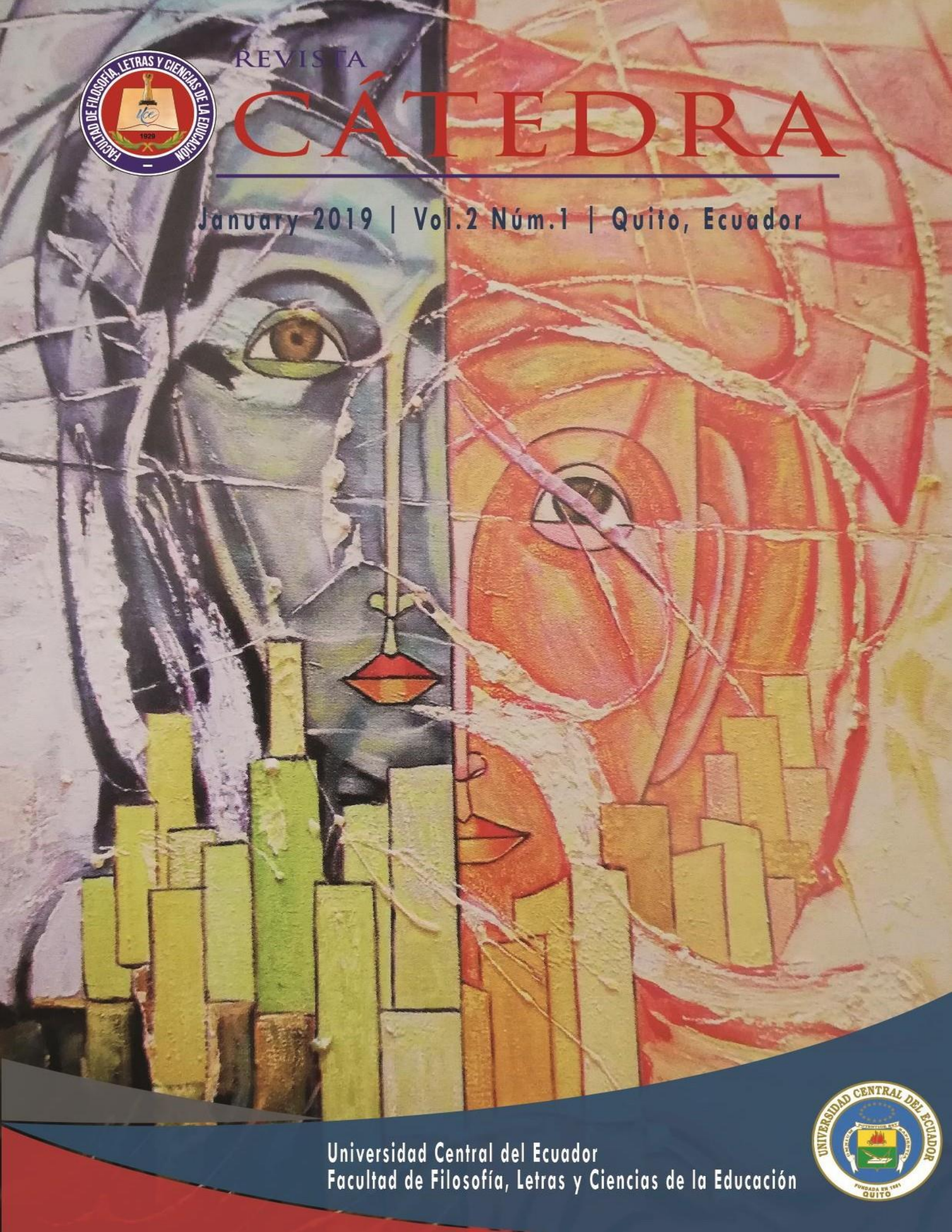

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La *Revista Cátedra,* which belongs to the Faculty of Philosophy, Letters and Education Sciences of Universidad Central del Ecuador has been a means of communication since 1992; the academic voice of the professors was expressed through the bulletins, 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.

OBJECTIVE
To disseminate multidisciplinary scientific unpublished articles, elaborated under the parameters of the research methodology, written with academic rigor and based on the teaching practice.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. From its origins, the Revista Céetdra was published in printed format. It is currently published in electronic format, using virtual environments to align to the needs of the revista s users and editors.

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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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The educational dimension from the point of view of the educational paradigms

REVISTA CÁTEDRA

EDITORIAL

Cátedra magazine, from the Faculty of Philosophy, Literature and Educational Sciences of the Central University of Ecuador, publishes articles aimed at improving the educational process and its link with society.

Cátedra Magazine is pleased to present volume two, number one in the electronic version. The subject matter developed on this occasion has its theoretical bases in the Educational Sciences in their different specialties and educational levels, so some relevant aspects are presented such as: the educational dimension from the student's point of view; the educational dimension from the teacher's point of view and the educational dimension from the point of view of educational paradigms.

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

The issue consists of ten approved articles:

The first article is entitled *Intercultural Education and Etnomathematics in the training of the professor of mathematics and physics*, by Iván Dávila-Garzón and Ximena Pinos-Benavides. The purpose of the manuscript is to study the contribution of intercultural education and ethnomathematics in the academic training of students and teachers of Mathematics and Physics at the Central University of Ecuador.

The second article is entitled *The culture as a factor of interest for the learning of French as a foreign language*, by Jorge Delgado-Rocha and Katherine Sánchez-Medina. The manuscript aims to determine the image of the Alliance Française de Quito that has been generated by the use of French culture as an attraction for the students of the institution.The second thematic axis called "The educational dimension from the professor´s point of view", is made up of three articles:

The third article is entitled *Relationship between academic performance and attendance as student promotion factors*, by Segundo Barreno-Freire, Oswaldo Haro-Jácome and Paola Flores-Yandún. The manuscript aims to analyze the relationship between grade averages and student attendance; statistical analysis shows a moderate positive and directly proportional correlation between both variables.

The fourth article is entitled *The substantive and dialogical dimensions of critical thinking in high school and university students*, by Manuel Gonzalo Remache-Bunci. The manuscript analyses critical thinking as one of the fundamental pillars in the personal, social and academic development of the individual because it helps to process and build conscious knowledge of the real world.

The fifth article is entitled *The digital competencies in teachers and future professionals Universidad Central del Ecuador*, by Juan Cobos-Velasco, Lilian Jaramillo-Naranjo and Santiago Vinueza-Vinueza. The manuscript makes a diagnosis of the digital competencies that future professionals and teachers possess in the exercise of their profession; the results show that most future professionals have a basic level of digital competence.

The sixth article is entitled *The innovation in the use of language in a context changes the way of thinking of the professors*, by Nelly Carrillo-Aguilar. The manuscript determines how teachers, after training in the use of language in context, improve their reading comprehension processes, and change their way of thinking with respect to their teaching practices.

The seventh article is entitled *The evaluation to the executive and teaching performance as an opportunity to improve the educational quality*, by Beatriz Cóndor-Quimbita and Manuel Remache-Bunci. The manuscript studies how management and teacher performance influence learning, and how maintaining traditional pedagogical practices do not contribute to the improvement of teaching quality.

The eighth article is entitled *Relevance of the Art method for the teaching of the Latin American tale in Elementary School (EGB)*, by Andrés Román-Orbe and Kerly Hidalgo-Medina. The manuscript presents the use of the ARTE method, a set of reflective, theoretical and experimental activities based on the learning theories of Piaget, Vigotsky and Ausubel, in the teaching of Language and Literature.

The ninth article is entitled *To know, to teach and to change. Approximation to the technologies in Higher Education,* by Ana Beatriz Martínez-González and Omar Astorga. The manuscript analyzes some technological trends that have been affecting higher education.

The tenth article is entitled *Evaluation of the relations of power, state and education*, by Juan Durán-Molina and Fernando Rodríguez-Arboleda. The manuscript evaluates the relationship between knowledge and power and its relation to social inequalities.

Cátedra Magazine thanks all the authors and evaluators of the articles that have made the publication of this volume possible. It extends an invitation to the national and international academic community to present their research work related to the theoretical bases of the Educational Sciences in their different specialties and educational levels.

Director/Editor-in-Chief

La educación intercultural y la etnomatemática en la formación del docente de Matemática y Física

Intercultural education and ethnomathematics in the teacher training in Mathematics and Physics

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Resumen

En el rediseño curricular de la Carrera de Pedagogía de la Ciencias Experimentales, Matemática y Física, de la Facultad de Filosofía, Letras y Ciencias de la Educación, de la Universidad Central del Ecuador se incluyen dos disciplinas: Educación Intercultural e Inclusiva y la Etnomatemática. La educación intercultural e inclusiva se presenta con lineamientos para preservar los saberes y cosmovisión de los pueblos plurinacionales. La etnomtemática usa sus aplicaciones en el campo de la matemática. El presente artículo tiene como objetivo estudiar el aporte de las disciplinas mencionadas en la formación académica de los estudiantes y docentes. El estudio se hará a partir de los principales postulados de Osuna y D´Ambrosio quienes realizan sus aportes en torno a la educación intercultural y al inicio del estudio de la etnomatemática, de aquí se determinan los principales insumos teóricos para comprender procesos de construcción y reconstrucción en el proceso de enseñanza-aprendizaje. En el proceso de formación de docentes se analizará los aspectos principales para que su enseñanza sea intencional y orientada a las condiciones de la sociedad actual. En el proceso de formación de los estudiantes que serán los futuros

docentes de Matemática y Física se desarrollarán investigaciones prácticas para impulsar la construcción del conocimiento y fortalecer de la identidad nacional, pues, está desapareciendo. Los resultados del aprendizaje de estas asignaturas fortalecerán la formación integral y las prácticas interculturales educativas con compromiso social y ético.

Palabras clave

Campo de formación, diseño curricular, Educación intercultural, Etnomatemática, formación docente.

Abstract

The research on intercultural education and ethnomathematics in teacher training in Mathematics and Physics is important because of the new curricular design of the Pedagogy Career of Experimental Sciences, Mathematics and Physics at the Faculty of Philosophy, Letters and Education Sciences, Universidad Central del Ecuador. Two disciplines are included in the field of Integration of knowledge and culture contexts, these disciplines are Intercultural and Inclusive Education and Ethnomathematics, and present guidelines for preserving the knowledge and worldview of the plurinational people; ethnomathematics use their applications in the field of mathematics. The objective of this article is to study the contribution of the disciplines mentioned in the academic training of students and teachers, and will be based on the main postulates of Osuna and D'Ambrosio who made their contributions in the intercultural education. The main theoretical inputs to understand construction and reconstruction processes are determined. In the process of teacher training, the main aspects will be analyzed so that their teaching is intentional and oriented to the conditions of today's society. In the process of training students practical research will be developed to promote the construction of knowledge and strengthen national identity, a topic that is being lost.

Keywords

Training field, curricular design, intercultural education, ethnomathematics, teacher training.

1. Introduction

Bibliographic and documentary research on intercultural education and etnomathematics in the teaching of mathematics and physics is very important, reason for which these subjects are included in the new curricular design and their contents should be proposed and developed in the learning process of the new professor. The study of intercultural education will preserve the knowledge and worldview of the indigenous population. Etnomathematics proposes the use of ethnoscience and the application of the resources applied in the field of mathematics.

The main problem of the study is to rescue and recover the ancestral knowledge and the worldview of people. The identification of basic definitions to initiate the knowledge of these subjects with a formative intentionality will be the main target for the development of construction and reconstruction processes of meanings and senses that could work as a foundation in the dialectic relation between human nature and its transformative capacity of the student.

The training process of professors is intentional and oriented to create citizens who meet the conditions that the current society demands. The formation of new professors carries

with it activities to promote the development of people committed to the history and traditions of their environment, deeply reflective with full analysis capacity, argumentation, and someone prepared to assume the work and professional performance required, i.e., committed, flexible and transcendent professionals.

The aim of this research is to collaborate with the education career of experimental sciences, mathematics and physics, in the knowledge organization of the conceptual and self-reference system favoring the interaction between the disciplines. In order to achieve this purpose, methods, processes and procedures will be used, and the professors and students will receive the preliminary guidelines of the intercultural education and the etnomathematics in the new curriculum. In addition and as proposed by Granados (2012), the new approach of higher education is established on the basis of the principle of complementary and interdependent adaptation to the transformations that have occurred in recent years concerning the organization of knowledge and learning of the new epistemological horizons of the complexity and the ecology of knowledge that generate creativity with collaborative and intercultural environments (curricular design of the mathematical and physical career, 2016, p. 22).

The basic nuclei that make up the theoretical-methodological constructs of the disciplines that underpin the profession in relation to intercultural education and etnomathematics are related to contemporary society and educational policy. The strategies and teaching methods will be intended to propose a holistic education with the integration of knowledge to create an active subject committed to the national identity.

This study is important, interesting and relevant since the student of mathematics and physics once graduated will provide his/her professional services in Elementary and High School; thus, with this new knowledge the student will receive better education. The proposal of the redesign is an essential alternative to meet the demands of the institutions of the Ecuadorian Education System, which require the formal inclusion of professionals of these areas in the educational levels indicated.

Mathematics and Physics are disciplines that must be adequately taught, since these contribute significantly to local and regional development. Only the teachers specialized in these subjects are highly qualified and contribute to the improvement of the academic quality of the students and to the formation of good citizens. Thus, they will promote the production of knowledge and the learning, the recognition of reality, the project of life, the learning environments and the integrative nature of the curriculum, aspects that are essential and topical.

The present study presents data related to intercultural education, theories and approaches, inter-cultural teaching practices, intercultural in the Constitution, importance and strategies. Additionally, the importance and object of Etnomathematics are indicated. Finally, conclusions is presented, which will help teachers and students to face this new challenge.

2. Education

2.1 Interculturality: theory and approaches

Interculturality is a way of life and coexistence among individuals that determines the interrelation and interaction of people in a social group. In this regard, Nomberto (2010) states that:

> Interculturality refers to the communicative interaction that occurs between two or more human groups of different cultures. If one or more of the groups in mutual interaction are going to be called ethnicities, societies, cultures or communities it is rather a subject of preferences of schools of social sciences and in no case it refers to epistemological differences (Millán, 2010, p. 18).

In the virtual library of indigenous people, it is indicated that interculturality is the contact and exchange between cultures in equal terms. This contact and exchange should not be thought in ethnical terms but from the relationship, communication and lifelong learning between people, groups, knowledge, values and traditions. All of the above should be oriented to generate, build and promote mutual respect, and a development of the capacities of individuals and community above their cultural and social differences. Therefore, interculturality tries to break with hegemonic history and reinforces traditional identities.

In the intersectional analysis and intercultural approach, Walsh, (2010), states that there are three approaches to interculturalism. The first approach refers to the contact and exchange between cultures, whose problem hides in the domination in which the relationship is carried out. The second approach is called functional, which demands the recognition of diversity and cultural difference as goals of inclusion in the established social structure. The third and final approach is the critical interculturality which recognizes that the difference relies in a colonial structure and matrix of power (Walsh, 2010, pp. 31-52).

Therefore, interculturality means the construction of equitable relationships between people, ethnicities and cultures. Some elements that contribute to intercultural education, as indicated by the United Nations, relate to educational, political, economic, cultural, environmental and legal aspects. In the educational field, interculturalization of education refers to fundamental issues such as education laws, educational projects, objectives, policies, plans and programs, curriculum, teacher training, school textbooks, school culture and the exchange with the community and the context.

In this regard, Walsh (2010) says:

> Interculturality does not separate from identity. The fact of relating symmetrically with people, knowledge, senses and different cultural practices requires a self-awareness of the person, the identities that are formed and emphasize the own and the differences. Self-identity is not something we can choose from, but something that has to be negotiated socially with all the other meanings and images built as knowledge activated by our own use of identity (Hall, 1997), i.e., identifying ourselves with the family and cultural environment requires at the same time to differentiate us from different identification processes that are often unconscious (pág.54).

From the above, the concepts of location, town or city are mentioned, which are characterized by different cultural traits of each other that allow their distinction. In addition, there can be social subdivisions in each of these groups that maintain their own characteristics that characterize them.

2.2. Intercutural teaching practices

In accordance with the new curricular design (2016), the mathematics and physics career creates inter-cultural practices by introducing the subject of cross-cultural education that benefits the formation of the future professor, one of these practices are: the knowledge of the cultural diversity of the nationalities and people of the country, the valorization of the cultural manifestations of the various members and the application of strategies and creation of didactic resources that allow an intercultural education.

To reach the goal it is possible to develop the creation of projects that promote intercultural education; research that proposes the development of the student in intercultural aspects; to foster interdisciplinarity with etnomathematics to achieve the recovery of ancestral knowledge and worldview, our language and national identity.

2.3. Interculturality in the Constitution of Ecuador

In the Political Constitution of Ecuador of 2008, there are some articles referring to the intercultural education, particularly Article 27 states that education will focus on human beings and ensure their holistic development in the context of respect for human rights, the sustainable environment and democracy it will be participatory, compulsory, intercultural, democratic, inclusive and diverse, of quality and warmth, i.e., it highlights the anthropological character of education, which includes all the dimensions inherent in human beings.; and the intercultural nature of education is also highlighted.

Article 29 states that it is the duty of the State to guarantee the right of people and to learn in their own language and cultural sphere. This requires that all people living in the Ecuadorian territory be taken into account, including those who come from diverse cultural and linguistic realities.

Finally, in article 57, numeral 14, reference is made to develop, strengthen and enhance the intercultural bilingual education system, with quality criteria from early stimulation to the higher educative level. The identities should also be cared for and preserved in accordance with teaching and learning methodologies.

What is indicated in the Magna Carta makes it possible that these aspects are taken into account in the career of mathematics and physics. The student must be led to the preservation of the cultural identities of our country.

2.4 Importance of intercultural education

In accordance with Akros (2018), intercultural education "has gained importance since it proposes that diversity be valued more so that there is more respect for people and their freedom of thought" (p. 2). In this sense it is confirmed that interculturality is a form of coexistence and interaction between people and therefore, in education, communication. With intercultural education, flexibility and reflection are put into practice as part of their identity. It can also be implemented through active methodologies, group work, to develop equality, equity and respect.

In order to achieve the objectives of the teacher training, workshops, trainings and courses must be included, in which the future teacher has a preponderant role and adapts according to the reality of the communities, and where permanent socio-cultural changes are experienced with people of different backgrounds and expressions that allow to have links

between cultural groups. In addition, intercultural education is important because of the positive assessment of diversity and respect for people.

Regarding the cultural aspect, every person expresses his/her interactions with others. Therefore, intercultural education develops a reflection and an educational practice that considers diversity to be normal in any group. In this sense, intercultural education can put into practice the flexibility and reflection of each person in its essence and culture because it interacts with others, and is part of their identity.

2.5. Strategies for the intercultural education

In the career of mathematics and physics career values such as equality, respect, pluralism, tolerance, cooperation, responsibility, and the recognition of each student's personal right by fostering their personal identity should be promoted to facilitate learning and achieve objectives. The positives of cultural diversity and languages must be recognized, giving attention to diversity and respect for differences. In addition, demonstrations of racism and discrimination should be avoided, and the promotion of ethnic groups.

To reach the stated objectives, some intercultural strategies should be used, such as avoiding ethnic discrimination in and out of the classroom. Interculturality is treated as a transversal axis of education and is based on intercultural practices, for example, the etnomathematic project. The knowledge and cultural manifestations of the students must be taken into account in the classroom so that through lectures they discover or rediscover the ancestral knowledge of people and nationalities of our country.

3. Etnomathematics

The term "Etnomathematics" was coined by the Brazilian educator and mathematician Ubiratàn D'Ambrosio in 1977, during a presentation for the American Association for the Advancement of Science. From this date, numerous proposals have been made to obtain a more precise definition, included by the same D'Ambrosio in 1999, who indicates that the etymological abuse leads him to use the words ethno and mathema for their categories of analyses and Ticas representing technique (Martínez, 2013, p. 429).

Rohrer and Schubring (2011) indicate that Falsirol used the term Etnomathematics as a combination of ethnology and mathematics, and he used it before D´Ambrosio and referred to the work of Ewald Fettweis work (German mathematical educator: 1881-1967). The conceptualization managed by Fettweis considered mathematics as a cultural element that connected with other disciplines, such as: ethnology, history of mathematics, history of culture and mathematical education (Martínez, 2013, p. 429).

Etnomathematics of D´Ambrosio refers to the mathematics practiced by groups such as urban communities, rural, workers, professional classes, specific ethnicities and community of professional mathematicians. He points out that this discipline was created by specific ethnicities and by other cultural groups according to their own mathematical processes, symbols, jargon, mythologies and reasoning models (Martínez, 2013, pp. 429 – 439).

Etnomathematics in its etymology is based on three roots: ethno, matema and tica. *Ethno*, which comes from the Greek root ethnos that means peoples/races refers to the various natural, social, cultural and imaginary environments. *Mathema* from the Greek to explain, to understand, to teach, and *Thica* linked to the Greek root tecni, related to the arts, techniques and ways (Martínez, 2013, p. 430).

From the previous consideration, Gilmer (1995, p. 188) assumes etnomathematics as the "study of the mathematical techniques used by cultural groups identified to understand, explain and manage problems and activities that arisen in their own environment". Additionally, Gerdes (2007), indicates that the etnomathematics is derived from the overlap that occurs between cultural anthropology, mathematics and mathematical education, mentioning the need to be aware on the existence of various mathematics, according to different cultures.

Thus, it can be indicated that the etnomathematics is practiced by cultural groups, identified social groups and guilds, in which its reality is better understood. In addition, this mathematics is usually practiced since they are children.

It can also be said that etnomathematics is a variation of mathematic didactics, and it is interested in studying the knowledge of a cultural group and their behaviors for interpreting the world and their Cosmo. Therefore, the etnomathematics thought is a way of understanding the learning process of mathematics according to ancestral knowledge.

Gómez and Ortiz refer to Gavarrete (2012) by pointing out that at the end of the last century, several discussions were developed on the linguistic and sociocultural aspect of mathematics, such as the language used, the semantics, the influence of culture and society. In the present century, it reflects on the most appropriate way of legitimizing the knowledge of the etnomathematics. Epistemological and political aspects are taken into consideration in order to generate more democratic access to mathematics (Gómez and Ortiz, 2016, p. 23). In addition, it should be noted that in the learning process, the etnomathematics should consider the ancestral inheritance and the particularities of the group's worldview, and this must be conceptualized and worked for indigenous communities, people or cultures. Mathematical concepts must be linked to the social and economic structures of them, and learning methods and arithmetic and geometric techniques should be used, and should be contextualized to their surroundings in order to obtain the knowledge of the students.

4. Target of Etnomathematics

According to Oliveras (2000), the object of study of the etnomathematics refers to three thematic areas that are well defined:

The first corresponds to the cultural-mathematical anthropology with respect to the elements that are needed to theoretically define the terminology and the anthropological and epistemological approach of etnomathematics, and to be able to understand them. The second thematic area refers to the mathematical cognition contextualized towards the groups, and corresponds to the elements of the cognitive psychology related to the mathematics in the daily life and the mathematical learning in the school and out of it. The third are the curricular aspects and processes that correspond to the socio-cultural and political conditions related to the problem of curriculum and learning (Gavarrete, 2012, p. 49).

Etnomathematic knowledge has been present in most cultures throughout history, since cultural diversity is one of the characteristics of every civilization in the world. The origin of etnomathematics relies to the emergence of the ethnosciences and anthropological research that has developed since the nineteenth century (Trujillo, 2016).

To understand the intrinsic relationship between the ancestral knowledge of people and fields such as mathematics corresponds to traditional activities, for example, working with plants, animals, architectural conceptions, graphic representations. Finally, etnomathematic is centered on the nature.

4.1 The training of the math professor

In the study carried out by Juan Ramón Cadena entitled "Insertion of the etnomathematics in the teacher training in the Ecuadorian higher education", indicates that in Ecuador the careers of teacher training in Mathematics have not considered this discipline in any case. The results of a survey of fifth-semester students of the teaching career in mathematics, Universidad Central del Ecuador, determines that the level of basic knowledge of mathematical concepts, history, etnomathematics is deficient. A teaching practice must be developed involving two independent but non-dichotomous processes, teacher training and classroom practice.

In the teacher training, the insertion of etnomathematics should be taken into account as a process that allows the extrapolation of practices towards the construction of a theoretical construct. Thus, there must be a dialectical bidirectional relationship of praxis and theory. As indicated, one of the most pressing problems in mathematics teachers is the search for problems and didactic situations. All the methodologies used should propose a meaningful learning in the students.

Didactic intervention is a very delicate process. According to the analysis of Cantoral (2016), three planes are articulated in the creation of conceptual systems:

- The first is the problem as a consequence of the nature of mathematical knowledge.
- The second, for the knowledge is the "local", which implies a social praxis adjacent to the characteristics of the environment, the context and the idea.
- The third is the search for an own epistemology of mathematical knowledge, the set of categories from didactic activity and systematized experiences that produce a theory of authentic and autonomous learning.

The teaching-learning process of mathematics in Ecuador has mainly been based on the uncritical acceptance and reproduction of the western rationality model. The Andean rationality recognizes the otherness or difference as something essential that admits and is enriched with other forms of sensibility in the comprehension of the world. There is symmetry, which is reciprocity, reflected in a dualistic view of reality and non-arbitrariness.

Therefore, the objective is to know the conceptions of contemporary culture and education in a dialogue with anthropology, history, sociology and educational psychology. These constructs help the learning process and develop the pedagogy of mathematics. In addition, the aspects relating to the characteristics of each cultural sector should be taken into account, considering the specific conditions of cognition and conceptualization of mathematical elements.

5. Conclusions

The career of Education in the experimental sciences, mathematics and physics practices the intercultural education inside its classrooms, and proposes to develop the concepts in

the practice and in the linkage with the society through its practical application in the individual and group research.

Using active methodologies makes necessary to realize the discovery and rediscovery of the contents of the etnomathematics; thus, bibliographical and documentary research will be used with individual and group work, exhibitions and elaboration of graphic organizers.

The use of interculturality will be evident in the knowledge of its principles, and it will be carried out in educative institutions through intercultural educational practices. Etnomathematics will contribute significantly to the rescue of ancestral knowledge.

Interculturality and etnomathematics can be carried out with field work that contributes to meaningful learning to assess the cultural identity of the country in an efficient way. The basic definitions will be identified to initiate the knowledge of these subjects through the development of construction and reconstruction processes.

The teacher training process will be intentional and oriented to the conditions demanded by today's society, and will be related to the educational policy, the training of the person and the professional development of the teacher as a reflective, analytical, critical, committed, flexible and transcendent entity.

It will be necessary to improve the academic quality of the students, future teachers, in the formation of good citizens. One of the strategies will be the implementation of intercultural education in the classrooms. The application of etnomathematics in the Elementary and High Schools through educational intercultural practices and the rescue of the ancestral knowledge. Bibliographical and field research will contribute to meaningful learning to assess the cultural identity of the country.

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La cultura como factor de interés para el aprendizaje del francés como idioma extranjero

Culture as a factor of interest for learning French as a foreign language

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Resumen

En este artículo se presenta a la cultura francesa como factor de decisión para los estudiantes de la Alianza Francesa de Quito (AFQ). Elegir al idioma francés para el aprendizaje de un idioma extranjero es fundamental. Se define a la cultura desde un enfoque social, además de determinar las diferentes características que adquiere dependiendo de la sociedad a la que pertenece, de igual forma el objeto de estudio ha sido escogido, debido a que la Alianza Francesa es un referente en la educación del idioma francés como lengua extranjera en Ecuador. La investigación va dirigida a determinar la imagen de la institución que se ha generado gracias a la utilización de la cultura francesa como atrayente para los estudiantes de la AFQ. Se realizó un análisis cualitativo y cuantitativo para observar la importancia que le dan los estudiantes y el directorio de la AFQ a la promulgación de la cultura dentro y fuera de las aulas. Se utilizaron como herramientas de investigación: encuestas sobre la cultura francesa dirigidas a 136 estudiantes de la Alianza Francesa de Quito y, además, una entrevista para conocer la importancia que le da esta institución al uso de la cultura francesa como atrayente educacional. En conclusión, se determinó el nivel de influencia de la cultura de un país para

aprender su idioma, mediante el uso de diferentes actividades y eventos propuestos e impulsados por la AFQ.

Palabras clave
Cultura, comunicación, educación, francés, lenguas extranjeras.

Abstract
In this article, French culture is presented as a decision factor for the students of the Alliance Française of Quito (AFQ) to choose the French language for the learning of a foreign language. It is essential to define the culture from a social perspective, in addition to determining the different characteristics that it acquires depending on the society to which it belongs; thus, the object of study chosen, since the Alliance Française is a reference in the education of the French language as a foreign language in Ecuador. The research is aimed at determining the image of the institution because of the use of French culture as an attraction for the students of the Alliance Française of Quito. A qualitative and quantitative analysis was made to observe the importance that the students and the board of the Alliance Française of Quito give to the promulgation of culture inside and outside the classroom. The research tools used were: surveys on French culture directed to 136 students of the Alliance Française of Quito and, in addition, an interview to know the importance that this institution gives to the use of French culture as an educational attractor. In conclusion, the level of influence of a country's culture to learn its language was determined, using different activities and events proposed and promoted by the Alliance Française of Quito.

Keywords
Culture, communication, education, French, foreign languages.

1. Introduction
This article aims to analyze the use of French culture into the strategies of the Alliance Française of Quito to attract students ' interest in learning a foreign language. The hypothesis handled in this research is the use of culture as a strategic communication element in the learning of French as a foreign language. In addition, the global context will be analyzed, as well as the society changes in the so-called globalization. Globalization will be viewed from a cultural perspective as a phenomenon of homogenization and unification of cultures. This will give way to culture and interculturality and its implications in today's society.

Over the years, foreign language teaching institutions have had to adapt to the new trends in education that globalization has brought with it, and it is together with the culture that the enlargement and attraction of new types of students has been possible. Communication strategies used at the Alliance Française of Quito are selected as object of study, since this institution is a reference in the teaching and learning of French as a foreign language in Ecuador. According to the International Organization of La Francophonie, in fifty years French will be the second most spoken language in the world. In the same way, French is the third language most used in business, making it a referential point in education.

> cultural differences, rather than leading to cultural differences can become into opportunities for cultural synergies. By raising awareness of their own cultural processes and peers, students and teachers can reflect

> on their learning cultures, expose their difficulties and try to solve them (Trujillo, 2010, p. 153).

Alliance Française of Quito was founded in 1953, becoming the first Alliance Française of Ecuador. Since its origin it has positioned as a benchmark in the learning of French as a foreign language in our country. Cultural activities are carried out in the institution, activities in which the Ecuadorian culture and the French culture are related. In addition, the Alliance Française is the only French learning institution that has diplomas in language certification endorsed by the French Ministry of Education, granting an advantage over other language centers.

This research will be conducted from the systemic approach, understood as "a logical-mathematical theory that proposes to formulate and derive those general principles applicable to all systems" (Betarlanffy, 1978, p. 34). In the systemic approach, the institution is seen as a system, where each of the parties fulfils a specific function, which understands the context and and how it affects each of these functions.

To meet this perspective, information will be addressed from an interview with Charline Lagarde, teaching coordinator of the Alliance Française of Quito. Also, the systemic perspective will be fulfilled, with the use of surveys with closed questions, and with a lenght of no more than six questions; these questions are seen from Armstrong and Kotler perspective

> The most used method for collecting primary data is the most appropriate strategy for gathering descriptive information. The company that wants to know the knowledge, attitudes, preferences or purchasing behavior of people can often obtain that information by asking them directly (Philip Kotler, 2012, p. 109).

The article is structured in: a Literary review of the culture, interculturality and globalization; the following will be the application of a double analysis on the communication strategies used by the Alliance Française of Quito and the introduction of the culture, for which it will be necessary to use an open interview addressed to the Director of the Alliance Française. A survey will be used with open and closed questions addressed to the students of this institution. For the application of these research tools the sampling formula for finite universes was used and a sample of 136 students who currently perform their studies at the Alliance Française was obtained. Then the interpretation of the results obtained from both the interview and the surveys was performed. Finally, based on the results obtained, certain conclusions and recommendations were proposed on the importance of the French culture as an attractive factor for students of the Alliance Française to finish their studies of foreign language.

2. Review of the literature

2.1 Culture and its study

The term culture, from its Latin root, was understood in the beginning as the cultivation of the earth or as a reference of the work, but later, it gave way to its meaning like the cultivation of the spirit. Nowadays, the term culture is quite used in the society, but this word has several meanings from different perspectives. It may be that intangible feature of society that makes it unique.

According to Bauman (2011), culture or liquid modernity was initially considered as an agent of change, with a mission to educate the masses and to change their customs; but culture in modernity has lost that meaning, because it does not longer have the mission to illustrate and enlighten people, but to seduce the public. In this consumer society, the goal is to create new needs and guarantee a permanent dissatisfaction.

> The French concept of "culture" emerged as a collective name for government forces to foster learning, soften and improve manners, refine artistic tastes and awaken spiritual needs that the public had not felt until then (Bauman, 2011, p. 34).

Bauman refers to liquid modernity because in the same way that the liquid, its stages in the social life cannot maintain its form for a long or prolonged time, the solid has been diluted, and unlike the past, these dissolutions cannot be replaced by other solid forms. In our society, consumption has become part of the daily life and culture is in this consumption.

> The culture of liquid modernity corresponds well with the individual freedom of choice, and its function is to ensure that the choice is a necessity and an unavoidable duty of life, while the responsibility for the election and its consequences remains where the human condition of liquid modernity has placed: on the individuals, now appointed general manager and sole executor of his 'Life Policy' (Bauman, 2011, p. 35).

Society has always had the instinct to identify itself through ideas, reactions and habitual patterns of conduct that members have acquired either by instruction or by imitation. The migration of people is an integral part of modernity. According to Bauman (2011) this phenomenon is separated into three phases:

1. Emigration from Europe to the rest of the world: Europe, being the most populous region in the world at the time, was mobilized to the supposedly empty lands. During these migrations, the invasion and slaughter was justified with the mission of the white man and his cultural culture.
2. Migration towards a model of assimilation: when the colonies were about to end some of the native populations of the invaded places and traveled to the countries of their colonizers, so that when they arrived they became "ethnic minorities".
3. The third phase, in which we are currently living, is a process that is still under development, and despite the efforts to curb the access of immigrants to other countries by their Governments, this process continues.

These migratory processes have resulted in many more changes in the history of humanity, including phenomena that are currently studied, one of these is globalization, the phenomenon most studied by the social sciences. There is something known as "cultural" shock ", which usually happens with people who are inserted in another culture different from the culture of origin. It can also occur when an individual learns a second language, in both cases, symptoms such as: rejection, unhappiness, among others can happen.

This state of stress makes the student feels discomfort and discrepancies between his/her culture and the new World he/she is exploring; it is a normal feeling in this kind of situation, because the student is not used to socialize in that space. The way to overcome this shock is to immerse in the culture, and know native people. It can then be defined as a temporary situation, because thanks to socialization and understanding that feeling of anguish disappears.

2.2 Globalization and its effect in the society

When referring to globalization, it is necessary to specify its different points of view since globalization can be analyzed from the meaning of the universalization of the economy, but it can also be seen from the cultural aspect and even from the Ppolitical. "This term refers to something that occurs all over the world, affecting all countries and almost the entire world population" (Ander-Egg, 2016, p. 17). To this process that affects all, Ander-Egg mentions that it existed long before capitalism, a particular aspect of the process of globalization which originated in the fifteenth century but it started to have significant impact only at the end of the twentieth century with the technological advances. For organizations, Ander-Egg mentions that globalization has another meaning:

> Globalization, for the companies of my group, is the freedom to invest when and where they want, to produce what they want, to buy and sell wherever they want and to suffer the least possible restrictions derived from liberal legislation and social conventions (Ander-Egg, 2016, p. 17).

Roche and Oliver (2015) mention that globalization has to do with a homogenization culture process, where there is only one way of life, a uniformity of behaviors, thoughts and even leisure. For this reason, the media has been used as a source of strategic dissemination at the global level, since emptying the cultures of other countries provides a substantial advantage to turn the new culture into merchandise in the minds of people that make up other countries. "Every advance in technology makes it possible, without doubt, the acceleration of the process, but it does not imply changes in the fundamentals of this: In its logic, in its system of values, in its objectives" (Roche and Narbona, 2005, p. 69). Therefore, one cannot speak of interculturality, since while unification is interposed in globalization, interculturality raises a dialogue between cultures in an equitable manner.

2.3 La interculturality and its role nowadays

Modern nation-states have as their main characteristic the plurality of cultures in their territory, i.e., no longer one speaks of a single culture but of several diverse cultures with their own peculiarities. The union of these cultures results in diversity and the generation of new differences and new social groups.

> Historically, the strategy of the dominant groups of the new States was to reduce internal diversity and promote cultural homogeneity through school control and mass media, the imposition of a particular language, symbols and rituals, the delimitation of frontiers, the reconstruction and the invention of history, and the fact of imagining the existence of a monolithic and monocultural unit that contrasted with the outside world (Beltrán, 2015, p. 66).

Interculturality is linked to aspects such as migration, where a process of exchange of open and respectful viewpoints is carried out between people of different origins, traditions, languages, religions, among others. It serves to better understand the diverse practices and visions of the world. Through interculturalism tolerance and respect are sought. It is the capacity to interconnect the culture of origin with the foreign culture. "The exchange is produced on an equal basis understood as the equal contribution of all the groups involved" (Beltrán, 2015, p. 80). Exchange is the main characteristic of interculturalism. Interculturality in the education process of the students has a main character, since education must allow spaces of absorption and integration between different cultures. "When it comes to intercultural education, we must explore in detail the discursive

constructions with which different meanings have been given to the term culture" (Cortez, 2015, p. 24).

Language as an element of culture is an integral part of interculturalism, so it can be seen reflected in the Conseil de L'Europe (Council of Europe), as they are the creators of the CECRL (Cadre Européen Commun de Reference pour les langues). This is a reference book for the Teaching and learning of languages spoken in Europe (Spanish, French). Its main objective is the organization of language learning and the homologation of diplomas or degrees, interculturality is a fundamental part of this. Within this manual, the person who learns the new language is considered as "apprenant" or apprentice, which gives the category of a subject or social agent. Therefore, the class is addressed to their social needs with the environment. The "apprenant" does not learn two foreign ways of communicating, but rather he/she learns interculturality, a form of relationship between the native languages and the foreign language.

"The objective of interculturality is communication, understanding of others, without imposing our values on them or necessarily identifying with theirs" (Beltrán, 2015, p. 81). Within the communication, the teaching of languages together with interculturality is of paramount importance, because the culture of the other has elements that can be considered sensitive, for example, in a culture the way of greeting can be offensive or even aggressive, then interculturality is a fundamental aspect to the knowledge and understanding of the other.

The foreign language student must possess skills related to interculturality. These include the ability of the student to establish a relationship between the culture of origin and the foreign culture. In addition, it is necessary that the student can identify and know how to use interaction strategies that will depend on the contact with people of another culture. Finally, the student needs to understand and serves as an intermediary between the culture of origin and the foreigner to solve intercultural misunderstandings, as well as to overcome stereotyped ideas.

The basis of interculturality is the understanding of the other, empathy, the exchange of ideas and experiences, but not the imposition. It is manifested in the harmonious integration of cultures, thus avoiding the loss of identity of minority groups to dominant groups. Integration is the adaptation of all parties to equality of conditions, obligations, and even rights.

Even though this is the best solution for the proper coexistence, it does not mean that there are no processes of acculturation or emergence of new cultures, because it is inevitable. Globalization and Interculturalism change the paradigm of homogeneous societies or groups with a specific culture within a unique geographic space. "Culture and identity are built socially and are continually in motion and in reconstruction" (Beltrán, 2015, p. 86).

It is also necessary to clarify the difference between intercultural and multiculturalism. Multiculturalism refers to the result of intercultural, i.e., to new cultures that have emerged or evolved after the contact, while interculturality, as we defined it, is the harmonic dialogue between these cultures.

3. French culture and the Alliance Française of Quito

The Alliance Française is a non-profit organization which aims to promote the French language in the different countries of the world, its main headquarters is located in Paris,

capital of France. On July 21, 1883, French intellectuals such as: The scientist Louis Pasteur, the diplomat Ferdinand de Lesseps, the writers Jules Verne and Ernest Renan and the editor Armand Colin, among others met in the Cercle Saint Simon. From this moment, it spreads throughout the world for the same purpose. Currently, the Alliance Française has 1000 headquarters in 136 countries. In 2013, the Alliance Française becomes the first Cultural NGO in the world with 6 million of spectators and 500,000 students.

Figure 1. Headquarters of the Alliance Française of Quito in Eloy Alfaro and Belgium. Source: Campus France equateur.campusfrance.org website

The Alliance Française of Quito has as its vision the following "to achieve excellence through permanent innovation in the teaching of the French language and to be a reference of prestige in the cultural diffusion and the link between the Francophone and Ecuadorian cultures" (Alliance Française, 2018). It works closely with the Cultural Cooperation and Action Service of the French Embassy for the development and realization of linguistic, artistic and cultural actions. The offer of studies in the Alliance Française of Quito is aimed at learning the French language since its origin until the preparation and obtaining of diplomas certified by the Ministry of Education of France, such as the TEL, DELF (Diplôme d'études de langue française) A1, A2, B1, B2, and the DALF (Diplôme approfondi de langue française) C1 and C2; These diplomas serve to carry out studies in the francophone country. "Currently, more than 3000 students and professors are part of a network linked by the language, French and Francophone culture "(Alliance Française, 2018). It should also be mentioned that within its offer is the FLE-Vivier program aimed at those people who want to obtain a certification as French teachers.

4. Objectives of the research

The objectives are:

1. To define the importance of culture and globalization in today's society, when deciding to start and continue the learning of a foreign language such as French.
2. To analyze the communication strategies of the Alliance Française of Quito, and how the French culture has been integrated within them.

To achieve the objectives of this research a quantitative-qualitative analysis was conducted that focused on solving the following questions.

1. ¿How does the Alliance Française of Quito incorporate the French culture into the classes and in their student recruitment strategies?

2. ¿ What is the importance and interest given by the students of the Alliance Française of Quito to the immersion and learning of the French culture?

5. Research methods

5.1 Interview

The purpose of the interview is to obtain information from a primary source. "The interview is not a casual talk but a dialogue for informative purposes" (López Sobrino and López Cubino, 2012, p. 11). In the case of this investigation the interviews will be made to the Teaching Coordinator Charline Lagarde. It was the General Director who appointed Charline Lagarde as the information support officer for this research. Once the interviews were conducted, it was noted that the information provided would be duplicated, since both the Teaching cCoordinator and the Communication Director had the same information and data.

5.2 Survey

The survey will be used as a data collection method to obtain information from a primary source. The surveys can be carried out personally, through the Internet thanks to various programs created for this purpose and also telephonically; in this particular research the surveys were carried out personally.

To start, it is necessary to make a questionnaire designed to obtain specific information. The people participating in the survey have been previously selected through the obtaining of a representative sample.

> Survey research, the most widely used method of collecting primary data, is the most appropriate strategy for gathering descriptive information. The company that wants to know the knowledge, attitudes, preferences or purchasing behavior of people can often obtain that information by asking them directly (Philip Kotler, 2012, p.256).

For the tabulation of data, it will first be related the data of age with the data of sex, then it will be necessary to know the age and the level of studies. From question number one, it will be related to the level, because through this assessment can be known if the most advanced students have or do not have more influence of culture.

5.2 Sample

In order to carry out the surveys, it is necessary to know the number of the target population. Data collection of 100% of this population has a certain level of difficulty, so it is necessary to obtain a sample of participants. To obtain the sample, an interview was carried out previously to Charline Lagarde, Teaching Coordinator of the Alliance Française of Quito, who knew that the period in which this investigation is carried out (August 2018-September 2018) is one of the periods with less frequency of students, due to school vacations.

The number of students enrolled and attending regularly to class in the Alliance Française de Quito during the year is about 5000 people, and in the period August-October is 300 students. Therefore, the formula for obtaining the sample based on a finite universe resulted in 136 students, so 136 surveys were conducted

$$n = \frac{Z^2 \times N \times p \times q}{e^2(N-1) + Z^2 \times p \times q}$$

Ecuación 1

$$n = \frac{1.96^2 \times 300 \times 0.8 \times 0.2}{0.05^2(300-1) + 1.96^2 \times 0.8 \times 0.2} = 135.37 \approx 136$$

Ecuación 2

6. Results

6.1 Analysis of the interviews

The information shared by Charline Lagarde, Teaching Coordinator of the Alliance Française was important for carrying out this article. During the interview we asked if the number of students has increased or decreased in the last years, to which Lagarde answered: "The number of students has not increased or decreased, the number is variable, but anyway I consider that it has maintained" (Lagarde, 2018).

It can be deduced that the Alliance Française maintains the annual number of students, which could be an indicator of image positioning, with a privileged position compared to other language learning institutions. After knowing this response, it was important to know the image of the members of the institution, for which it was asked, what do you think is the reason that the CFA has taken this privileged position on the other language institutes?

> The French alliance, I think has this position, with an image of prestige because it always tries, I say try, because it is never possible to do it at 100%, to maintain a quality of service, a certain exigency, and to be able to adjust to the needs of the students, i.e., if a student comes, we will try to know what his/her projects are, to accompany him/her, to give solutions adapted to his/her profile, to his/her expectations. For us each student is important, and we take him/her into consideration (Lagarde, 2018).

Es decir que, el trato personalizado y la adaptación a las necesidades de los estudiantes es la base fundamental para que la Alianza Francesa haya logrado esa posición de prestigio frente a los demás. Por lo tanto, si la Alianza Francesa de Quito, considera que uno de sus fuertes es el servicio al cliente, es también relevante conocer si la cultura francesa es un fuerte atrayente para sus estudiantes. Por lo que se utilizó la pregunta ¿considera que la cultura francesa es un atrayente para que los estudiantes decidan inscribirse?, a lo que Lagarde respondió:

In other words, the personalized treatment and adaptation to the needs of the students is the fundamental basis for the Alliance Française to achieve this position of prestige. Therefore, if the Alliance Française of Quito considers that one of its strengths is the customer service, it is also relevant to know if French culture is a strong attraction for its students. So we asked: do you think that French culture is an attraction for students to enroll? to which Lagarde answered:

> I'm not sure. If we want to know it we should ask the students, because as I said the students do not necessarily attend our cultural events, rather I think what is very appealing to students at the time of enrollment are

> the studies in France. I could say that 50% of students have registered for the pleasure of learning, so perhaps it may be linked to culture, i.e., French-speaking general culture related to the knowledge of a new language, new culture, gastronomy, travel, etc. (Lagarde, 2018).

For Lagarde, learning French is not directly linked to cultural interests, since 50% of them are enrolled in the courses for pleasure; likewise, if they are not interested in the culture, the cultural events organized by the Institution are not going to be of their interest either. These events are related both to the French culture and to the Ecuadorian culture, and sometimes the capacity of the place is low so they must move to a larger space, as is the case of concerts.

If students enroll for the pleasure of learning, rather than culture, we need to know if students complete all levels offered by the institution. With regard to this question, Charline Lagarde said: "Not generally, not until the B2, most students only get to level A2, which would be about 6 periods. And in general, when they decide to continue until B1 they continue to B2" (Lagarde, 2018).

Although the CFA has this prestige, only one part continues its learning up to the level B2, level necessary to enter to a university or educational institution in France. However, with regard to communication strategies, it was considered important to ask whether there was a differentiation between students and prospective students. Lagarde said: "Yes, we make the difference between those who are already students of the Alliance Française and the new students, for the new ones we always have a marketing strategy, and different communication" (Lagarde, 2018).

It can be said that Alliance Française of Quito uses targets (new students and students enrolled) for their communication strategies. For students enrolled, internal marketing strategies for loyalty are used; for new or future students, external marketing is used as an attractant.

Finally, the knowledge prior to the interview is the annual realization of the linguistic journey, a communication strategy of the Alliance Française that has immersed the cultural aspect due to the direct contact with the French culture. So does the linguistic travel promotion work only for students or can people from outside also sign up?

> In general, the linguistic journey is open to all students of the institute, a network that constitutes about ten schools in Quito. The minimum level required is A1. We have had students who have wanted to travel in the linguistic journey, who have registered only to pass the A1 level and travel (Lagarde, 2018).

With the answer offered to this question, we can conclude that the French culture can serve like an interest factor so that the students register in the French courses. They will have the opportunity to know the culture and French language, to learn its customs and to gain access to a different society, all this by means of a trip to France promoted by AFQ. This interest has its origin in the students because the trip is not at the beginning of the course but at the end, which provides an opportunity for the Alliance Française to present in an attractive way everything that the students will see during their journey. The target of the trip is that it serves as a reinforcement for the students who started their course and traveled to France, and then they could be able to continue finishing their studies in the institution.

6.2 Analysis of the survey

The survey was applied to 136 students from a total of 300, studying at Alliance Française of Quito, and belonging to the period number 5, i.e. August – October 2018. It should be mentioned that the participants did so voluntarily. The survey was scheduled for a duration of 5 minutes, but participants took 10 to 15 minutes due to the questions in which they had to give their opinion.

At the end of the survey, a talk was generated among the students about these questions. Next, is presented the tabulation and interpretation of the results of the questions asked in the survey.

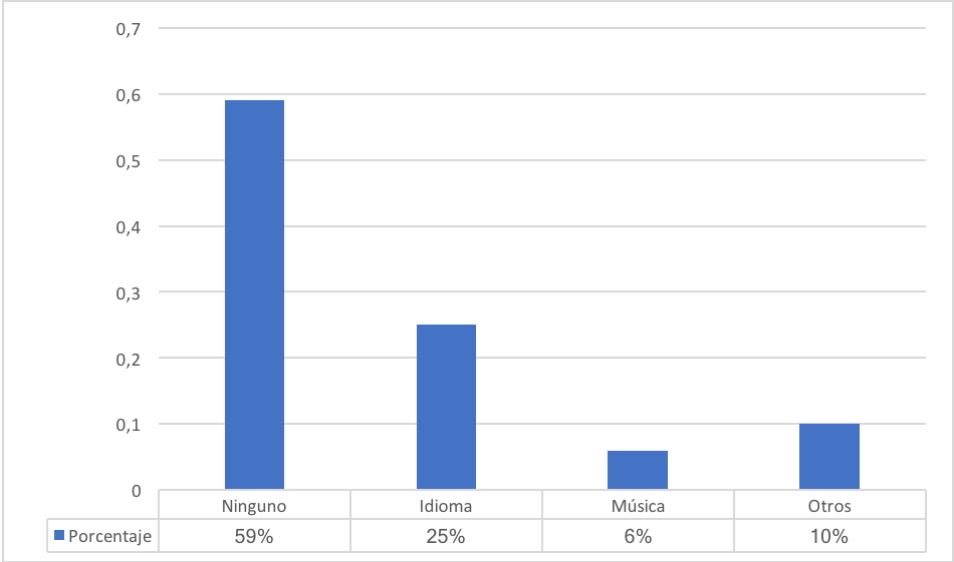


Figure 2. What aspects of the French culture have been acquired in your daily routine thanks to the Alliance Française?

1. The music, to know its history (History of France) day by day,
2. The democracy of the country, respect for human rights,
3. A bit of the culture and History of France,
4. Listen to varied music, French movies,
5. Holidays, laws and rules studied in the book,
6. The structure, education, politics, the films, the painting, the museums are the best I have known,
7. Open mindedness, cinema, music, cooking, fashion, multiculturalism,
8. French culture in clothing, French language, youth exhibitions, food culture,
9. Points of view and problem analysis. Appreciation for art. Learn to value the culture to which I belong,
10. Several of the aspects that have used to in my day to day of the Alliance Française and its culture are the education, the formal form of speaking, the food, the variety in each dish,
11. Board games, French cinema and francophone countries,
12. The songs and the understanding of some French words used in Spanish,

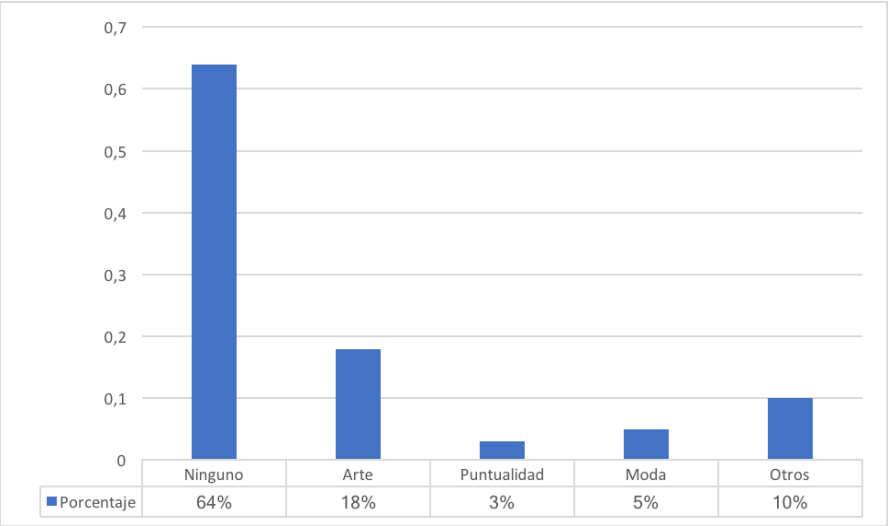
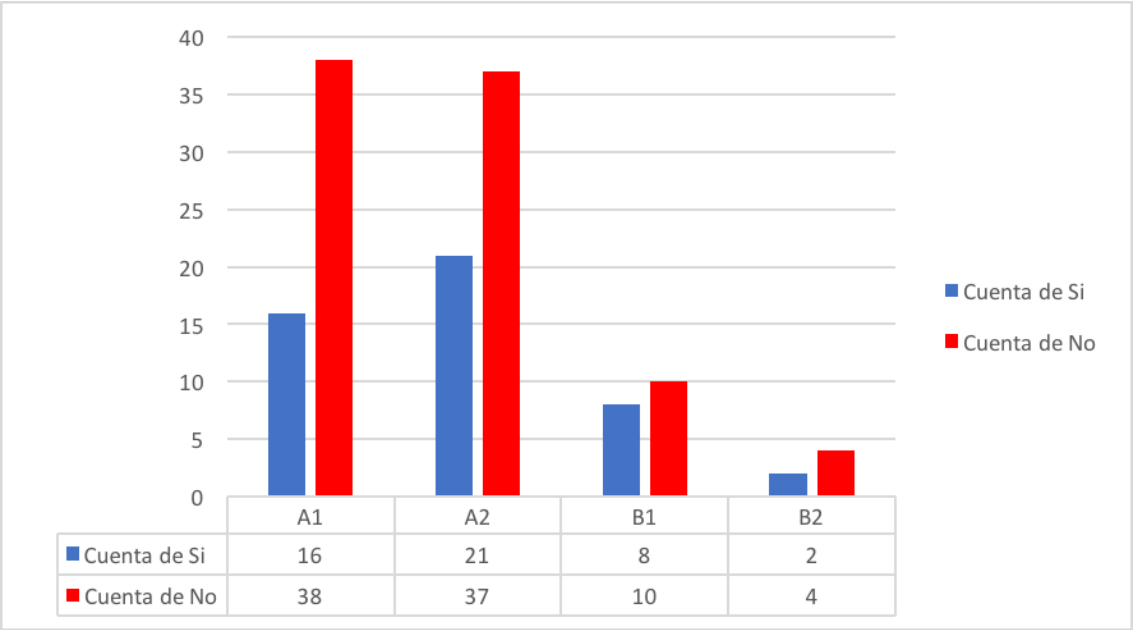


Figure 3. What aspects of the French culture are similar to the Ecuadorian Culture?

For this question, the students took time to answer it, and they sometimes talked among them, and also answered it at the end. 64% of respondents answered that no aspect is comparable, 18% responded the art, 5% responded fashion, 3% responded punctuality, the remaining 10% responded to different topics such as cordiality, education, food, among others.

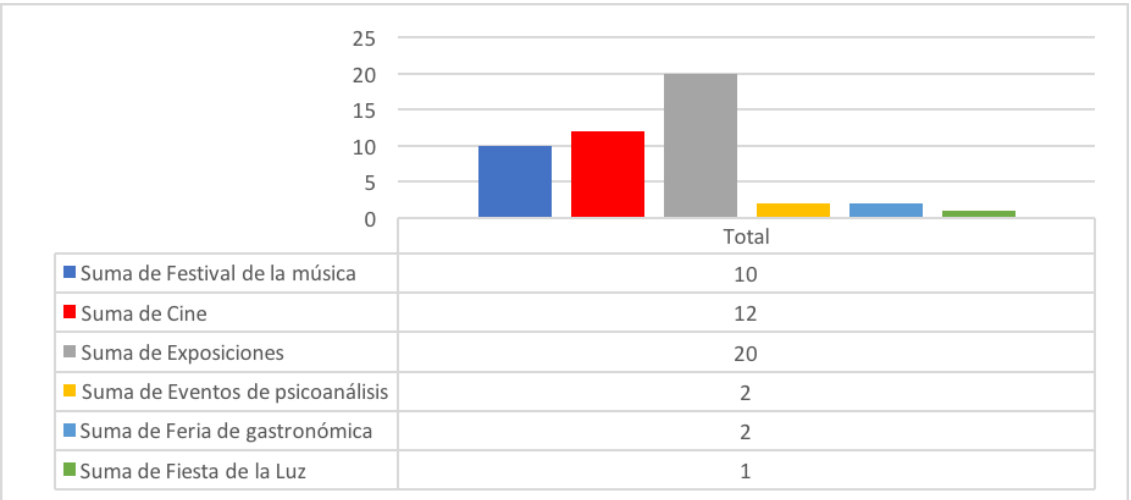
1. People cordiality,
2. These are very different cultures for example you can compare the gastronomy, the fashion, the education. As completely antonyms,
3. Architecture, art,
4. Fashion, gastronomy,
5. The customs transmitted from generation to generation,
6. Education, punctuality, respect, silence,
7. Depending on the region, in Quito people are more conservative than French. However, interest in art and food is very similar,
8. In the French culture there is more education than in the Ecuadorian,
9. Unfortunately, not many. The differences are too pronounced,
10. The usual greeting among friends, eating with the family, the variety of typical food, museums, and monuments that make up the country,
11. In a negative aspect that France is more organized than Ecuador and something positive for students is that the two languages are very similar,
12. I think they are currently compared in the seriousness and way of not being gentle with foreigners,



	A1	A2	B1	B2
Cuenta de Si	16	21	8	2
Cuenta de No	38	37	10	4

Figure 4. Have you attended the different cultural events organized by the French Alliance?

This question was made to find out if the students participate in the cultural events of the Alliance Française of Quito. 64.9% of the participants do not attend the alliance's cultural events, out of which 38 people belong to the A1 level; 37 people to level A2; 10 to level B1 and 4 to level B2. 35% attend the different cultural events, this represents 16 people of level A1, 21 people of level A2, 8 of level B1 and 2 of level B2. Those who participate in the cultural events needed to specify which events they normally attend. The results are the followings:

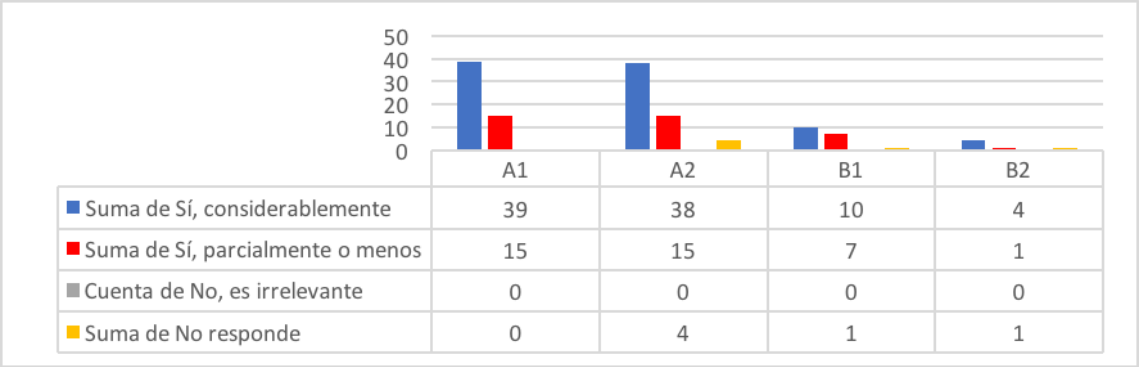


	Total
Suma de Festival de la música	10
Suma de Cine	12
Suma de Exposiciones	20
Suma de Eventos de psicoanálisis	2
Suma de Feria de gastronómica	2
Suma de Fiesta de la Luz	1

Figure 5. Cultural events

Out of the 47 people attending the cultural events of the Alliance Française, 42.5% have attended the exhibitions and art galleries, this being the most welcome event among the participants. Then, in Figure 7, the French film events, with a total of 25.5%; music festivals with 21.2%; the events of psychoanalysis and gastronomic fair with 4.2% each and finally, the Light Festival with 2%. On the Light Festival, it should be emphasized that it is not an

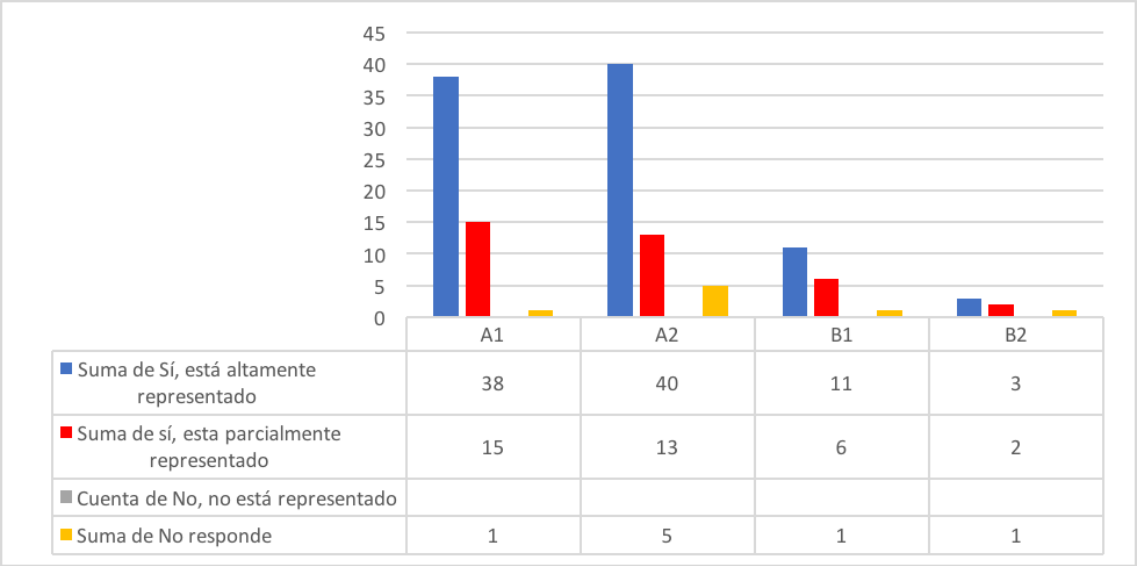
event organized by the Alliance Française but if it has participation of the French culture to be done jointly by the municipalities of Quito and Lyon.



	A1	A2	B1	B2
Suma de Sí, considerablemente	39	38	10	4
Suma de Sí, parcialmente o menos	15	15	7	1
Cuenta de No, es irrelevante	0	0	0	0
Suma de No responde	0	4	1	1

Figure 6. Do you consider that the cultural events help in the learning of the French language?

In this question, 6 people did not answer, representing 4.4% of the total number of participants. 66.9% think that cultural events help considerably in the learning of French and 27.9% believe that it helps, but partially or less.



	A1	A2	B1	B2
Suma de Sí, está altamente representado	38	40	11	3
Suma de sí, esta parcialmente representado	15	13	6	2
Cuenta de No, no está representado				
Suma de No responde	1	5	1	1

Figure 7. Do you consider that the French culture is well represented in the strategies and events carried out by the Alliance Française?

Once again, in this question 8 people did not answer, representing 5.8% of the participants. 67.6% believe that French culture is highly represented in the strategies and events of the Alliance Française, showing that the alliance has a good position. 26.4% consider that it is partially represented.

7. Discussion and conclusions

Culture has several definitions according to the perspective seen, this research focused on the research from the social aspect. Culture has developed and has exchanged ideas and visions of the world due to migrations, a main characteristic of human beings, and this has resulted in interculturalism.

Globalization as a term began to be used in the 1980s, after the Second World War and the emergence of new communication and information technologies. What it seeks is to homogenize and unify culture. At present, this process is more forceful due to the use of ICT in the daily lives of people, who can know and observe more easily how it is and how people live in other societies.

Interculturality is different from multiculturalism, because multiculturality refers to the result of the mix of cultures, while interculturality is a dialogue between them. Interculturality helps people in a society delimited with its predefined aspects and characteristics to access information and knowledge outside this society. In this way they acquire knowledge and a broader and cosmopolitan thought.

According to the authorities of the Alliance Française of Quito, culture is not an attraction for prospective students of the CFA, but rather the role it fulfills in the communication strategies is to retain the students to continue studying. This can be seen as a missed opportunity, because when the survey was conducted for the students of the Alliance Française of Quito, 66.9% of the 136 students think that cultural events help them considerably in learning French. And 67.6% believe that French culture is highly represented in the strategies and events of the Alliance Française, which reflects that the AFQ has a good level of positioning against the interest of students when choosing the institution and language to start learning.

Although the results of this investigation are not conclusive, it is clear that culture has a great potential to be a determining factor for students at the time of choosing a language to study, as a proof is that the public attending the cultural events of the Alliance Française of Quito is not necessarily the same public that takes classes in the AFQ.

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Relación entre rendimiento académicoy asistencia como factores de promoción estudiantil

Relation between academic performance and attendance as factors of student promotion

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Resumen

El artículo académico aborda la correspondencia entre el rendimiento académico y asistencia como factores de promoción del estudiantado de la Facultad de Filosofía, Letras y Ciencias de la Educación (FFLCE) de la Universidad Central del Ecuador (UCE), a partir de información documental de los archivos institucionales que registró la Unidad de Servicios Informáticos de la Facultad de Filosofía (USIF) en el período académico 2016 – 2017, de manera principal el componente calificaciones de todos los niveles (semestres), considerados los promedios de las asignaturas de las diez carreras vigentes para titulación, aprobadas por el Consejo de Educación Superior (CES), en las que constan matriculados 3617 estudiantes. Los promedios de las calificaciones y asistencias, fueron calculados mediante un análisis estadístico con el uso del coeficiente de correlación y se obtuvo un 0,75; lo cual significa que hay una correlación positiva moderada y directamente proporcional. Rendimiento académico y asistencia por la variable sexo del estudiantado

(hombres – mujeres), no evidencia diferencia significativa, lo que quiere decir que tienen similares calificaciones y asisten por igual a las clases.

Palabras clave

Rendimiento académico, calificaciones, asistencia, promoción estudiantil.

Abstract

The academic article shows the correspondence between academic performance and attendance as factors of success of the students of the Faculty of Philosophy and Education Sciences (FFLCE) of the Central University of Ecuador (UCE), from documentary information of the institutional files registered by the Computer Services Unit of the Faculty of Philosophy (USIF) in the academic period 2016 - 2017, in a main way the qualifications component of all the levels (semesters), considered the grade-point averages of the subjects about current careers for degree, approved by Consejo de Educación Superior (CES), in which 3617 students are enrolled. The grade-point averages and attendance were calculated through a statistical analysis with the use of the correlation coefficient and a 0.75 was obtained; this means that there is a moderate positive correlation, and directly proportional. Academic performance and attendance by sex of students (men - women), it does not show significant difference, which means that have similar qualifications and attend classes equally

Keywords

Academic performance, grades, attendance, student promotion.

1. Introduction

The main roles of the university are: teaching, research and linkage as a dynamic and integral whole, whose ultimate aim is the professional training, the scientific production and the contribution to the solution of problems of the society. Out of these roles, teaching shows to be a priority in the university management, since it tries to professionalize the youth with solid scientific, technical and humanistic knowledge to contribute to the development of the society and the State.

The educational system recognizes, at any level of the student training, but more specifically at the higher level, as a promotion factor the so-called academic performance, which is conceptualized:

> [...] It is sometimes referred to as school aptitude, academic performance or school performance, but generally the differences of concept are explained only by semantic questions, since generally in the texts, the school life and the teaching experience, they are used as synonyms (Navarro, 2003, p. 2).

Academic performance determines the approval or failure of a semester, a course or a module, as well as the level of success after a formative stage such as grade or semester. Thus, the article addresses to this conceptual category from a quantitative perspective and based on the statistical analysis.

The academic performance has been investigated at the national and global level, reaching various conceptualizations in the educational field, known as multicausal, which includes a

number of aspects involved in the process and it is the main indicator of learning achievement.

> Perhaps the most accurate definition is that academic performance is the sum of different and complex factors that act on the student. It has been defined with a value attributed to the achievement of the student in the academic tasks; and it is measured by the qualifications obtained with a quantitative valuation, whose results show the subjects studied, the defection and the degree of academic success (Garbanzo, 2007, p. 46).

The research carried out on this complex thematic agrees that in order to achieve a good academic performance, some dimensions must be integrated such as: dedication and effort to learning, academic ability, socioeconomic context, motivation, learning and teaching styles; among other factors that directly influence the qualifications obtained by the students. In other words, through academic performance is determined learning achievements obtained by the student and expressed by a qualitative or quantitative grade, or with its qualitative equivalences, as a result of the valuation of a set of academic activities planned.

The article addresses the relationships between the academic performance with class attendance and the difference between the sex variable of the students (male and female). The reflections obtained in the study seek to expose and explain the academic performance achieved by the students of the 10 careers of the Faculty of Philosophy, Letters and Education Sciences of Ecuador; this analyzes the averages of grades and attendance that students have by subject in the semester 2016-2017.

The evaluation instructions of the UCE with its corresponding academic system, on the basis of the regulation of academic year 2016 of the Council of Higher Education (CES), has established that each student obtains two qualifications in the semester, being about 20 points each, which must be at least 28/40 points to approve each subject; for those students who have between 8 and less than 28 points, they have the right to the take a replacement exam whose note (over 20) added to the average achieved in the two parts of the semester must be at least 28 points for its approval, and if they have less than 8 points, they have automatically failed the subject.

The purpose of the research is to analyze the relationship presented between the academic performances with the attendance to classes, considering the variable sex of the students enrolled in the Faculty in the period 2016-2017.

The careers belonging the faculty are: Language Sciences and Literature, Natural Sciences, Social Sciences, Commerce and Administration, Informatics, English, Mathematics and Physics, Preschool, Languages, Educational Psychology, those which are in the approval process of their redesigns and curricular designs in the semester, and that will change their nomenclature from the following period. The careers have from 49 to 69 subjects distributed in the nine semesters for the degree in Education Sciences. The data analyzed are the grades of the students obtained by subject in each one of the careers, from which the average of the grades per student and per career is systematized.

The second variable analyzed was the attendance of the students to classes, which were obtained from the database of the faculty in percentage values, from which the average per career was calculated, considering the means of assistance of the students for each subject. UCE's policy on assistance is that in order to approve a subject, the student must achieve

the minimum standard of 80% during the semester (Rodríguez, 2016). The student population of the faculty enrolled in the academic period 2016 – 2017 is 3617 classified as: 35.44% men and 64.56% women; distributed in the ten careers and in the nine academic semesters corresponding to the professional training of the degree.

This study aims to determine whether the quality of class attendance improves the student academic achievement. In addition, it seeks to establish whether there are differences between the academic performance of male and female students; statistical results are presented by means of tables and graphs illustrating the characteristics of the research variables to identify whether there is a relationship between the percentages of student attendance with the averages of students' qualifications.

A comparison is also made among the averages of the qualifications, the attendance percentages among male and female students by careers and in the whole faculty.

2. Academic performance

Student academic performance is the most important aspect of any educational process when analyzing the educational quality because for the: "(...) University students is an essential factor in the approach of the subject for the quality of higher education, because it is an indicator that allows an approximation to the educational reality" (Garbanzo, 2007, p. 43). The teaching is constituted by actions planned and developed mainly by the teachers to achieve a learning result in the student as an intellectual effort assumed, and that is concrete in the academic performance observed through the summative evaluation, hence, the concept of performance states:

> It is evident that the approach to academic performance could not be exhausted through the study of students 'perceptions of the variables of skill and effort, and could not be reduced to the simple understanding between attitude and aptitude of the student. The demand for analysis and evaluation of other factors allow entering more in the academic performance as a phenomenon of study, [...] variables will be addressed, ranging from its conceptualization, prediction and evaluation to research developed in different education levels [...]. (Navarro, 2003, p. 2).

Academic performance involves a number of components such as the ability, effort, attitude and aptitude of the student. In addition, academic performance can be explained as the result of the entire teaching and learning process, implemented on a regular and non-regular basis, obtained individually and collectively through the evaluation.

The academic performance as a final product of an evaluative process is mediated by social factors of the context; however, there are also intrinsic and extrinsic motivational factors that favor or hinder learning. The presence of pedagogical, didactic and curricular factors also determines the performance and make visible the didactic methods, resources, skills, contents and values that are used for this evaluative process. The evaluation is an essential part of the teaching-learning process. In this regard, Arribas (2014) states: "one of the main manifestations of academic performance is the qualifications" (p. 2).

In this article, reference is made to an element of academic performance such as qualifications, obtained through the evaluation of the learning process in its final stages for accreditation in an educational system or subsystem. Although it is true, qualifications involve a high dose of subjectivism and in many cases do not reflect the current capacities

achieved by the students, however, they are the most obvious results of the academic achievement obtained by the students.

2.1 Qualification and academic performance

It is also necessary to consider a different learning perspective in which there is greater determination of the process against the product or performance. In this regard, Carretero (2009) states:

> [...] learning is synonymous of understanding. Therefore, what is understood is what is learned and what will then be remembered better, because it is integrated into our knowledge structure. Therefore, it is essential for the teacher not only to know the representations that the students have about what they are going to be taught, but also to analyze the interaction process between the new knowledge and the one they already own. In this way, the final product produced by the student is not as important as the process that leads him/her to provide a certain answer (p. 2).

At the academy level, there is a very strong controversy about pointing to grades or ratings as the most obvious expression of academic performance. It is substantial to be aware that there are other important aspects when analyzing the learning generated in an educational process such as: skills, knowledge, behaviors, practice of values, social relevance, among others. However, qualifications are the primary indicators for determining academic performance, which is expressed by a qualitative or quantitative assessment obtained by the student.

Murillo (2013), contextualizes the academic performance as the sum of a set of varied, complex and interdependent elements that participate in any process oriented to learning, which is evaluated permanently and as a result it obtains the qualifications through a generally quantitative scale with its corresponding qualitative equivalence, evidencing the approval or failure of the subject.

Similarly, (Garbanzo, 2007) assumes a conceptualization that is similar to the one presented above:

> The valuation of academic performance does not lead to anything other than the relationship between what is learned and what is achieved from the point of view of learning, and is valued with a grade, which results from the sum of the achieved grade by the student and the different academic activities conducted (p. 46).

In this context, the results of the evaluations, expressed in qualitatively or quantitatively grades, are in fact the most used evidence to verify outcomes when studying academic performance.

According to the regulations of the student evaluation system RSEE (2017), approved by the Council of Higher Education CES, it implements the general guidelines to develop the evaluation of the learning, and also establishes that each university must elaborate an internal evaluation system with specific characteristics of the institution, contemplating the guidelines established by the CES and, in addition, conceptualizing the evaluation of learning in the following terms:

> Article 5.- Evaluation as a learning component.- The evaluation of learning is essential in the educational process of the students, of the careers and programs, that by being systematic, permanent and participatory allows the integral assessment of its advances in the acquisition of cognitive, investigative, procedural and attitudinal capacities, in such a way that they contribute to guarantee the quality of the professional training (CES, 2016, p. 4).

Each academic semester is divided into two terms and each one applies an evaluation process that consists of a test that corresponds to 40% of the qualification and other evaluation strategies as teamwork, autonomous work, research, projects, among others, corresponding to 60% of the 20 points.

The evaluation of the learning is expressed in results considering the following scales; qualitative qualifications: excellent, very good, good, regular and deficient. While quantitative ratings are set on a scale from 0 to 20 points.

For the approval of each subject, the students must obtain at least 28 points in the sum of notes of the two terms. If this score is not achieved, the student is entitled to an additional recovery assessment, provided that he/she obtains a qualification higher than 8.8 points in the semester; if the grade is lower, the student will fail the subject. The recovery evaluation is made up of 60% of the qualification obtained in the recovery exam, plus 40% of the sum of the scores in the first and second term. In the same way, for approving the subject the student must have 28 points in the recovery evaluation, otherwise he/she will fail the subject (Rodríguez, 2016). Thus, the minimum standard for the term at UCE is 28/40 points.

2.2 Attendance

In the field of higher education, attendance is defined as "(...) the daily attendance of the student to classes" (University of Las Palmas Gran Canaria, 2011, p. 1), which is mandatory, except in online education, so that the student must arrive on time to participate in the different subjects that have registered. On the other hand, each teacher is responsible for recording the attendance of the students, individually, in every hour of classroom work, and at the end of each term the professor must record the total attendance to the computer system of the UCE.

Universidad de Loyola- Andalucía, in the teaching guide states:

> Class attendance is an essential element in the learning process of the subject, along with the active participation of the students in their development and continuous work. The subject's plan requires the student's attendance and participation in class so that the student can achieve the objectives and competencies of the subject (University of Loyola Andalucía, S.F., cover).

The attendance refers to the physical presence of the student in the classes of the different subjects. According to the regulation of academic regime promulgated by the CES in the year 2013 for the institutions of higher education (IES) of Ecuador, in its reform of March 2017, states that the careers must comply with 7200 hours distributed in 54 subjects, organized in three curricular units: Basic, professional and qualification, during the nine academic terms. This number of hours includes the teacher-assisted classroom work plus the autonomous work developed by the student in a six-monthly period of 16 weeks (CES, 2017).

For the approval of a subject, students and professors comply with the current legal national and institutional regulations in relation to the evaluation of the learning in which two components are integrated: the qualification and the attendance obtained by the student in the semester. According to the instruction for the student assessment issued by Universidad Central del Ecuador on May 2017, paragraph 12 provides that: "The subjects, courses or equivalents to be taken by the students during their training will be approved with a minimum of 70% of the qualification and a minimum attendance of 80% of classroom classes" (UCE, 2017, p. 3). This mandate agrees with the academic vice-rectorate provision of UCE on October 2016, which served as the basis for analyzing student attendance in this article.

2.3 Student promotion

The student promotion at the university is known as the approval of a course, subject or module after a regulatory time of studies and personal effort, as defined by Suárez (2011) "[...] Passing one course to another when the educational and personal objectives have been obtained by the pupil"(p. 1). For approving, several constant requirements are required in the general and private regulations of the IES. In the case of the UCE, for the promotion of school level, the University statute stipulates that:

> Art. 160.-Approval of courses and subjects.- The subjects or courses that must be coursed by the students during their training period will be approved with a minimum of 70% of the qualification and a minimum attendance of 80% of in-classroom classes (UCE, 2016, p. 70).

UCE in all its careers has two obligatory requirements: to promote to its students the qualifications and assistances for subjects and semesters.

3. Methodology

The study was non-experimental, transectional and descriptive, since only the observed variables are described, without having any special treatment; the data corresponded to an academic period; the unit of analysis is the results of the student qualifications of the semester 2016-2017. The data for descriptive analysis were extracted from the computer archive of the Faculty Philosophy, Letters and Education Sciences of UCE, in charge of the Technological Services Unit of the Faculty (USIF). The study is approached from the documentary research; additionally, important contents and integrated empirical data of qualifications and assistance provided by USIF were selected and were subjected to deep reflection to establish valid conclusions regarding the study of the subject.

The population immersed in the research is: N = 3617 students enrolled in the 2016-2017 semester in the ten careers of the Faculty of Philosophy, Letters and Education Sciences as shown in Table 1.

Careers	Student population		
	Women	Men	Total
Language and Literature	212	119	331
Natural Sciences	225	139	364
Social Sciences	200	174	374

Administration and Business	82	48	130
Informatics	71	250	321
English	209	128	337
Physics and Mathematics	113	173	286
Preeschool	498	3	501
Languages	240	77	317
Educative Psychology	485	171	656
TOTAL FFLCE	2335 (64.56%)	1282 (35.44%)	3617 (100%)

Table 1. Student population at the Faculty of Philosophy, Letters and Education Sciences (FFLCE).

As shown in table 1, most of the population is female, this is 64.56%, while men are 35.44%. In addition, there are more than 80% female students in careers like preschool, psychology and multilingual that are the most populated. The careers investigated are in the process of approving their redesigns and curricular designs; consequently, they will change their nomenclature from the next academic period.

4. Results and discussion

The results presented below are derived from the statistical analysis carried out with the data corresponding to the study variables, such as the attendance expressed in percentage over 100% and the academic performance in scale of semi-annuals qualifications from 0 to 40 points corresponding to the semester 2016-2017.

Carreers	Average grades	Average attendance	Correlation coefficients
Language and Literature	33.43	92.73%	0.80
Natural Sciences	32.16	93.05%	0.76
Social Sciences	31.90	94.70%	0.48
Administration and Business	29.25	86.82%	0.77
Informatics	28.72	88.37%	0.75
English	32.57	94.78%	0.48
Physics and Maths	30.04	93.86%	0.57
Preeschool	33.99	94.78%	0.66
Languages	32.08	91.22%	0.81
Educative Psychology	32.80	94.14%	0.70
TOTAL FFLCE	31.69	92.45%	0.75

Table 2. Average of qualifications and attendances per career at FFLCE

The averages of qualifications per career are presented in Table 2, and are expressed on a scale of 40 points, being the career Preschool the one with the highest average grade (33.99/40 points) in student academic performance, while Informatics presents the lowest average (28.72/40 points).

The average academic performance of the 10 careers of the faculty is 31.69/40 points, higher in 3.69 points to the minimum promotion standard of the UCE of 28/40 points, but lower in 8.31 of the maximum standard of 40/40; therefore, its level is valued as good according to Rodríguez (2017). Then there are two career groups located above and below the overall academic performance average; 8 careers have higher averages but close to the mean. Only two careers are below, but with averages far from the media.

On the other hand, the arithmetic mean of the average attendance is 92.45% for the 10 careers; being the careers of Preschool and English the ones with the highest attendance percentage (94.78%); while Business has a lower average with 86.82% of attendance. In Social Science some subjects have an attendance percentage of 100 %. Six careers exceed the average, while four are below the average. The average of student attendance of the faculty exceeds 12.45 percentage points to the minimum standard established by the UCE.

4.1 Correlation test

The calculated statistical test was Pearson's R correlation coefficient, between the average of grades and average attendance, considering the totality of students in all ten careers. The correlation rate in the different careers is in a range from 0.48 to 0.81, and at the faculty level is 0.75 as shown in Table 2.

By interpreting the Pearson correlation coefficient of 0.75; it means that there is a high positive correlation, according to the equivalences of Table 3. The positive coefficient means that there is a directly proportional relationship among the two variables, in other words, if the average of grades goes up, the attendance percentage also increases. However, it should be noted that in the careers of social sciences and English the correlation is moderate between qualifications and attendance unlike the other careers.

>0.80	Very high
0.60 - 0.79	High
0.40 - 0.59	Moderate
0.20 - 0.39	Low
<0.20	Very low

Table 3. Interpretation of correlation coefficients.
Source: http://personales.unican.es/salvadol/apuntes2b.pdf

4.2 Approved and Reproved

The students in order to pass a subject must have at least 28 points and 80% of class attendance in each subject. The trend of approved and reproved students is presented in Table 4.

Careers	Number of students	Percentage of approved Total of subjects	Percentage of reproved Total f subjects
Language and Literature	331	96.29%	3.71%
Natural Sciences	364	94.53%	5.47%
Social Sciences	374	93.56%	6.44%
Administration and Business	130	87.57%	12.43%

Informatics	321	79.87%	20.13%
English	337	93.59%	6.41%
Physics and mathematics	286	86.28%	13.72%
Preschool	501	97.42%	2.58%
Languages	317	93.02%	6.98%
Educative Psychology	656	95.19%	4.81%
AVERAGE FFLCE	3617	91.73%	8.27%

Table 4. Percentage of approved and reproved students by career at FFLCE.

The average of reproved students is 8.27% in the faculty, i.e., they have not exceeded the minimum score required in academic performance, attendance or the two requirements.

Careers that have a lower rate of reproved students are: preschool with 2.58%; Language Sciences 3.71% and psychology 4.81%. However, there are three careers that have a higher repetition rate, these are: computer science with 20.13%; mathematics and physics with 13.72% and administration and business with 12.43% of reproved. It draws attention the reproved rate in these careers, so it is necessary to do a deeper investigation to determine the causes of this academic problem.

Subjects by careers. - It is important to mention that the subjects in the careers vary numerically; there is a block of common subjects which are oriented to the professional training in all the careers of the faculty; and another block of subjects that emerge from the specialized training of each career. English has a smaller number with 41 subjects, while Preschool has 69 subjects and the average subject for careers is 56.5. Table 5 shows the number of subjects per career.

Careers	Number of subjects during the period 2016 – 2017
Language and Literature	56
Natural Sciences	58
Social Sciences	53
Adinistration and Business	49
Informatics	55
English	41
Physics and mathematics	66
Preschool	69
Languages	59
Educative Psychology	59
AVERAGE FFLCE	56.5

Table 5. Number of subjects per career at FFLCE.

Difference between academic performance and assistance by gender.- To consider the gender variable, i.e, the one that differentiates the qualifications and the attendance achieved by the male and female students. In table 6, a cross-sectional analysis is made of the average values obtained in the grades and the attendance to classes in all the subjects by the students of all the careers.

Careers	Men		Women		Total	
	Grades	Attendance	Grades	Attendance	Grades	Attendance

Language and Literature	33.43	92.71%	33.43	92.75%	33.43	92.73%
Natural Sciences	32.15	93.04%	32.16	93.05%	32.16	93.05%
Social Science	31.90	94.70%	31.89	94.69%	31.90	94.70%
Administration and Business	29.31	86.92%	29.18	86.72%	29.25	86.82%
Informatics	28.72	88.37%	28.72	88.37%	28.72	88.37%
English	32.57	94.78%	32.56	94.77%	32.57	94.78%
Physics and mathematics	30.04	93.87%	30.03	93.84%	30.04	93.86%
Preschool	33.91	94.66%	34.07	94.90%	33.99	94.78%
Languages	32.06	91.18%	32.09	91.25%	32.08	91.22%
Educative Psychology	32.79	94.13%	32.80	94.15%	32.80	94.14%
AVERAGES FFLCE	31.69	92.44%	31.69	92.45%	31.69	92.44%

Table 6. Attendance and qualifications average according to the gender variable

According to the results observed in Table 6, there is no difference in academic performance, compared to male and female students, since the average is 31.69 points for both groups. In relation to class attendance, the difference is minimal in male and female students, as shown in Table 6. Therefore, it can be established that there are no significant differences in qualifications and attendances averages between male and female students.

Careers	Subjects in the period 2016 – 2017	Grades over 40	Subjects in the period 2016 – 2017	Grades under 40
Language and Literature	Cultural and ecologic reality	38.08	Language and literatura didactics I	26.16
	Teaching	37.00	Language and literatura didactics I!	27.47
Natural Sciences	Universal Literature V	3698	Investigation III	28.20
	Internship and investigation	39,88	Physics	26.89
	Pre-profesional practice IIII	39.75	General Chemistry I	27.04
Social Sciences	Pre-profesional practice II	38.72	General Chemistry II	28,.86
	Pre-profesional practice I	40.00	Philosophy II	27.38
	Pre-profesional practice IV	39.29	History of Ecuador II	27.47
	Pre-profesional practice III	39,.14	Investigación I	27.68
Administration and Business	Educative law	37.55	Philosophy of Education	0.00
	Pre-profesional practice V	36.22	Methodology of investigationn I	0.00
	Pre-profesional practice III	35.46	Statistics I	5.50
Informatics	Profesional ethics	38.80	Physics I	19.18
	Electronics	38.04	Mathematics III	21.83
	Investigation	37.25	Mathematics I	21.83
English	Tic I	37.03	Contrastive linguistics V	25.44
	ESP	37.00	English VI	25.46
	Didactics II	36.87	Didactics I	27.71
	Electronics I	39.67	Physics I	23.58

Physics and Mathematics	Electonics I	37.88	Analytical geometry	24.00
	Algebra	37.50	Mahematics I	24.35
	Entrepreneurship	39.77	Investigation III	27.55
Preschool	Pre-profesional practice II	39.06	Music	29.52
	Child dance	39.00	Neuroscience I	29.92
	Pre-profesional practice IV	38.00	Elective	24.00
Languages	Learning evaluation	37.91	Contrastive Linguistics II	26.68
	Research projects II	37.63	Didactics I	27.30
Educative Psychology	Pre-profesional practice Psychopedagogy II	38.63	Psychophysiology II	24.62
	Pre-profesional practice Psychopedagogy IV	38.35	Childhood Psychology II	28.27
	Pre-profesional practice Psychopedagogy I	38.21	Psychostatistics I	29.11
Average	High scores	38.15	Low scores	25.46

Table 7. High and low grades in subjects per career at FFLCE

Subjects with high and low grade averages. - In table 7, the three subjects are presented by careers with the highest and lowest academic performance of the students at the Faculty of Philosophy, Letters and Education Sciences.

It is evident that in pre-professional practice the student qualifications are higher, very close to the 40/40 points; while the lowest averages are present in the specialty subjects. The three subjects per career with the highest scores are at intervals of 36.22/ 40 points and have an arithmetic mean of 38.15/40 points. While the lowest scores for groups of three subjects per race were calculated in the range of 29.92 and lower, resulting in an arithmetic mean of 25.46/40 points.

Pre-professional practice I of the career of Social Sciences presents the lowest grade average among all the careers with 40/40 points. While the subject of statistics I of Administration and Business have the lowest average among the 10 careers with an average of 5.5/40 points. It is interesting to mention that the subject Philosophy of the Education and Research Methodology I of the career of Administration and Business have grade averages of 0 points as it is shown in Table 7.

5. Conclusions

The academic performance expressed in the qualifications obtained by the students of the 10 careers of the Faculty of Philosophy, Letters and Education Sciences of Universidad Central del Ecuador in the academic period 2016-2017 is satisfactory; i.e., the student promotion objectives were achieved; however, it has intermediate level in the scale table of the guidelines for student grade evaluation of UCE. The careers located in the superior and inferior extremes are Preschool and Informatics, respectively.

Student attendance is in a very good percentage range, well above the minimum standard regulated by Universidad Central del Ecuador, implying that there is student responsibility for their classrooms and teacher control in the classroom. The careers of preschool and

English stand out positively in the quality of attendance; while the trade career is observed as the lowest student attendance.

Academic performance averages and class attendances do not present significant differences between male and female students, which explains that the gender is not an incident factor in the student academic performance of the Faculty of Philosophy, Letters and Education Sciences.

The correlation between academic performance and student attendance calculated with Pearson's correlation coefficient is 0.75, which means that there is a moderate and directly proportional positive correlation between the variables under study. This implies that if the student's attendance rate is increased, his/her academic performance also goes up.

In the faculty, the average of approvals in the semester studied is higher than 90%, including academic performance and assistance as mandatory requirements. However, there are three careers with a high repetition percentage: Computer Science, Mathematics and Physics, and Administration and Business. The careers: Preschool, Language Sciences and Psychology have lower percentage of reproved students.

In terms of the subjects with the highest and lowest student academic performance, pre-professional practice stands out as well as an important group of subjects with excellent academic performance that is very close to the maximum promotion standard; also recurring are the low averages in subjects of specialty in all the careers studied, being more evident this phenomenon in the career of Administration and Business.

From the comparison study between academic performance and gender, it is fundamentally similar in the average scores between male and female students of the 10 careers, with a minimum difference in class attendance favorable to female students.

To support the study, it was necessary to evaluate the number of subjects per career in the general context of the faculty, considering those of vocational training and specialized training of the careers, being English the career with a lesser number of subjects (41), while preschool has the highest number of subjects (69). The arithmetic average of subjects per career (56.5) is very close to rules of the academic system of CES.

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Las dimensiones sustantivas y dialógicas del pensamiento crítico en estudiantes de bachillerato y universitarios

The substantive and dialogical dimensions of critical thinking in high school and university students

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Resumen

El pensamiento crítico es sin duda uno de los pilares fundamentales en el desarrollo personal, social y académico del individuo porque ayuda a procesar y construir conocimientos consientes del mundo real; en este estudio se requiere analizar y evaluar a los alumnos, así como también determinar la evolución y diferencias en las dimensiones sustantivas y dialógicas en educandos de bachillerato, segundo y séptimo nivel de los estudiantes universitarios. Sobre esta base, se investigó a 375 alumnos, con el enfoque cuantitativo, enfatizados en el análisis de carácter descriptivo y comparativo en un inicio con los datos grupales al test de normalidad de Shapiro Wilk (al tratarse de puntuaciones discretas). La dimensión de escritura sustantiva presentó una significancia p =0,05 por lo que fue necesario utilizar la prueba de Kolmogorv Smirnov con corrección de Lilliefor, para contrastar si el conjunto de datos se ajusta o no a una distribución normal en este caso se obtuvo una significancia p = 0,11, con lo que puede decirse que todas cumplieron con el criterio de normalidad (p>0,05). En la investigación se consideró el valor medio para cada una de las dimensiones y categorías. De los resultados obtenidos se determinó que existen falencias en los estudiantes de bachillerato y disminuyen a medida que superan el nivel de instrucción.

Palabras clave

Aprendizaje, dimensión dialógica, dimensión sustantiva, educación, pensamiento crítico.

Abstract

Critical thinking is undoubtedly essential in the personal, social and academic development of the individual because it helps to process and build knowledge of the real world. In this study it is necessary to analyze and evaluate the students, as well as to determine the evolution and differences in the substantive and dialogical dimensions in high school students, second and seventh level of university students. On this basis, 375 students were investigated using the quantitative approach, which emphasized in the analysis of descriptive and comparative character in the beginning with the group data with Shapiro Wilk normality test (when dealing with discrete scores). The substantive writing dimension had a significance p = 0.05, so it was necessary to use Smirnov Kolmogorv test with Lilliefor correction in order to test whether or not the data set were adjusted to a normal distribution, in this case a significance p = 0.11 was obtained, and it can be said it met the criterion of normality (p> 0.05). In the investigation, the average value for each of the dimensions and categories was considered. From the results obtained it was determined that there are shortcomings in high school students and these shortcomings reduce once they get increase their level of instruction.

Keywords

Learning - dialogical dimension - substantive dimension - education - critical thinking.

1. Introduction

This research originates by the difficulties observed in students aspiring to enter the university. In Ecuador, new models of educational management are implemented with the aim of improving the quality of education. Unfortunately, this set of policies has failed to articulate high school with higher education. At present, the difficulty of entering the university becomes more and more dramatic, it is common to find frustrated students, full of anger and disappointment because they did not achieve the necessary score in the tests of mathematical, linguistic, scientific and social domain as expressed by El Comercio (2018) "... being a bachelor 2018 required 698 points. Among the graduates the average was 685; while the qualification for the non-educated was 716 points. In whole, 291 703 people presented the exam ..." (p.5). Uncertainty continues even more when situations deal with contradictory feelings and thoughts simultaneously by overcoming skills not acquired at the previous levels of study. In this regard, Laiton (2010) states:

> [...] it is a need that in this encompassed modern world, the student acquires skills of critical thought from the education like a whole; critical thinking that would allow him/her the access to any knowledge with autonomy, quality, criterion and necessary argumentation so that such knowledge not only becomes an information heap, but more a knowing what to do with the information, where to find it out, how to solve the daily problems with certainty and conceptual clarity (p. 1).

The above statements show the evolutionary level of critical thinking. In Ecuador this variant of thought can be seen among the high school student with respect to the university student. According to Vivas (2003) "... in terms of increasing critical thinking. [...] " (p. 259) what is relevant for this study is the establishment of differences between those who study the second level of the degree, compared to those who are on the seventh level.

The difficulties expressed earlier in this research are aimed at formulating the following questions: Are there differences in critical thinking in high school and university students?

Are there differences in relation to the level of studies?, Is there dependency on critical thinking in university students of different scientific fields? Are there divergences of critical thinking in university students from different universities? In this approach it is suggested that the questions will determine the changes at the level of critical thinking throughout the formative process. However, such changes have been documented in terms of increments (Vivas , 2003, p. 259).

With the results of the research it is necessary to raise awareness on the importance of critical thinking, to improve the social reality and the results related to the learning process to be a student and to be a bachelor (tests that are applied to students in order to obtain the degree and to enter the university, where a high percentage of young people have difficulties in the linguistic dimension; critical thinking must be systematically exercised. The academy aims to raise theoretical and practical strategies to develop in self-disciplined and self-regulated way this type of thinking in participants and students. The development of critical thinking in the classroom requires thinking and planning the class with routines and strategies that involve students in thinking. The purpose is to keep students active and motivated in the learning process.

The article is structured in four parts. The first part deepens the conceptual bases concerning the generalities of the critical thought, the peculiarities of the substantive and dialogical dimensions. The second part describes the methodology with the characteristics of the population and the trends of the groups involved in the research. The third part explains the approach, type of research, level of research and the instrument to be used in the collection of information, it performs a descriptive analysis of each of the items concerning the substantive and dialogical dimensions, i.e.,: substantive reading, substantive writing, listening-expressing orally, dialogic reading, dialogic writing, listening-expressing orally dialogic. In each one the analysis and interpretation is carried out with the option of greater and lesser repetition. The fourth part contains the conclusions in which the opinions are explained to be validated with the conceptual part of each of the items of the research instrument.

2. Theoretical frame

2.1 General aspects of the critical thinking

Dewey (2007) understood thought as an “active, persistent and careful consideration of a belief or way of knowledge of the bases that support it and its conclusions” (p. 24). Critical thinking is reasonable since it looks for the truth, thus, its aim is to recognize what is fair and true; i.e., the thinking of a rational human. Ennis (1985) also insists in the fact that critical thinking is reflexive, and states “it is a thinking that analyzes the results of its own analysis and those of different analyses” (p. 45). Based on this idea, it can be said that in Ecuador critical thinking is limited in universities, considering the own experiences before having more awareness and objectivity, since by being neutral and using the reason, it allows reaching a deep knowledge that motivates the research, allowing that people can talk with knowledge.

Alejos (2005) indicates that Michael Scriven (1996) conceived critical thinking as an intellectual, disciplined and active process that develops cognitive skills such as: "conceptualize, apply, analyze, synthesize, evaluate and validate information, through the experience, reflection, reasoning and communication as a guide to belief and put into action"(p. 5). At the university level, in order to meet social and professional expectations, the idea is to develop critical thinking. The purpose is that students and teachers question

themselves, ask questions, investigate, generate ideas and propose solutions to problems based on epistemological knowledge.

This kind of thinking will depend on the educational philosophy of the university. In this sense this tendency allows the subject to carry out an analysis of the experiences and information he/she possesses and be able to reach the conclusions of the reality. In addition, this requires the implementation of cognitive skills understanding these as the active process of thinking that consists of taking alternatives, so the emotional competencies that the human being has are related to the personal attitudes necessary to think.

Lipman (1996) quoted by Serrano (2011) considers that "critical thinking is a capable and responsible thinking as it leads to judgment because it is based on criteria, it is self-correcting and context-sensitive" (p. 4). People with critical thinking rely on coherent criteria and sustainable judgments, and are able to regulate their ideas, reorient their decisions and opinions, and take responsibility for their reasoning, based on the scientific theory and the surrounding context. In the daily life of a young university, critical thinking is developed and evidenced in various situations, from the elaboration of a complex task, the analysis of others´ ideas, issuance of criteria, rectification of judgments, the construction of a project, preparation of an exhibition, writing of essays, among others.

All these activities coupled with the implications of group work and interactions with the educational phenomenon agree with the fact that the student demonstrates skill in his/her critical thinking. According to the author, this ideology has to be sensitive to the context, and the executive functions that allow to regulate behavior and to plan ideas with this kind of thinking; therefore, critical thinking not only generates beings able to investigate and explore, but it allows them to evaluate all their knowledge and question if necessary. The development of critical thinking of educational spaces is of great importance because we not only assimilate information in our human nature, but enter into a thorough analysis of the information received to use it later, not to destroy, but to build a better society. In this regard, Elder and Paul, (2005) indicate:

> The reality is that teachers will be able to encourage critical thinking only to the extent that they think critically. This could be the most important barrier for the student to achieve the competencies of critical thinking. Teachers should think thoroughly so they can help their students to think thoroughly. For teachers to promote a sensible, rational and multilogical global vision, they will have to develop it. In short, teaching critical thinking presupposes a clear conception of critical thinking in the mind of the teacher (p. 7).

Critical thinking is a capacity that the human being possesses, the same that implies reason, truthfulness, judgement, precision, coherence and a high knowledge of the subject. Critical thinking allows the analysis and evaluation of certain information through intelligence, knowledge and reasoning. The university student will be able to organize his/her ideas, concepts and knowledge which allow him/her to reach more objective information.

The position of the authors is very clear with regard to critical thinking because it is a process that organizes the ideas and knowledge of the human being in relation to a subject. It considers its cognitive aspect to establish objective ideas and reflects leaving aside the emotional aspect. Ribadeneira (2012) proposes a broad stance in this regard, and indicates:

> ... it is a proposal with a high reference of the individual´s reality that is based on the most advanced knowledge of science, but without giving up the cultural identity and the popular wisdom that integrates it, with the purpose of serving as an transformer instrument, so that the human being does not remain in the past or in postmodern times without criterion or argument (p.27).

Thus, it can be determined that critical thinking considers the own experiences and experience of the human being. The personal overcoming is not only in the scientific bases, but in its customs, its worldview and its know-how: to know, to know to be, to know how, as a contribution to its professional preparation.

2.2 Sustantive dimension

The substantive dimension is the ability to value thought expressed through sustained information, articulated concepts, algorithmic methods with respect to a discipline of knowledge. In this regard, Montoya (2007) states:

> The substantive dimension evaluates the truth or falsehood; in this way, thought becomes more objective and effective in its processing and production of information, since it is based on data and information compared rather than mere opinions (p. 7).

The substantive dimension is consistent with the content of the thought, through which can be connoted the quality of thought when expressing solid knowledge, sustained and adjusted to the context and the reality. The results of this dimension triggers in: coherent statements when one thought becomes another from the semantic level, i.e. the meanings of the main ideas; and from the lexical level when using synonyms. Therefore, the substantive dimension refers to the quality of information that is provided to society based on the different fields of knowledge.

2.3 Dialogic dimension

According to Montoya (2007), "The dialogic dimension is the ability to examine the thought in relation to the others in order to assume different points of view and mediate other thoughts" (p. 78). This dimension makes it easier for people to probe, explore, examine our thoughts in relation to the thought manifested and expressed by others, with the aim of discerning and appropriating other points of view.

In this dimension some strategies that allow to examine one thought from the solution of another can be identified; in other cases, the argumentation in relation to the other one can be evaluated while it is discussed. Moreover, the arguments different to ours can be evaluated to make a decision; therefore, the argumentation is considered as a strategy of persuasion to the other through the dialogue. In the Academy, the dialogic dimension allows to establish the relationship with other speakers who enunciate their position with respect to those evidenced in reality. It contributes to learning to live together and to cooperate with other people regardless their ideological, cultural, academic and scientific heritage.

3. Methodology

375 participants were considered among the students of the BGU (General Unified Baccalaureate,) of a public institution of Quito, and university students of Escuela Politécnica Nacional (category A) and UTE University (category B), of different careers and who were coursing the second or seventh level by that moment. 193 out of the 375 participants were women (51.5%) and 182 were men (48.5%), noting gender balance.

Group	Frequency	Femenine	Masculine	Total
Technical Baccalaureate	F	1	38	39
	%	2.6%	97.4%	100 %
Environmental Engineering (2) EPN	F	14	16	30
	%	46,7%	53.3%	100 %
Environmental Engineering (7) EPN	F	16	16	32
	%	50.0%	50.0%	100 %
Business Engineering (2) EPN	F	18	11	29
	%	62.1%	37.9%	100 %
Business Engineering (7) EPN	F	26	16	42
	%	61.9%	38.1%	100 %
Business Engineering (2) UTE	F	15	13	28
	%	53.6%	46.4%	100 %
Business Engineering (7) UTE	F	12	16	28
	%	42.9%	57.1%	100 %
Environmental Engineering (2) UTE	F	14	12	26
	%	53.8%	46.2%	100 %
Environmental Engineering (7) UTE	F	16	21	37
	%	43.2%	56.8%	100 %
Basic Education (2) UTE	F	41	17	58
	%	70.7%	29.3%	100 %
Basic Education (7) UTE	F	20	6	26
	%	76.9%	23.1%	100 %
Total	F	193	182	375
	%	51.5%	48.5%	100 %

Table 1. Gender distribution

It can be seen that there is equilibrium in the proportions with respect to the gender. However, in the case of the baccalaureate there was evidence of more presence of men than women, and in the career of basic education there were more women than men.

The age of the research group ranged between 16 and 47 years, with a mean of 22.5 and deviation of 4.6 years. Table 1 and 2 shows the distribution by gender and the average age of each research sub-group.

GROUP	Mean	Standard deviation
TECHNICAL BACCALAURATE	16.6	0.6
ENVIRONMENTAL ENGINEERING (2) EPN	20.4	1.3
ENVIRONMENTAL ENGINEERING (7) EPN	22.9	1.5
BUSINESS ENGINEERING (2) EPN	20.6	1.3
BUSINESS ENGINEERING (7) EPN	22.9	1.1
BUSINESS ENGINEERING (2) UTE	21.0	3.9
BUSINESS ENGINEERING (7) UTE	22.6	1.8
ENVIRONMENTAL ENGINEERING (2) UTE	20.0	1.2
ENVIRONMENTAL ENGINEERING (7) UTE	22.8	1.4
BASIC EDUCATION (2) UTE	26.4	6.3
BASIC EDUCATION (7) UTE	29.2	6.2
Total	22.5	4.6

Table 1. Average age per subgroup

The groups are homogeneous (low dispersion), especially the high school group which presented an average of 16.6 years. Online education (specialization: basic education) of UTE University with the average age of 26, 4 years for the second level and 29.2 years for the seventh level presented more dispersion, situation that was into account since, in this group many of the students fulfilled functions as teachers of educational institutions.

Other variables of interest were the place of origin and residence, determining that 69.9% were from Pichincha and the rest was distributed in other provinces with proportions below 4%. As for the place of residence, 80.3% did so in Quito, the rest was distributed minimally in the other provinces, a situation that is explained from the fact that a fraction of the group was studying online.

4. Design

The design belongs to a descriptive exploratory study. Exploratory research is useful in topics such as critical thinking in university students, making differences between disciplines (Barratt ,1996, p. 78). The descriptive study allows to outline the structural or functional conditions of the problem selected, using in this case the variables identified as relevant based on the bibliographic analysis. The descriptive design "seeks to specify properties and important characteristics of any phenomenon that is analyzed, and it describes trends of a group or population" (Hernández et al., 2014, p. 92).

The instrument used was the critical thinking questionnaire designed by Santiuste (2001), composed of 30 questions aimed at exploring the dialogic and substantive dimensions. The instrument has a summative or ordinal type scale called Likert, intended to evaluate opinions and attitudes by assigning numerical scores to obtain the mean value for each specific dimension.

It is important to note that the instrument's reliability test was developed through a pilot study to 74 students: 14 High school students and 60 second-level students from two universities. It determines the internal consistency with Cronbach Alpha method whose result is 0.918, which is considered as very good, and without the need to rethink or delete any item, as confirmed by the following table.

Item	Mean if the element has been eliminated	Variance if the element has been eliminated	Total correlation of corrected elements	Cronbach Alpha if the element has been eliminated
LS.- question 1	108,770	228,006	.479	.916
LD.- question 2	109,770	241,486	.038	.923
OS.- question 3	109,000	226,595	.469	.917
ES.- question 4	108,963	231,521	.294	.920
ED.- question 5	108,912	226,333	.518	.916
ED.- question 6	109,000	230,531	.469	.916
LD.- question 7	108,898	229,523	.471	.916
OS.- question 8	108,850	229,575	.469	.916
ES.- question 9	108,912	227,233	.547	.915
ES.- question 10	108,762	227,721	.543	.915
LS.- question 11	108,914	227,934	.538	.915
LD.- question 12	109,019	228,313	.510	.916
LS.- question 13	108,963	228,696	.483	.916
OS.- question 14	108,853	226,641	.566	.915
OD.- question 15	108,840	228,162	.553	.915
LS.- question 16	109,021	225,946	.623	.914
LS.- question 17	108,901	229,060	.431	.917
LS.- question 18	109,029	227,525	.534	.915
LS.- question 19	108,936	226,071	.612	.914
OD.- question 20	108,912	228,242	.518	.916
LS.- question 21	108,853	227,783	.555	.915
LD.- question 22	109,021	230,777	.382	.918
ES.- question 23	108,861	228,946	.529	.916
LS.- question 24	108,842	228,755	.529	.916
LS.- question 25	108,837	226,024	.556	.915
ES.- question 26	108,992	228,710	.533	.915
OS.- question 27	108,797	226,409	.578	.915
LS.- question 28	108,914	225,826	.633	.914
ES.- question 29	108,789	223,111	.614	.914
LS.- question 30	108,642	226,542	.601	.914

Cuadro 2. Resultado de la prueba de confiabilidad

5. Results

The results come from 375 students of the different interest groups in this study. The application of the Critical Thinking Questionnaire (CPC) (Santiuste et al., 2001), the database was designed in the statistical program SPSS in its version 23 in Spanish IBM ®, which made it possible to operate the statistical processing at both descriptive level as inferential. Due to the magnitude of the results, only the answers are presented for each of the questions grouped by dimension.

6. Descriptive analysis

Item	Value income (1)		Value conditions (11)		Identify relevant information (13)		Identify arguments (16)		Looks for reasons (17)		Verify logic (18)	
Option	F	%	F	%	F	%	F	%	F	%	F	%
Totally disagree	12	3.2	4	1.1	5	1.3	7	1.9	12	3.2	6	1.6
Disagree	19	5.1	21	5.6	33	8.8	25	6.7	26	6.9	31	8.3
Sometimes	78	20.8	122	32.5	109	29.1	119	31.7	99	26.4	124	33.1
Agree	147	39.2	139	37.1	143	38.1	161	42.9	132	35.2	140	37.3
Totally agree	119	31.7	89	23.7	85	22.7	63	16.8	106	28.3	74	19.7
Total	375	100	375	100	375	100	375	100	375	100	375	100

Table 4. Substantive reading (I)

In this block it was determined that most of the people indicated the options of agreement or totally agree, which would reveal an acceptable level of compliance with these indicators. As shown in table 4, the lowest-weighted item was the internal logical verification of the texts read. Overall, the results seem acceptable, item 18, *I verified the internal logic of the texts I read*, shows that there is not a thorough knowledge of something as basic as textual properties, since the text has a structure. It contains an internal logic that provides explicit and implicit information that helps decrypt it. This result should be analyzed cautiously since the ignorance of the textual properties and the internal logic have an impact on the reading comprehension.

Item	Value posible solutions (19)		Get conclusions (21)		Differentiate opinions (24)		Pose validity (25)		Discriminate type of information (28)		Identify relevant information (30)	
Option	F	%	F	%	F	%	F	%	F	%	F	%
Totally disagree	6	1.6	6	1.6	4	1.1	7	1,.9	4	1,.1	4	1.1
Disagree	23	6.1	18	4.8	17	4.5	25	6.7	21	5.6	13	3,.5
Sometimes	108	28.8	97	25.9	104	27.7	100	26.7	115	30.7	80	21.3

Agree	161	42.9	167	44.5	160	42.7	130	34.7	153	40.8	145	38.7
Totally agree	77	20.5	87	23.2	90	24.0	113	30.1	82	21.9	133	35.5
Total	375	1000	375	100	375	100	375	1000	375	100	375	100

Table 5. Substantive reading (II)

In table 5 is observed that the acceptance of the fulfillment of most of the items relates the category of "agreement"; however, the one of lesser weight corresponded to the item 25, *I consider if the texts that I read say something that is in effect today* . The data show that sometimes students are not critical on what they read, and they get everything that is presented as information from the media, but do not discriminate its relevance, its validity or its reliability.

Item	Reliable sources (4)		Present advantages (9)		Justify conclusions (10)		Differentiate facts (23)		Present reasons (26)		Mention sources (29)	
Option	F	%	F	%	F	%	F	%	F	%	F	%
Totally disagree	22	5.9	7	1.9	7	1.9	3	.8	1	.3	12	3.2
Disagree	36	9.6	25	6.7	20	5.3	20	5.3	25	6.7	24	6.4
Sometimes	92	24.5	100	26.7	71	18.9	102	27.2	138	36.8	86	22.9
Agree	100	26.4	158	42.1	174	46.4	165	44.0	136	36,.3	122	32.5
Totally agree	125	33.3	85	22.7	103	27.5	85	22.7	75	20.0	131	34.9
Total	375	100	375	100.0	375	100.0	375	100.0	375	100.0	375	100.0

Table 6. Substantive writing

For the substantive writing dimension, an acceptable level of compliance with the indicators is evident given that the majority of answers are concentrated in the categories: "Agree" and "Totally agree", however, the least-weighted indicator referred to Item 4, when *I look for information to write a job, I judge whether the sources I manage are reliable* . However, there is not an adequate process by the students to determine the reliability of the source, making the students more feasible to incorrect sources.

Item	Mention the source (3)		Present solutions (8)		Justify opinions (14)		Clear (27)	
Option	F	%	F	%	F	%	F	%
Totally disagree	14	3.7	5	1.3	7	1.9	7	1.9

Disagree	32	8.5	24	6.4	23	6.1	18	4.8
Sometimes	131	34.9	95	25.3	92	24.5	92	24.5
Agree	79	21.1	156	41.6	157	41.9	151	40.3
Totally agree	119	31.7	95	25.3	96	25.6	107	28.5
Total	375	100	375	100	375	100	375	100

Table 7. Listen-oral substantive expression

With regard to oral listening-expression in a substantive way, it is observed in table 7, that the answers concentrated in the categories: "sometimes" and "agree", being item 3, *when I expose orally an idea that is not mine, I mention its source* the least weighted. These results, especially the one referring to the sources, show the little importance that the students give to the recognition of the others´ ideas during the oral discourse, a situation quite common in the academic communicative exchanges that effects the level of academic honesty.

Item	Point of view (2)		Alternative interpretation (7)		Provide evidence (12)		Consider mistake (22)	
Option	F	%	F	%	F	%	F	%
Totally disagree	36	9.6	8	2.1	8	2.1	11	2.9
Disagree	72	19.2	16	4.3	29	7.7	34	9.1
Sometimes	171	45.6	113	30.1	112	29.9	109	29.1
Agree	81	21.6	149	39.7	157	41.9	138	36.8
Totally agree	15	4.0	89	23.7	69	18.4	83	22.1
Total	375	100	375	100	375	100	375	100

Table 8. Dialogic reading

In relation to the dialogic reading, most people concentrated their response in "sometimes", as shown in table 8, considering that item 2, *when I read the opinion or a thesis that agrees with my point of view, I take sides without considering other possible reasons contrary to it*. This is the only one of the group with inverse scale, in item 22, the one with the least weight *when I read something I disagree with, I think I may be wrong and it is the author who is right.* The results are different compared to those of substantive reading, inferring that there is no real dialogue of the reader with the author, i.e,. it is a mechanic processing of the information obtained through the reading but a critical processing is not achieved.

Item	Alternative opinions (5)		Present interpretations (6)	
Option	F	%	F	%
Totally disagree	11	2.9	4	1.1

Disagree	33	8.8	29	7.7
Sometimes	89	23.7	107	28.5
Agree	139	37.1	176	46.9
Totally agree	103	27.5	59	15.7
Total	375	100	375	100

Table 9. Dialogic writing

The answers referred to the dialogic writing are observed in table 9; the rank that excels is "agree" or "Totally agree", and the weights do not allow to define which of the reactants was more deficit of information. However, the results indicate more difficulties than in the substantive writing if considering a global weighted mean.

Item	Alternative interpretation (15)		New ideas (20)	
Option	F	%	F	%
Totally disagree	4	1.1	7	1.9
Disagree	20	5.3	22	5.9
Sometimes	94	25.1	105	28.0
Agree	169	45.1	156	41.6
Totally agree	88	23.5	85	22.7
Total	375	100	375	100

Table 10. Listening- oral dialogic expression

With regard to the answers referred by listening- oral dialogic expression there are two items in table 10. In this case it was determined that the most frequent response was "agree", without an item that could be considered a problem in this dimension, since more than 90% valued these indicators with acceptable scales.

7. Conclusions

It is verified that the substantive dimension record higher scores than the dialogical, although these differences do not become statistically significant. With regard to the "substantive reading" dimension, 90% of the participants reach scores equal to or greater than 3. The skills where greater dominance is evident are related to the valuation of the usefulness of the information presented, the validity of the exposed arguments and the identification of the most relevant information. Instead, the skills that present more weaknesses are linked to identifying arguments and verifying logic.

In the analysis of the dimension "dialogic reading" it is concluded that the scores of the participants are slightly lower than those reached in their "substantive" version, having more answers the scales "sometimes" and "agree". The greater difficulty of the students is in the use of viewpoints contrary or different to theirs, and the least difficulty is the consideration of alternative interpretations.

In the "substantive writing" dimension is reflected as the main conclusion that the use and relevance of the sources from which students extract information are the skills that present the greatest strengths in this category. On the other hand, it is concluded that weaknesses could rely in the presentation of arguments, advantages and disadvantages of the issues or problems raised.

The "dialogic writing" dimension shows that the learners find it easier to present alternative opinions from other authors than to expose alternative interpretations of the same fact. As for the dimension "oral substantive", although the scores recorded in the different are very similar, a greater dominance perception can be seen. Finally, the "oral dialogic" dimension concludes that the questioning by the existence of alternative interpretations that explain the same fact seems to be the skill that the students practice with more dominance.

Throughout the research process, limitations were found in the updated conceptualizations with respect to the substantive and dialogical dimensions. The strategies related to the substantive and dialogical dimensions are very limited for their dissemination despite the use and application in the learning processes. Future investigators of this topic require to complement with proposals for the substantive and dialogical dimensions.

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Las competencias digitales en docentes y futuros profesionalesde la Universidad Central del Ecuador

Digital competences in professors and future professionals of Universidad Central del Ecuador

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Resumen

En la actualidad, el rol que desempeñan los docentes de educación superior se fortalece con el manejo de la conectividad, ya que para enseñar a sus estudiantes requieren del conocimiento y aplicación de herramientas tecnológicas que ofrece la web 2.0. Por lo que los docentes deben aprestarse no solo a adquirir conocimientos básicos en tecnología, sino a ser competentes para aplicar ésta en sus prácticas didácticas y, para lograrlo, su enseñanza aprendizaje inicial resulta esencial.

El objetivo de esta investigación es realizar una aproximación diagnóstica sobre las competencias digitales que poseen futuros profesionales y docentes en el ejercicio de su profesión. Para ello, de una población total de 40.000 estudiantes de la Universidad Central del Ecuador se extrajo la muestra óptima de 1.799, quienes respondieron a un cuestionario de percepción de conocimiento, aplicación y valoración de competencias digitales. Según los resultados, la mayor parte de los futuros profesionales disponen de un nivel básico de competencia digital. En el caso de los docentes se determinó que el uso de las herramientas de la web 2.0 causa dificultad en la incorporación a sus procesos de enseñanza, mientras que los estudiantes tienen un apego al uso de las mismas. La implementación de recursos tecnológicos en el proceso de enseñanza- aprendizaje, promueve un cambio significativo en instituciones de educación superior, esto permitirá formar profesionales capaces de enfrentar la sociedad actual.

Palabras clave

Competencia, digital, docentes, estudiantes, educación, TIC.

Abstract

Currently, the professor role of higher education is very important to train students in the use of the tools offered by the Web 2.0 through Information Technology and Communication-ICT. Professors must be prepared not only to acquire basic knowledge in technology, but to be competent to apply it in their teaching practices and, to achieve this, their initial learning is essential. The objective of this research is to know the digital skills of future professionals based on their perception, an important element for their subsequent exercise. For this, from a total population of 40,000 students from Universidad Central del Ecuador, the optimal sample of 1,799 was extracted, who answered a questionnaire on knowledge perception, application and assessment of digital competences. According to the results, most of the future professionals have a high level of digital competence (especially in basic digital skills), in the same way, certain significant contrasts were obtained with respect to age, in the area of basic digital skills. In the case of teachers, it was determined that the use of web 2.0 tools causes difficulty to its incorporation into the teaching process, while students have an attachment to the use of them. The implementation of technological resources in the teaching-learning process promotes a significant change in institutions of higher education, which will allow to train professionals to be capable of facing today'ssociety.

Keywords

Digital, skills, teachers, students, education, TIC.

1. Introduction

This research aims to identify the difficulties that professors and students of Universidad Central del Ecuador have in the development of the digital competencies and the incorporation of the ICT in the teaching- learning process. Higher education requires supplanting traditional methodologies with the incorporation of ICTs to address the new challenges of the 21st century.

From this approach, several have been the demands for higher education: including the incorporation of ICT; technological competence in charge of developing integral skills in students and teachers. Agenda 2030 addressed by the United Nations-UN states that "higher education has an obligation to promote not only digital competencies, but also human

competencies and not only knowledge that is closed or programmed" (Pozo and Monereo, 1999, p. 11). This involves developing learning to learn and learning to be a person, a cornerstone of 21st century education.

Thus, in order to enhance the development of digital competencies and strengthen the UN's stated agenda 2030, the autonomous and collaborative development of teachers and students is necessary. Students require to learn how to make decisions and solve problems in conditions of conflict and uncertainty in their daily context. Professors need to develop learning processes in order to transform cognitive knowledge into practical and lasting know-how.

In relation to the above, "the knowledge society, information technologies, multimedia and telecommunications will provide their profession new meanings and roles" (Latapí, 2003, p. 15). In this framework of new demands for future professionals, higher educational institutions have the need to incorporate ICT in different educational scenarios to improve future training processes, involving changes in educational models that conform to career redesigns, changes that are feasible and provide methodological possibilities for teaching-learning systems.

Under this perspective of change, teachers and students face outdated institutional plans, traditional methodologies and linear thoughts of teachers who are reluctant to use technology. The present study aims to analyze the perception of professors and students about digital competence.

For that purpose, a questionnaire of digital competencies for professors was designed, validated and administered in which the use of educational platforms was evaluated. The findings allow to observe some strengths and lack of training of current curricula and restate new strategies for their correct development. The research questions that guide the study are:

- What is the level of digital skills that the teacher manages to enhance the use of the virtual platform of Universidad Central del Ecuador?
- How often does the professor of Universidad Central del Ecuador use technology?
- Which Web Tools 2.0 allow to reinforce learning and its implementation in the university educational platform?
- What structural and functional elements of the virtual platform will improve the teaching and strengthen the autonomous work of the students?
- What is the level of knowledge about ICT reported by professors of Universidad Central del Ecuador?

The questions raised will be developed throughout the quantitative research, whose context is focused on the teachers and students of Universidad Central del Ecuador. The population under study was composed of 1 197 professors, and 300 professors were taken as an optimum sample; the student population was 40 000 students, and 1 799 were taken as an optimal sample.

To answer each question, it is advisable to locate in the framework of the innovation processes, determining the relation technology-education: "Technological innovation, tendency to the universalization and globalization, changes in the social relations and new conceptions of the technology-society and technology-education relations" (Cabero, Martínez and Salinas, 2003, p. 30). With this assessment, it can be determined that it should not be excluded from the demand of new ICT by two very important areas: the first, the media shape a new society where the educational system has to serve; the second, the

educational system will always use the media in social communication, and nowadays it happens because of the use of telecommunication networks.

While education should not be excluded from the advancement of technology, it is essential that the learning and knowledge obtained is transferred to the transformation of pedagogical methods and techniques. Thus, the educational objectives must be well defined and cleared for the student to adapt to the new changing and globalizing society.

The article is structured in five parts: the first part presents generalities about what educational change means and how ICT becomes the digital material to improve autonomous and collaborative strengthened learning from WEB 2.0. The second part presents several scientific considerations on the basis of theories of several authors that strengthen the use of ICT in modern educational scenarios, with the possibility of educating professors who align with the paradigm of connectivity and technological languages. The third part studies concepts related to the development of ICT competencies for digital literacy. The fourth part presents data collection instruments and their results. The fifth part analyses the results obtained and the conclusions.

2. Overview of the context in the educational change

In the research carried out by Sabater (1997), on the new teaching roles and the new media as powerful information distributors, is indicated that a change in the teaching functions is required, i.e., the transfer of the explanatory contents. Therefore, nowadays professors find it difficult to compete with these new supports in their explanatory extension, since the role of the professor goes beyond. The idea that the professor is a source of information is a half-reality " they are a source of training, not information" (Savater, 1997, p. 45). Alonso (2001) also points out "people can be informed by pushing a button, but they cannot be educated by pushing a button" (p. 57). The new information society expects that the professor will learn to transmit new knowledge in a different way, i.e., society hopes that the new media will give the tools that would help to forget old methods that are used in the teaching-learning processes.

Under the perspective of professors' change, the authors assume that teachers are not able to cope with the change or are simply full of prejudices. Technology is overwhelming, especially for professors who belong to a traditionalist school. The new society aspires for rofessors, especially in higher education, to become mediators capable of adapting and accepting new developments that arise with the incorporation of ICTs.

Currently, ICTs have been called the information and transformation society. The transformation not only in the political and social field, but also in the education. In the analysis of the work of Duderstand (1997) can be observed four significant arguments for a better understanding of the new social change:

1. Knowledge is essential and of great importance to establish safety, wellbeing and quality of life; in the face of these aspects it is pursued to obtain institutional responses of different kinds.
2. Incorporating ICT in the teaching-learning process through educational innovation programs in the different institutions of higher education.
3. Once the technologies begin to be considered in the organization chart and in the management bodies of the universities, they must transform the university structures.
4. Relationship with the use of the communicative possibilities of ICT in university teaching through motivational and innovative experiences of all kinds.

All these elements are aimed at creating new teaching-learning processes. It is also important in this process to develop different observation levels to emotional and intellectual skills. In a vertiginous and unchanging world of change, the predisposition and commitment of students is essential; "students' flexibility to enter a working world that will demand lifelong learning; and the necessary competencies for this continuous learning process" (Salinas, 1997, p. 3).

Learning is understood to depend on the environment in which the student is located. For example, if it is needed to develop a Web page, the student must have the necessary tools for its development. The resources used in teaching are the main curricular components that, because of their symbolic procedures and strategies, help the progress of cognitive skills in people. Capturing and understanding the information by the student allows the creation of special environments in which the learning scenarios are encouraged, including two main components: the first is the physical component as the hardware. The second is the intangible component or software system, proceeding these two aspects to a specific context of educational communication, with the main purpose of providing learning (Cabero et al., 1999, p. 53).

Similarly, the environment in which the professor works by using technology changes, i.e., the teacher becomes an active guide encouraging students to use digital resources. The tools are essential for investigating and transforming new knowledge and skills; becoming a manager of the generation of new learning resources, strengthening its role as a guide and mediator (Salinas, 1998, p. 5-15).

3. Changes in Higher Education and ICT

3.1 Use of media and technology in Education

When the student uses multimedia materials, he or she can observe, explore, experiment and, as a result, is the one who on his/her own initiative realizes his/her errors, for example, when interacting with a simulation. According to the analysis of the curricular materials of Parcerisa (1996), the media and information technologies are established as follow:

- Innovative: materials are incorporated into the teaching that allow to make structural and innovative changes, since in various educational institutions the materials used are not of great innovation, but rather are routine in the teaching-learning process, the situations are provoked by the lack of knowledge, ability to correct the management, little authentic conviction by the technological means of the information, etc.
- Motivating: Strategies are established in which the interest and attention of the students become meaningful and mainly suggestive activities, since the inappropriate use of these means causes a demotivation in the students; thus, in the classroom, the use of these means has more to do with the time lost than with the establishment of truly meaningful planning.
- Configurator and mediator: the resources that the student uses for the self-learning determine the type of mental activity they develop, the advantage that is acquired is to generate new knowledge, which can be combined to become meaningful learning.
- Controladora: la información y los contenidos que se van a enseñar, si bien es cierto
- Controller: The information and content to be taught, although it is true that they are on the web is sometimes erroneous or is permanently volatile, open or dynamic, the main reason why the skills that students develop are not relevant or sufficient. One way to stimulate the learning process is by means of the playful aspect as it is possible to make games with contents that have are relevant for those who play.

- Solicitor: there are new ways to use information that require new intellectual skills, which are not yet implemented in schools since the resources used act as a methodological guide.
- Formative: The material used in learning sometimes relapses. The media, more than transmitting content, transmits visions of the world, so that sometimes the messages are easier to interpret and others are indirect, i.e., difficult to understand. The media pushes critical analysis and reflection, reason for which the professor must carefully select the ones to be used.

The media are used as tools to encourage motivation, because the more dynamic is the way to present higher the attention of the student. The media sometimes help the students to develop the thought, express their feelings, emotions, among others. The didactic means allow the student to realize and clarify abstract concepts.

3.2 The professor and the use of media and technology

With the implementation of technologies in the training of the future professionals, professors must be properly prepared and trained in the management and execution of the new methodologies to guide the students in the development of their activities. Professors should not only focus on communicating knowledge, but also on forming students with values, those who acquire a creative personality, independent, able to search, analyze and structure information.

Antonio Bautista (2004) states that the use that the professor gives to the media in their practices makes the difference between theories of the curriculum: technical, practical or interpretive and critical. The technique uses transmitters/players and both the teacher and the student repeat the information found in texts, Internet, among others. Practical/situational uses use the means to reach an analysis and understand the information. Critique allows representations, problem solving, information analysis and learning to use representation systems that are basic and necessary to interpret, understand and relate to the social, physical and cultural context (Bautista, 2004, p. 56-57).

> It is considered that the critical use of the media should be understood as the use that the professors do, those who assume the function of critical and transformative intellectuals. This type of use contemplates resources as research tools, and their use implies an analysis (Bautista, 2004, p. 52).

Based on the proposed analysis, the author expresses that the means used in the teaching-learning process must be appropriate. The teacher must be constantly updating the new technological tools. Existing studies around the use of the media indicate that there is a certain tendency for the use of these to revolve around two fundamental objectives: the motivation of the students and the transmission of information (Cabero, 2003). In this way other possibilities are limited, for example, the use of the means for the training and the improvement of the professor, the creation and modification of attitudes, or the evaluation of the students (Cabero et al., 2003).

3.3 Training of professors in the new technologies

The above-mentioned areas should be considered as basic and should be in constant review and broadening of knowledge. It is worth mentioning that technological competition will never cease to innovate and show innovative virtual advances that allow a better education.

Under the criteria analyzed, it is important to rescue that the training plans of the professors in aspects such as the media and new technologies, should not always be done with

technical and aesthetic foundation. Emphasis should be placed on helping teachers in the curricular integration of media and teaching tools used in pedagogical mediation.

4. Considerations for the incorporation of ICT in Higher Education

Cabero (2003), states that technology should be of easy access for professors and students, because it is not enough to create "computer rooms", but change the concept to "technology to the classroom", so that the technology is available to professors when they wish to incorporate it into the teaching practice, and it would be the professor who decides it use in the classroom based on methodological criteria (Cabero,2003, p. 45).

In this sense, as well as in times of traditional education, the blackboard was a required and essential resource in the formation of an individual; nowadays, technological resources are also indispensable and necessary in the educational formation. The professor, in addition to showing his/her virtues as a professor in the classroom, must have knowledge in ICT tools for interactive learning. The incorporation of ICT in the educational field of universities is really important, since it will save time and gain in reliability. The implementation of technological resources in the teaching process promotes a change in institutions of higher education that will allow to train professionals able to confront the current society.

4.1 Digital literacy

In order to achieve a correct and efficient implementation of technological resources, the professor must present attitudes and skills favorable to the use of ICTs. The Ministry of Education, Culture and Sport of Spain-MECD and the Organization for Economic Cooperation and Development-OECD (2003) refer to a sophisticated repertoire of competencies that pervade the workplace, community and social life; these include the skills needed to manage information and the ability to assess the relevance and reliability of what is being looked for on the Internet (MECD and OECD, 2003, p. 4). Under this analysis, it must be overcome the concept of the simple knowledge of knowing how to manage a computer, as it has traditionally been understood and is still understood by certain sectors. To overcome these gaps, it is necessary to train the professors.

4.2 Professor training

There is an extensive and very valuable research that dates from the emergence of online education. Excerpt from what was commented by Cabeo, Duarte and Barroso (1999-2001), will be presented:

> ... I am going to refer the interested reader, I will say that for me this training must overcome the instrumental vision that we often have, and has to acquire other dimensions: instrumental, semi oenological/aesthetic, curricular, pragmatic, psychological, producer/designer, selection/evaluator, critic, organizational, attitudinal and researcher (p. 68).

This significant contribution allows analyzing that not only the instrumental education is necessary, but also it is essential the education in values, paradigm of formation in person. This will harmonize values such as: commitment, responsibility, autonomy to incorporate in planning, design, and evaluation, strategies that promote innovative knowledge in comprehensive training among professors and students.

4.3 Digital competencies

In order to develop learning activities and to work successfully in an increasingly demanding and innovative society aligned to knowledge-based, updated know-how,

students and teachers must effectively master digital technology. Within the learning process ICT can contribute to the development of skills such as: experts in the use of information technologies; search engines, analyzers and information evaluators; troubleshooters; creative and innovative productivity tools; communicators, collaborators, and most importantly informed citizens, responsible and able to contribute to the society.

Currently, a professor needs to be able to offer students learning opportunities that support ICT. He/she should know how to use them and know how they can contribute to the student learning. In order to develop capacities in the students, it is necessary that the current education curriculum strengthen the professional competencies of a professor. Professors need to be trained to teach students the benefits of using ICT, so that these types of resources are effectively integrated into the subjects. According to UNESCO (2008) regarding ICT competencies, the following competencies are determined on a personal basis:

- To know the basic operation of hardware and software, as well as productivity applications, an Internet browser, a communication program, a multimedia presenter and management applications.
- To know a variety of specific applications and tools, which should be able to use them with flexibility in different situations based on problems and projects. Professors should be able to use resource networks to help students collaborate, access information and communicate with external experts in order to analyze and resolve selected problems. Professors should also be able to use ICT to create and monitor class projects performed individually or by groups of students.
- To have the ability to design ICT-based knowledge communities, and also to know how to use these technologies to support the development of students' skills in terms of knowledge creation and lifelong and reflective learning.

4.4 Professors´competencies of the 21st century

García Vallinas (2007) state about the competencies of the 21st century:

> The skills necessary to develop in the broad, plural, dynamic and uncertain labor market are valued precisely by the flexibility or adaptation capacity of the worker to diverse working environments; but also, beyond the changing demands of the labor market, the needs and formative requirements of people are important, to transcend the specific or specialized training for certain jobs, providing them with a more general training that attends to the personal fulfillment like citizens or to train them to decide on the course and direction of their own lives (p. 1).

Therefore, it can be determined that a teacher governed by the changes of the current society must implement the various technological resources at the time of teaching their knowledge and encourage their students to practice self-learning. Developing in them capacities such as analysis, reflection and understanding of information requires training competencies. In this regard, Gonzales (2012) indicates some of the capacities that must be developed in the current education:

- To create and edit videos as educational resources for teaching;
- To use blogs and wikis to generate online learning platforms targeting their students;
- To take advantage of Web images for their use in the classroom;

- To use social networks within the learning process as means to connect with colleagues and students that allow them to grow professionally;
- To compile e-portfolios for their own development;
- To have a thorough knowledge of the types of online security, use of software or applications that allow the detection of plagiarism in the work of the students;
- To create videos with screenshots and video-tutorials;
- To collect Web content suitable for the classroom learning;
- To use and provide students with the necessary task management tools to organize their work and plan their learning in an optimal way;
- To understand the issues related to copyright and honest use of materials;
- To use digital tools to create evaluation questionnaires;
- To use collaborative tools for the construction and editing of texts;
- To find and evaluate web content;
- To use mobile devices (tablets or smartphones;
- To identify safe online learning resources for students;
- To know the use of YouTube and its potential in the classroom, use annotation tools and share the content with the students;
- To share the Web pages and sources of resources presented in the class;
- To use graphic organizers, online and printable;
- To use tools to create and share tutorials with movie screen capture recording;
- To create online workgroup or team tools that use messaging;
- To search efficiently on the Internet using the minimum time possible;
- To carry out research work using digital tools;
- To use tools to share files and documents with students.

However, it is important to refer to some key competencies such as: managing and knowing how to use templates and spreadsheets; to know and to teach methods of digital research like the competencies in the management of information-CMI. In addition, it is necessary to know and manage digital graphic editing tools; to reflect and teach their students the practical, critical and ethical uses of the network; to know and manage virtual classrooms; to use digital forums with students. Nowadays, it is necessity to know about ICT, because every professional needs to develop effectiveness in their profession. The analysis on the use of ICT at Universidad Central del Ecuador is detailed below.

The questionnaires presented show the number of participants. The questionnaire was answered voluntarily by 300 teachers from 2015-2016 and similarly by 1 799 students.

Gender	Frequency	Percentage	Valid percentage	Accumulated percentage
Masculine	204	68.0	123	68.0
Femenine	96	32.0	32.0	100
Total	300	100.0	100.0	

Table 1. Frequency and percentages according to the gender of professor of the UCE

Gender	Frequency	Percentaje	Valid percentage	Accumulated percentage
Masculine	824	45.8	45.9	45.9
Femenine	970	53.9	54.1	100.0
Total	1 794	99.7	100.0	
Lost	5	0.3		

Gender	Frequency	Percentaje	Valid percentage	Accumulated percentage
Total	1 799	100		

Table 2. Frequency and percentages according to the gender of the students of the UCE

5. Instrument and data analysis

The questionnaire of instrumental skills in the use of ICT (professors) was elaborated based on the competencies and ICT standards of UNESCO, which was validated by the international panel of research in educational technology-PI2TE mentioned in the conceptual framework, and grouped into 3 dimensions. The first dimension has to do with instrumental skills in the use of ICT, which has 9 items; the second dimension has to do with didactic – methodological skills in the use of ICT, which in turn is comprised of 11 items, and finally, the importance on the use of ICT in the teaching practice, such dimensions have 11 items. The 3 dimensions of this first instrument have been broken down into a total of 31 items that are part of this questionnaire, and are answered by a five-point continuous scale according to Likert scale, being: totally agree, agree (2), undecided (3), disagreement (4) and totally disagree (5) with a student sample (alpha = 0.85). The data were organized, codified and analyzed using the statistical package SPSS version 22.0.

The survey on the educational Platform-Web 2.0 for professors and students was elaborated based on the use perception of the Sakai platform that works in the UCE, the same that was validated by PI2TE mentioned in the conceptual framework, and that is composed by 22 questions that are formed by the dimensions of gender, demography, valuation of the virtual platform, use of tools of the Web 2.0 and networks. The data were organized, codified and analyzed using the statistical package SPSS version 22.0.

6. Results

PARTE 1												
	Educative software (Learning)			**Source of information (Update of knowledge)**			**Indicator of virtual spaces (Teaching formation)**			**TOTAL**		
Data	**Respondents C**	**% of the total IC**	**% accumulated IC**	**Respondents C**	**% of the total IC**	**% ccumulated I**	**Respondent**	**% of the total IC**	**% accumulated IC**	**Respondents C**	**% of the total IC**	**% accumulated IC**
Totally	104	34.78%	34.78%	85	28.50 %	28.50%	70	23.24 %	23.24%	86	28.84%	28.84%
Partly	96	32.11%	66.89%	103	34.61 %	63.11%	87	29.10 %	52.34%	95	31.94%	60.78%
In a regular basis	68	22.58%	89.46%	72	24.21 %	87.32%	87	29.10 %	81.44%	76	25.29%	86.08%
Not too much	26	8.70%	98.16%	32	10.80 %	98.12%	48	15.89 %	97.32%	35	11.79%	97.87%
None	6	1.84%	**100.00%**	6	1.88%	100.00%	8	2.68%	100.00%	6	2.13%	100.00%
TOTAL	**299**	**100.00 %**		**299**	**100.0 0%**		**299**	**100,0 0%**		**299**	**100.00 %**	

Table 3. Univariate factor analysis of instrumental skills in the use of ICT (professors)

From the information obtained of 299 key informants representing the 66.89% accumulated between the "totally" and "partly" indicators with respect to the use of software to promote learning in the teaching processes, and based on a survey held in Argentina, Chile, Costa Rica and Mexico, it was shown that more than 60% of professors use technological tools (Informe en Tendencias Sociales Educativas, 2014, p. 180).

According to the data, it can be inferred that the design of strategies to eliminate barriers includes the incorporation of ICT to the curriculum, since the use of educational software allows to promote meaningful learning. The use of ICTs motivates the student to create and generate new knowledge. Under this premise and depending on the criteria expressed by professors regarding the use of educational software to promote learning with their students, it can be inferred that it is totally important. Its use will reinforce what has been learned in the classroom in an interactive way.

From the information obtained of 188 key informants, representing the 63.11% accumulated between the "totally" and "partly" indicators with respect to the source of information *updating knowledge*, and according to the report on *Social Trends of Education* of 2014, the activity that is mostly performed by professors in the computers is the writing of documents (98%), search of information (98%), preparation or creation of presentations (95%), preparation of schedules or timetables (93%), while the less performed activity is communicating with their students (46%). Taking into account these data, it is considered important that the professor uses ICT to: reinforce what has been learned in the classroom through the use of digital journals, e-books, blogs, among other tools; to look for reliable sources of information. All these elements allow professors to have access to scientific information and acquire skills that allow them to search efficiently and safely on the Internet.

From the information obtained of 157 key informants representing the 75.58% accumulated between the indicators "totally" and "partly" with respect to the source of information *training teachers,* and taking into account the report of the Economic Commission for America Latin America and the Caribbean (ECLAC) shows that the percentage of professors who have been in courses on ICT is quite high in countries like Chile (90%), Peru (82%), Colombia (61%), and Costa Rica (60%), while the percentage of professors who have taken courses on ICT is quite low in developing countries such as Nicaragua (17%), Paraguay (10%) or Guatemala (6%). It can be inferred that the professor update as a fundamental part in the educational and student education development allows the teacher to publish and share information on the web. The objective is to work collectively with other professors so as to unify knowledge in order to increase the general intelligence for a better teacher training. Table 4 shows the level of importance that students give to the use of the virtual platform.

Importance on the use of the platform				Value of the platform			Use and learning of online teaching			Ethics			Use of the Web 2.0			TOTAL, Interviews		
Data	**Respondents C**	**% of the total IC**	**% Accumulated IC**	**Respondents C**	**% of the total IC**	**% Accumulated IC**	**Respondentss C**	**% of the total IC**	**% Accumulated IC**	**Respondentss C**	**% of the total IC**	**% Accumulated IC**	**Respondentss C**	**% of the total IC**	**% Accumulated IC**	**Respondentss C**	**% of the total IC**	**% Accumulated IC**
Never	87	4.82%	4.82%	139	7.73%	7.73%	281	15.60%	15.60%	45	2.50%	2.50%	45	2.50%	250%	119	6.63%	6.63%
Ocasionally	173	9.59%	14.41%	336	18.69%	26.42%	181	10.04%	25.63%	108	5.99%	8.49%	108	5.99%	8.49%	181	10.06%	16.69%
Sometimes	390	21.66%	36.08%	551	30.65%	57.07%	271	15.05%	40.68%	289	16.04%	24.53%	289	16.04%	24.53%	358	19.89%	36.58%
Almost always	629	34.95%	71.03%	475	26.41%	83.48%	210	11.70%	52.38%	475	26.39%	50.91%	475	26.39%	50.91%	453	25.17%	61.74%
Always	493	27.39%	98.42%	183	10.19%	93.67%	184	10.23%	62.60%	737	40.97%	91.88%	737	40.97%	91.88%	467	25.95%	87.69%
9	29	1.58%	**100.00%**	114	6.33%	**100.00%**	673	37.40%	100.00%	146	8.12%	**100.00%**	146	8.12%	**100.00%**	221	12.31%	100.00%
TOTAL	**1799**	**100.00%**		**1799**	**100.00%**		**1799**	**100.00%**		**1799**	**100.00%**		**1799**	**100.00%**		**1799**	**100.00%**	

Table 4. Univariate factor analysis of the Educational Platform-Web 2.0 UCE (students)

Based on the results obtained from 1 122 key informants representing 62.34% accumulated between "always" and "almost always" indicators regarding the importance of the use of the educational platform at UCE, and according to the data obtained by Revista de Tecnología Journal Technology (2013), it is mentioned that at the Latin American level, 68.5% of students consider as important the use of the virtual platform. The relationships between students and professors increase and contribute to the development of the activities and allow to appreciate the academic performance during the course development. According to this information, it can be observed that the importance of the educational platform at UCE in the students, is similar to other universities, but it is necessary to encourage students to use the online learning platform as an instrument of study in all educational scenarios.

Similarly, 658 key informants representing the 36.60% accumulated between the indicators "always" and "almost always" with respect to the indicator valuation of the educational platform and according to studies carried out by the Association for the Development of the Educational technology and New Technologies Applied to Education-EDUTEC (2013) in its article "Using online learning environments in higher education", in reference to the assessment of online learning environments-EVA, 100% of the universities consulted said that they considered them very appropriate. This allows to offer the opportunity to incorporate conceptual, procedural and attitudinal elements that facilitate a training in competencies in the students, in addition to interculturality by transcending borders imposed by distance. According to these data, it is necessary to encourage the use of the online learning platform at UCE, motivating the student through the use of various activities that are part of the platform and that allow to strengthen the learning and use of the tools that make them up.

As regards to the results of other competencies of the 394 key informants representing the 21.93% accumulated between the "always" and "almost always" indicators with respect to the indicator use and learning of online platforms, and according to the article "Using online learning environments in higher education by EDUTEC" (2013), 60% of students responded that they use the platform in learning activities. The activities that are generally used are: support materials and homework delivery. Therefore, it can be inferred that it is necessary for professors and students to learn to use all the tools that the online platform provides.

Likewise, from the 1 212 key informants representing 67.36% accumulated between the "always" and "almost always" indicators with respect to the ethics indicator and according to an article by Technology and Ethics (2002), there is an increase in the material that is offensive and dangerous on the Internet by 76%. Monopolies in the software and information industry by 60%, thus, it is clear that globalization linked to the Internet would seem to require standards of a global nature as well. The goal would be to establish behavioral patterns, i.e., a defense of human values.

In reference to other data obtained, it is analyzed that of 1 212 key informants represent 67.36% accumulated between the indicators "always" and "almost always" with respect to the indicator use of the Web 2.0, and according to data of the National University of Online Education, Knowledge Society and Education (2012), it is mentioned that 92.6% usually have access, participate or visit the Web 2.0 every day. It is necessary to implement a large number of tools offered by the Web 2.0 in the educational field that would allow to generate and share collaborative and autonomous learning to encourage the proper use of these technological tools.

7. Discussion

Future professionals have full knowledge of their own level of digital competences and believe that it is ideal for exercising this competence objectively. It will be taken into account as previously determined in Table 3, that the variable *ICT teaching competencies* is determined for this research from the knowledge of ICT activities towards the use of teaching learning processes. For this reason, nine research issues have been created and are related to knowledge, application and value (updating skills, teacher training, classroom management, learning support, evaluation processes, ethics, intellectual property and didactic teaching) technology in the learning processes in the classroom and outside it. the following questions can be answered:

- **What is the level of educational software used by teachers at Universidad Central del Ecuador?**
  When analyzing the data, it can be determined that the professors of UCE present averagely high knowledge percentages (66.89%) with respect to the use of educational software to promote learning in the learning processes. The use of the educational software allows to promote learning in the students by helping them in the evaluation, analysis and synthesis of the information; in this way the student is motivated to create and generate new knowledge.
- **What is the degree of knowledge updating regarding the technology of the professors of Universidad Central del Ecuador in relation to the classroom management through the search of information?**
  According to the data obtained, it is analyzed that the professors of the UCE have high percentages of knowledge (63.11%) with respect to the source of information *updating knowledge*.
- **What is the training level of teachers at Universidad Central del Ecuador regarding technology training?**
  It can be determined that the professors of UCE have medium to high (75.58%) knowledge percentages with respect to the source of information *training teachers*, and taking into account the report of the Economic Commission for Latin America and the Caribbean (ECLAC) it is seen that the percentage of professors who have taken courses on ICT is quite high in countries such as: Chile (90%), Peru (82%), Colombia (61%) or Costa Rica (60%) , while the percentage of professors who have taken courses on ICT is quite low in developing countries such as: Nicaragua (17%), Paraguay (10%) or Guatemala (6%).
- **What is the application degree of methodological strategies used by the professors of Universidad Central del Ecuador to improve the classroom management processes?**
  It can be determined that the professors of UCE present high percentages of knowledge (43.10%), with respect to classroom processes.
- **What is the support degree for learning with technologies to strengthen the autonomous work of students?**
  It can be inferred that the professors of UCE present high knowledge percentages (47.77%) with respect to the elaboration of multimedia resource support to the learning and according to the data of a study in the Spanish context, Vaillant and Marcelo (2012) point out that 28.5% of professors use ICT and 30% make occasional use (less than once a month). The remaining 41.5% of professors state to make regular and systematic use of ICT in their classrooms, although with very different intensity degrees. When professors make use of the technologies in their teaching, they do so to transmit content as support to the oral presentation (78.7%), to present content through a multimedia or hypermedia system (62.3%), and to make demonstrations that allow simulating certain scenarios (44.5%); and

according to these data it can be interpreted that the use of multimedia resources in education is not being exploited for the most part by the professors, they only use it as a support for oral exposure and to transmit content, forgetting that these tools should be used in an innovative way in their classes to generate knowledge.

- **How is the evaluation process applied by the professors of Universidad Central del Ecuador?**
  It can be determined that the teachers of UCE present average application percentages (46.46%) with respect to the indicator of *evaluation processes*, according to the competition standards in ICT for teachers of the UNESCO, ICT tools should serve as an assessment tool. In addition, Ecuador is one of the countries where ICT is used as an evaluation tool, an example of this is the conduction of tests *Ser Bachiller* in which 231 759 students of third year of baccalaureate participated to measure the dominance degree in the learning standards established by the Ministry of Education.
- **What attitude do professors have towards the application of ethics with regard to the use of technology in ICT-based education?**
  Regarding the attitude shown by the teachers of UCE towards the application of the ethics in the use of ICT in the education, it can be determined that the professors have very high application percentages (83.17%) with respect to the *ethics* indicator. Also, according to an article by *Technology and Ethics. Privacy in the Workplace in Perspectives in Business Ethics* (2002) is observed an increase in the availability of offensive and dangerous material on the Internet by 76%, monopolies in the software and information industry by 60%. To the foregoing, it is clear that globalization linked to the Internet would seem to require standards of a global nature that establish behavioral patterns and lead to a global defense of human values. This is certainly a complicated task as it would require laws of a global nature that many countries and governments would not seem to accept. It is important to rescue professors from considering the evidence of the importance of ethics in all areas of life.
- **What attitude do professors have towards respect for intellectual property when using technology in educational processes?**
  Regarding the attitude shown by the professors of Universidad Central del Ecuador towards the respect for the intellectual property in the use of technology in education, the analysis that reports the data (87.55%) is very high with respect to the indicator of intellectual property. According to studies conducted by McCabe to 2 294 High school students from 25 U.S public and private schools, it was obtained that 52% of students had copied explicit paragraphs from a website without making the corresponding citation. Also noteworthy is a South American research carried out by Bordigon et al., (2011) pointed out that "50% of the elementary and middle school students of the Argentine education system declared that they had copied to make their tasks and work" (p. 34). Due to the data obtained in the survey and the high rate of plagiarism made by the students, it is essential that higher education institutions take steps to prevent and reduce academic fraud through the implementation and use of online programs that detect anti-plagiarism and, thus, ensure a culture of respect for authorship (academic honesty) and enhance the management of reliable information.
- What attitude do professors have with regard to the support of technologies in didactic pedagogical processes?
  It can be inferred that professors of Universidad Central del Ecuador have high

knowledge percentages (87.23%) with respect to the *didacticpedagogical* indicator. In addition, according to Vaillant and Marcelo (2012) in the Spanish context most professors (78.7%) make use of technologies in their teaching to transmit content in support of oral presentation, forgetting the pedagogical aspects that should contemplate the use of technologies. Based on the aforementioned, it is necessary to give an efficient appropriation and management of ICT to the learning processes, which contributes to guiding educational policies, the organization of the institution, the material resources and the actors involved. It is not a matter of doing the same thing in another way, but of modifying the own objectives according to the requirements posed by the use of the technologies to articulate the pedagogical practice with the technological processes and products.

8. Conclusions

Systematized experiences based on data presentation and the corresponding analyses consider technologies as an innovative paradigm that is rapidly embedded in the higher education of the 21st century. To conclude with the research, it is inferred that since there are changes and rapid rhythms of modern pedagogical, these will be observed in two areas: the first relates to the competencies that professors have developed in the teaching-learning processes, and it is clear to infer that it is possible to improve or develop some instrumental skills in professors to provide students with better technological tools offered by Web 2.0, whose purpose is to integrate systemic approaches that combine the theory and practice related to professional contexts.

The following area relates to the perception of the future professionals of Universidad Central del Ecuador, which shows that although men use more technology, women have a similar number, therefore, it is not possible to establish that men have developed more competencies than women.

The research carried out focuses on the teachers and students of Universidad Central del Ecuador, and it was noticeable that professors have problems using the tools of the Web 2.0, causing difficulty in the pedagogical mediation of educative scenarios, especially in the incorporation of technological tools to promote quality teaching-learning processes; while students have an accelerated attachment in their use. Therefore, the implementation of technological resources promotes a paradigm shift in institutions of higher education, which will allow to create competitive beings according to a millennium education.

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La innovación en el uso del lenguaje en contexto cambia la forma de pensar de los docentes

The innovation in the use of language in context changes the way professors think

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Resumen

El presente artículo es una ampliación del tema expuesto en el III Congreso Internacional de Innovación en la Educación realizado en la Universidad Central del Ecuador (UCE). Su contexto es amplio y hay argumentos que ameritan ser resaltados y examinados; así como la importancia del análisis de un discurso pragmático, la capacidad de los docentes en crear nuevas estrategias pedagógicas para mejorar sus procesos de enseñanza y la presentación detallada de una propuesta de formación a docentes universitarios en el uso del lenguaje en contexto. Por esta razón, el objetivo de la presente investigación es profundizar cómo los docentes, luego de una capacitación en el uso del lenguaje en contexto, mejoran sus procesos de comprensión lectora y cambian su forma de pensar con respecto a sus prácticas pedagógicas.

La metodología de este estudio se centra en una discusión teórica sobre el uso del lenguaje en contexto y en un análisis cuantitativo de la formación a docentes en la lectura crítica y desarrollo del pensamiento. Este estudio se aplicó en las provincias de Pichincha, Esmeraldas y Santo Domingo. Como instrumento de investigación se aplicó un cuestionario sobre el análisis de un discurso con el uso del lenguaje en contexto y se comprobó que el 91% de los docentes mejoraron su capacidad de análisis. En conclusión, esta investigación se considera de alto impacto porque luego de las preguntas de metacognición que se realizaron a los docentes al final de la capacitación, estos reflexionaron sobre sus procesos de comprensión lectora y sus prácticas pedagógicas.

Palabras clave

Capacitación, congreso, discurso, lectura, prácticas, provincias, resultados.

Abstract

The following article is an expansion of a topic presented at the 3rd International Conference for the Innovation in Education, held at Universidad Central del Ecuador (UCE). Not only is it broad but it also contains arguments that deserve to be highlighted and further examined. In the same way the analysis of "pragmatic discourse" is an important exercise, therefore, it is a professor's ability to create new pedagogical strategies to improve teaching methods. Further, a thorough proposal of a training program for university instructors regarding language in context is important as well. As such, the aim of this article is to elucidate how teachers, after having received training in the usage of language in context, improve their reading comprehension processes and change their thought processes with regard to their pedagogical practices.

The methodology of this study focuses on a theoretical debate of the usage of language in context and employs quantitative analysis regarding teacher training of critical reading and the development of critical thinking for instructors in Pichincha, Esmeraldas, and Santo Domingo provinces. Such training involves a certain command of language in context. The questionnaire employed in this study to collect data from the analysis of a discourse through the usage of language in context revealed a 91% improvement in the teachers' capacity for analysis. Thus, this investigation should be considered of high impact; the metacognitive questions that were posed to the teachers at the end of their training made them think on their reading comprehension processes and pedagogical practices.

Keywords

Didactic, influences, provinces, reading, thinking, training.

1. Introduction

The curricular updating and strengthening of Elementary Education has been subjected to several changes. In 1996, the development of skills, contents and transversal axes was relevant but not to the reading comprehension processes. Teaching-learning was still informative and the use of language in context was not important.

In 2007, the National Office of the Curriculum carried out a study at the national level that allowed to determine the application degree of the curricular reform in the classrooms. From this regulation there was a disarticulation between the objectives and levels of learning, as well as the lack of information in the skills and evaluation criteria.

In 2011, the "Curriculum for the Unified General High School" comes into force with the purpose of providing the students with a general training according to their age" (MINEDUC, Curriculum of the Compulsory Education Levels, 2011, p. 6). This document considered to make a curricular adaptation in terms of content and skills with performance criterion, and leaves behind the use of the language in the context. Reading comprehension is subjected to basic knowledge and emphasis is placed on the evaluation criteria.

Based on an impact study on the curricular reform on Basic Education in the years 2012-2013, it was necessary to "analyze the epistemological and curricular rigor of the documents, aspects that underlie the new curricular proposal" (MINEDUC, Curriculum of Compulsory Education Levels, 2011, p. 6). On the other hand, the principles of critical

pedagogy and the thought development in the teaching-learning processes were taken as a basis for improving the quality of education. But, the educational reality in our country is different. Teachers have low levels of reading comprehension and they are not aware of the benefits of the use of language in context.

> In the year 2009-2010 the evaluation team of Universidad Andina Simón Bolívar carried out a study on the reading comprehension capacity of the teachers of three educational institutions in the province of Pichincha, and the results indicated that a significant percentage of teachers have low reading comprehension, but after a teacher-monitored training they improved their analytical capacity (Final report of the Teacher Training Excellence Center Program [CECM], 2009, p. 33).

According to these findings, the question to be investigated is: to what extent the teacher training in the use of language in context in the provinces of Pichincha, Esmeraldas and Santo Domingo influences their way of thinking and improves their processes of reading comprehension? Thus, the aim of this article is to demonstrate that the use of language in context influences the way teachers think and improves their reading comprehension processes.

For this reason, a theoretical discussion of John Searle acts of speech will be made, (1996); Introduction to the Pragmatics of M. Victoria Scandell, (1996); Introduction to the grammar of Manuel Casado, (2000); the concepts of topics and comments by Gutiérrez Salvador, (2000); Ideological structures of Van Dijk, (2008); Conversational Dialogues of Victorino Zecchetto, (2002); Ideological structures of Van Dijk, (2008); Conversational dialogues of Victorino Zecchetto, (2002); Textual functions of Oscar Lamas, (2003) and grammatical elements of Xavier Conde, (2001). Later, the instruments and methods of research applied to teachers trained in the use of context language will be explained. Third, an analysis will be made of the scores obtained by the teachers before and after the trainings and the results obtained will be interpreted.

A proposal to analyze speeches from the use of language in the context for university professors will be presented, and the didactic strategies and processes to be used are shown. This practice will serve for other possible university-level research. It would be interesting to assess the reading comprehension of university teachers and to verify if these training workshops influence their pedagogical practices. Finally, the corresponding conclusions of this investigation will be mentioned.

2. Introduction to Pragmatics

There are several authors who define pragmatics as a discipline in which the use of language in context is involved. Scandell (1996) states:

> Pragmatics is a discipline that takes into consideration the extralinguistic factors that determine the use of language, precisely all those factors that cannot be referenced by a grammatical study: notions such as those of speaker, listener, communicative intention, verbal context, situation or knowledge of the world will prove to be of paramount importance (p. 14).

From this argument, it is intended to mention that the use of language in context is not limited only to the decoding of a statement from the grammatical point of view, but to take into account other elements that define the interpretation of the oral or written message.

Both the speaker and the listener need to be placed in a situational context to interact in the communication.

For Searle (1996), "Speaking a language consists of conducting acts of speech, acts such as making statements, giving orders, asking questions, making promises, and so on, and more abstractly, acts such as referring and preaching" (p. 25). In this sense, the acts of speech or enunciations have a communicative intention that depends on the speaker or the listener to interpret a message. For example, it is not the same to ask a person to close the door with the word please that denotes courtesy than to say the same thing as an order and with authority. Because the intention changes. For this reason, it is important to consider these meanings when interpreting or communicating what is meant.

Scandell (1996) mentions: "An argumentative connector is a morpheme (adverb, locution, subordinate or coordinating conjunction...) linking two or more statements involved in a single argumentative strategy" (p. 98). Thus, the argumentative markers or connectors presented in a text are important elements to analyze a discourse. The relationship between two statements defines the meaning of the sentences and the interpretation is closer to the reality of the message. For example: we study at ten and we study until ten; a difference of meaning is clearly seen. The first statement can add other bookmarks (and then, while and others); while in the second the marker (until) does not allow adding other statements. Therefore, argumentative operators have their own function and affect the meaning of the statement, changing the intentions of the speakers.

Although the pragmatics of a discourse discusses several aspects of the use of language in the context, it is also important to consider the position of Van Dijk (2008), who points out:

> Only the pragmatic and the structure interaction of the text and the speech, as well as some aspects of style and rhetoric can be directly monitored by ideological structures, for example, through context models and not by the way of the models of event and meaning (p. 218).

In other words, "ideologies have often been identified as "false" beliefs or" false conscience" (Van Dijk, 2008, p. 221). Thus, the analysis of a discourse is not only focused on the structure of a text but on the ideological aspects. Discovering the ways of thinking of a social group makes the speaker or the listener to have a more real context. For this reason, the interpretations change and the cognitive knowledge of the subjects is activated to emit judgments and values.

Gonzales (s.f.), relies on a new concept about pragmatics by trying a definition when stating:

> Pragmatics is interested in the actions carried out with the uses of the language, i.e., by the functions fulfilled with its mediation; among the most outstanding are: personal, interpersonal and social contact and communication; representation of the real and modeling of knowledge; knowledge and regulation of their own and others' behavior; explorations on possible worlds and creation of beauty... (p. 9).

In this sense, the actions carried out by the subject in the communicative act depend on personal, interpersonal or social contact to interpret the real world. It is important to know that they regulate their own or others' behaviors. In other words, when the subject interprets a message it brings with it some previous knowledge that are the product of social relations; with these two elements the individual builds other meanings of the reality and acquires new knowledge. Then, the exploration of other worlds and the creation of

beauty become a dynamic mechanism of the use of the language in context. In other words, the use of interactions between the interlocutors is relevant when analyzing a discourse.

Another perspective of pragmatics can be seen in the definitions of Zecchetto (2002) when mentioning:

> Pragmatics is the discipline that analyses the specific forms and strategies assumed by communicative expressions... It is interested in the study of conversational dialogues, the cases reported by the Ethnolinguistics, the statements of the mass media in their various contexts, situations, circumstances. Pragmatics shares with other disciplines some aspects of their mental universe (for example, with psychology, sociology...), as it tries to discover the exemplary axes of the language -in general- of the human communicational behavior in the practical realizations (p. 21).

This approach explains that pragmatics is the responsible of performing a thorough analysis of the dialogues of the interlocutors related to different cultures and historical eras. These conversations mark the differential traits of speech acts in the same society, whose situational context is directed towards the study of human behavior from a sociocultural perspective. As a result, the use of language in the context implies not only the study of the enunciations itself, but the use in the way of thinking. To do this, it is necessary to take as a foundation the beliefs and ideologies presented in the statements, by being important aspects to discuss in oral and written speeches.

According to these arguments, the use of language in the context is related to pragmatics. Professors should be aware that the use of statements has a specific intention and its analysis depends on how these statements are interpreted. The communicative competencies of each one will generate changes in the pedagogical practices; therefore, these must be oriented to an argumentation and counter-argument to encourage critical thinking.

Hence, the cognitive reflection of the elements related in a discourse provides an accurate understanding of what we analyze. The encounter of divergent and convergent thoughts of the language users is what allows the construction of new meanings. It also allows the construction of dogmas and tendencies that when shared are converted into constructs of cultural thought. Therefore, a professor with competent linguistic performance is in the capacity to create transforming leaders of a society.

3. Introduction to grammar

Another important aspect of the use of language is grammar. Manuel Casado (2000) states that "coherence and cohesion are important elements in a statement; by coherence it is understood the parts of a whole and by cohesion it is understood the relations of the linguistic elements of the text "(p. 17). That is, the structure of the text is organized when it has unity, these two elements are necessary to understand and interpret a message.

Moreover,

> Paraphrase, substitution, ellipse, informative function and order of the constituents, markers or discursive operators are procedures that bind to the orality, intonation and expression of the speakers. Each of the elements mentioned have their function in the text and the relations of

> the statements make the interpretations to be varied and define the context of the situation.
>
> There may be a synonymic lexical variant in the recurrence (a word can be replaced by a similar one in the discourse.); a lexical reiteration of the designate (a word can be designated in different ways); the hyperonym (a word with general meaning). The pronominal substitution, on the other hand, orients to the use of the lexical proforms, i.e, to the use of the proverb to do. For example, in the statement: Mary reads a story. Sofia does the same thing. The proverb do replaces work.
>
> In the ellipses, the enunciations have certain absences or deletions of linguistic elements of the text. Thus, in the expressions John bought flowers; Maria, chocolates. Another example is when the elements of the nominal phrase precede or retake the nominal elliptical phrase. Example: I assume two neutral positions of this intense discussion. I describe the first one. The first nominal phrase retakes not only a neutral position, but also the other words as discussion known as adjacent.
>
> In the informative function, the use of the constituents and the discursive markers are components that organize the information of the elements of the statement. The elements of a statement: rheme, comment and focus are essential to interpret the speeches; the relationship between them allows to construct different meanings that organize ways of thinking in a discourse (Casado, 2000).

According to these arguments, the function of grammar becomes relevant since when analyzing a text, it is important to relate all these grammatical elements to approach the context of the discourse. If there is no proper understanding of what it means to relapse, ellipses, constituents, and textual markers on the part of the reader, it is possible to misunderstand the statements and build other meanings that are wrong. In addition, the structure and content of a text can be distorted. As a result, the use of in-context language requires deep grammatical analysis.

According to Gutiérrez (2000), "Support is the known information of a statement, while contribution is the unknown information of the word" (p. 21). In other words, every statement needs to be analyzed from the point of view of the subject and predicate. For example, in the statement they play in the park. The Speaker wonders who is playing in the park? As unknown, the rheme or contribution is the word who and the support or theme is played in the park, because it is what the speaker knows; in other words, the subject and the predicate play an important role when interpreting the meanings of a text.

Additionally,

> The topic of an enunciation is necessary to realize the reference with the adverbial subparagraphs (personally, technically, with respect to, etc.); They usually go at the beginning and mark several meanings to define the intention of the discourse. Thus, for example, in the following statement: With regard to climate, volcanoes are active, the topic element that is at the beginning of this enunciation (with regard to the climate), marks the meaning of the enunciation and makes that the intention of the discourse changes. This topic has the function of introducing a comment or contribution.

> With regard to the focus or relief, the prosodic emphasis is an important example: you did it. The emphatic element you contrast with the other pronouns I, he, etc. In other words, other people were able to intervene; but the statement clearly puts emphasis on you. As a result, the intention of the statement is to clarify the information. Therefore, the focus of a statement points to the importance of a context in its different variations in order to understand and assimilate its meaning (Gutiérrez, 2000).

Hence, the topic and the focus are other grammatical elements that can be analyzed in the discourse. If the receiver of a message learns to relate these components the interpretations are broader and the comprehension of the text improves. The cognitive processes of the interlocutors indicate different meanings and make the speaker and the listener develop language skills and critical thinking.

In addition, Lamas (2003) states: "A language can have different grammatical procedures to reach senses. The connectors: therefore, that is, by the way, for example and also serve to introduce textual functions in the speaking" (p. 13). In other words, these connectors indicate consequences, explanations, examples or add ideas in the statements. Consequently, these relationships imply cognitive inferences that lead to other meanings for the interpreter.

Another element to consider in the use of the language in context is the deixis. The terms like that, there, here, then and others are grammatical elements that refer to a context (Conde, 2001, p. 7). Pronouns and adverbs define the characteristics of the statement by placing references to link ideas or concepts that relate to the understanding of the meanings of the statements.

In short, the use of in-context language involves a profound pragmatic analysis. It is important to analyze the acts, the communicative intent, the ideologies of the speeches and the grammatical aspects. The theme, rheme, focus, topic and discursive connectors are necessary aspects to be analyzed in a speech. Consequently, the comprehension of texts is not based on a basic interpretation, but on an analysis that seeks the construction of relevant meanings that generate critical thinking.

It is necessary to perform a quantitative diagnosis to understand that the use of in-context language improves teacher' reading comprehension processes. The study was carried out in three educational institutions in the province of Pichincha of the Metropolitan district of Quito, which is part of the project CECM (Training Center to Teachers) that was carried out at Universidad Andina.

This investigation was done in two moments before (moment A) and after (moment B) of the trainings. Figure 1 shows the result of the reading comprehension test by the number of teachers before the training. This study was carried out in the year 2009-2010. The instrument that was applied was a survey of open and closed questions about a text of comprehension. The topic of this reading was about embryonic stem cells.

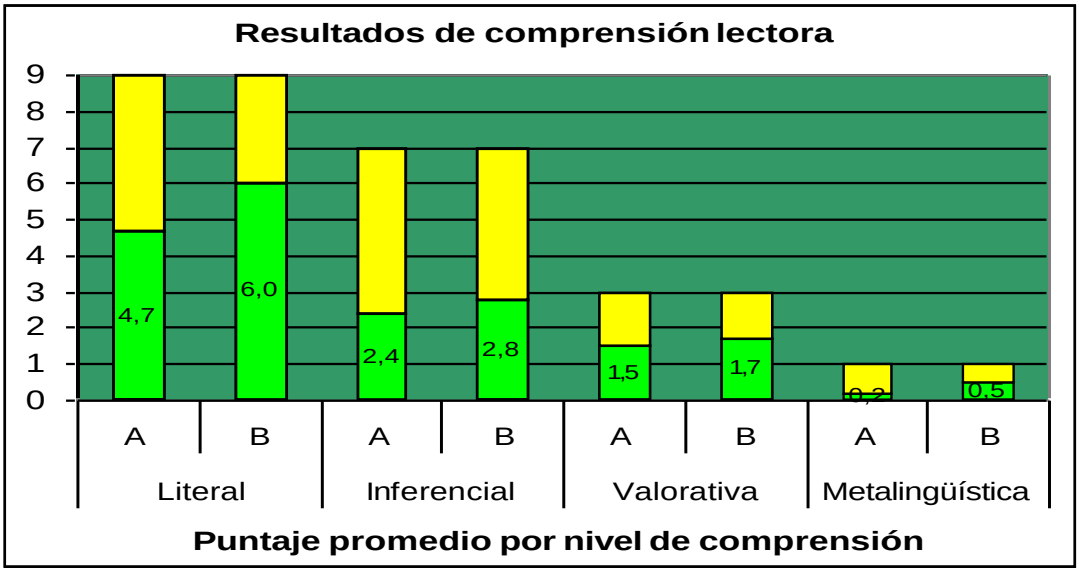

Figure 1. Average score of the reading comprehension test to teachers. Adapted from: (Final report of the CECM program, 2009)

En esta figura se observa que del Momento A al B las áreas verdes aumentan de tamaño, es decir, que crecieron los puntajes promedio de las tres dimensiones de comprensión lectora. El tamaño de las áreas amarrillas representa el puntaje máximo al cual los docentes deberían llegar. Es decir, falta por desarrollar este aprendizaje.

In this figure it is observed that from the moment a to the B the green areas increase in size, that is to say, that the average scores of the three dimensions of reading comprehension grew. The size of the yellow areas represents the maximum score to which teachers should arrive. That is to say, lack to develop this learning.

This analysis verified that teacher training contributed to improve reading comprehension processes. In addition, the evaluation team of Universidad Andina monitored this process and made the corresponding adjustments. The facilitators also developed the workshops according to the needs of the teachers and assessed their progress. In short, the average scores allowed to say that the ability to analyze the speeches improved significantly.

The knowledge percentage in the use of language in context in teachers before and after training is presented in table 2. This is a summary of a study carried out in the provinces of Esmeraldas, Santo Domingo and Pichincha in the year 2012-2013.

Province	% teachers	Average
Esmeraldas	98%	3
	2%	6
Sto. Domingo	99%	3
	1%	6
Pichincha	97%	4
	3%	6

Table 2. Results of using context language before training

Since the number of the population is known, the following formula was applied

$$n = \frac{\mathrm{N}\ (pq)}{(\mathrm{N}-1)(\frac{E}{K})^{2} + pq}$$

$$x = 246$$

Equation 1

This same result can be seen in a better way in the following figure 2.

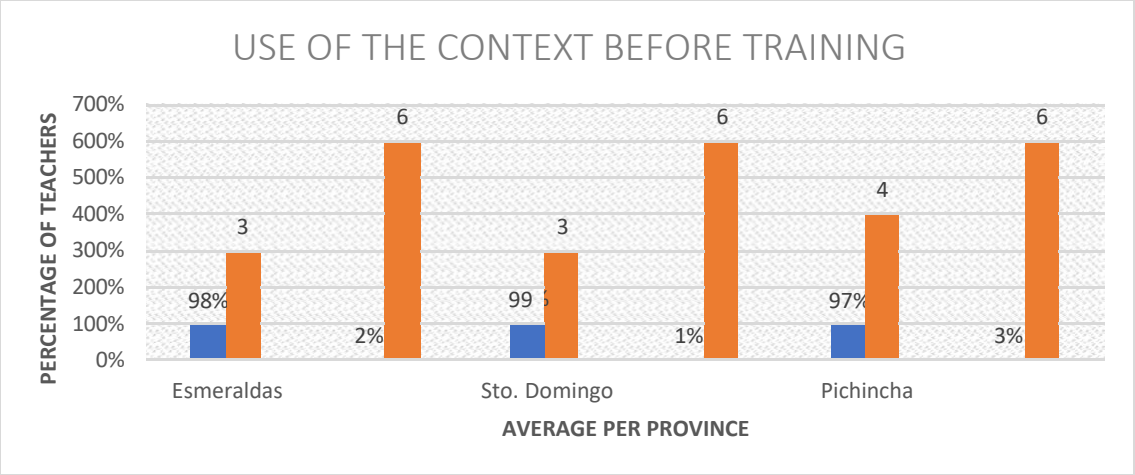

Figure 2. Percentage of teachers who obtained an average score in the application of a text analysis of the use of the language in context before being trainedAs

Can be seen, in Esmeraldas 98% obtained a score of 3/10; in Santo Domingo 99% obtained a score of 3/10 and in Pichincha 97% had an average of 4/10. What is inferred is that professors use the language in context in a limited way.

On the other hand, 2% of Esmeraldas teachers obtained an average of 6/10; 1% of the teachers of Santo Domingo obtained an average of 6/10 and 3% of the teachers of Pichincha obtained a score of 6/10. Some teachers achieved a satisfactory average in the interpretation of a discourse, which shows a low level of reading comprehension.

Most of the teachers analyzed the text superficially, and they did not take into account the different acts of the statements, nor did they emphasize textual markers, argument types, deixis, and language functions. In addition, the types of contexts went unnoticed; therefore, the interpretation of the speeches was neither profound nor relevant. The urgency of training was imperative.

With regard to the expression of their point of views, some of them were superficial. They considered that the main ideas, the secondary and the recognition of the subject and predicate were sufficient to understand the text in its entirety. In a way, their expectations at the beginning of the workshops were not relevant. They thought that the already knew the subjects exposed in the course. The course actually served as a category promotion.

Also, they complained that the reading and writing processes have the same processes and that the problem of not reasoning was of the students. They stated that the use of direct, indirect and verb conjugation complements were a prerequisite for the comprehension of texts, and the same happened with the ability to deduce. According to them, inferring requires that the students understand the text.

Finally, they ended up saying that the guilt of not having a reading culture was of the parents and that the education system of Ecuador has always been a disaster. In the face of these positions, all these expectations were collected by the facilitators at the beginning of the workshops; and at the end of the course, these thoughts and ways of thinking were contrast.

Table 3 is presented, in which another type of text was re-applied to teachers to use the analysis use of the language in context. At the same time, they were encouraged to conduct demonstrative classes as part of the completion of the course. It should be emphasized that the following results are after the training in the use of the language in context to the teachers of Esmeraldas, Santo Domingo and Ecuador.

Province	% teachers	Average
Esmeraldas	92%	8
	8%	7
Sto. Domingo	92%	9
	8%	8
Pichincha	89%	8
	11%	9

Table 3 Results of the use of context language after training

As can be seen, in Esmeraldas 92% obtained a score of 8/10 and 8% had an average of 7/10; in Santo Domingo 92% obtained a score of 9/10 and 8% had an average of 8/10; in Pichincha 89% had an average of 8/10 and 11% had an average of 9/10. It is inferred that the analysis of text done by the teachers using as a tool the language in context was favorable and influenced their way of thinking, and the scores have improved. In order to better project these results, Figure 3 is presented, in which the use of the language in context can be analyzed in a more detailed way. It is interesting to see how the percentages vary.

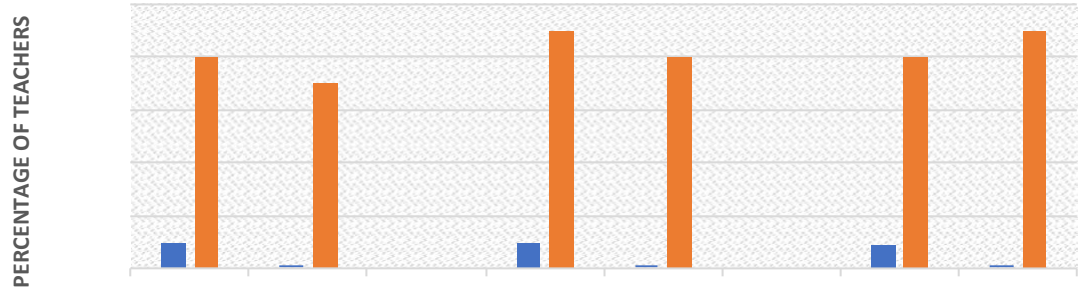

Figure 3. Results of the use of language in context after the training

As can be seen, 91% of the teachers trained in the provinces of Esmeraldas, Santo Domingo and Pichincha improved their use of language in their context. They perfected their reading comprehension and changed their way of thinking about their pedagogical practices. They analyzed speech acts, language functions, the use of different contexts, textual markers,

ellipses, and constituents. They related the statements with the culture and generated new cognitive constructions with respect to the text or discourse to be analyzed.

On the other hand, at the end of the training, the facilitators asked metacognition questions to the teachers. Here, it was verified that the expectations they had at the beginning of the course changed completely. They thought that it is necessary to give another turn to their pedagogical practices, since the reading comprehension plans are based on the use of the language in context. In addition, grammar is not subjected to subject and predicate analysis, main and secondary ideas, but involves other meanings.

They stressed that if students were able to analyze a speech in depth, there would be more critical-thinking development. The fact of scrutinizing the true meaning of the enunciations and associating them with the culture and ideologies of a society causes them to change their paradigms. But the teachers are the first ones who should do it. Therefore, it can be deduced that the teacher training in the use of in-context language improves their reading comprehension processes. And, on the other hand, they change their way of thinking about their pedagogical practices.

6. Proposal to train University professors in the use of language in the context

La siguiente propuesta es una guía para un taller de 4 días, con un total de 20 horas sobre el tema del uso del lenguaje en contexto. Toda propuesta metodológica, para elaborar talleres de capacitación, se fundamenta en elementos teóricos y evidencias (Carriazo, 2009). Por esta razón, la presente propuesta se basa en los artículos de M. Victoria Escandell, 1996; Introducción a la gramática de Manuel Casado Velarde, 2000 y Temas, remas, focos, tópicos y comentarios de Gutiérrez Salvador. Estos autores nos hablan del uso del lenguaje, desde el punto de vista de la pragmática y es un soporte para elaborar esta propuesta.

The following proposal is a guide for a 4-day workshop with a total of 20 hours on the use of language in the context. All methodological proposals to develop training workshops are based on theoretical elements and evidence (Carriazo, 2009). For this reason, the present proposal is based on the articles carried out M. Victoria Escandell, 1996; Introduction to grammar of Manuel Casado Velarde, 2000 and themes, Rhemes, topics and comments of Gutierrez Salvador. These authors talk about the use of language from the point of view of the pragmatics.

On the other hand, it is also based on the results of reading comprehension analyzed in the teachers of three public institutions of the province of Pichincha (Final report of the Teacher Training Excellence Center Program [CECM], 2009, p. 33). In addition, it takes into consideration the document of the new redesign of 2016 of Universidad Central del Ecuador (Commission of Connection with the Society, Commission of Investigation, Commission of Innovation, 2018).

6.1 Presentation of the workshop

Before presenting the workshop it is necessary to gather the expectations of the teachers with respect to the training course to contrast their thoughts at the end. They will then be explained what is the aim of the training, the objectives, content and methodology to follow, evaluation and metacognition. The organization of this workshop would be:

6.1.1 Topic: use of the language in the context

6.1.2 Objetive

- To show that the use of language in context influences the people's way of thinking to interpret the world around them.
- To conceptualize the use of language in the context to understand different types of text and generate critical thinking.
- To sensitize teachers that the use of grammar is a tool for the analysis of texts from the actual daily use of different real communicative situations.

6.1.3 Content

- Definition of Pragmatic by Scandell, (1996)
- Illocutive speech act, enunciations and discourse. Gonzales (s. f)
- Language functions and linguistic functions. Cervera (s.f.)
- Grammar in everyday use, coherence, cohesion, components of the enunciation (theme, rheme, topic and focus). Gutiérrez, (2000)
- Dance of the Signs, Zecchetto, (2002)

6.1.4 Prerrequisites of teachers

After a brief presentation to the teachers about what the module is about, the subjects to be studied, the methodology and evaluation, the previous knowledge of teachers is collected with respect to language, grammar and language use.

6.1.5 Construction of knowledge

To present to the teachers slides of a simple text of a daily dialogue, whose context is in a restaurant. Through the analysis of this example the definition of pragmatics, the speech acts, enunciation and functions of language are presented. The text is the following:

A man sits on a restaurant table. The waiter approaches and asks:
-Good afternoon. What do you want to order?
-To what the man answers:
-I want some spaghetti with tomato sauce.
-What do you think happens next?
-Now, imagine that the following happens in the same table:
-The waiter approaches and asks:
-Good afternoon. What do you want to order?
-To which the man answers:
-I order you to lie down on the floor and do ten pushups (Gascueña, s. f.).

After analyzing this text, it is necessary to make a reflection with the teachers on the speech acts. To do this, the following questions will be asked: What do you think can happen at that time? What can the waiter think of the order? What did the client say? How do you think he would react? These and other questions are essential to get a thorough analysis of the text.

With the analysis of these two situations presented in the text it is interesting to analyze with the teachers that the beginning of the text refers to a context that is in the restaurant. This situation directs a limited set of speeches that the speakers consider possible or acceptable. If the situation of the discourse were in a military context, in which a higher-ranking soldier gave him an order because he is subordinate, then he would possibly do chest pushups.

To reconsider that a speech act or intention of the discourse influences the way of thinking and acting of the individuals, it makes the comprehension of the text expands. In this sense the intention of the speakers is different. So, for example, the waiter takes an order to then

act, the customer informs what he wants, in this case, spaghetti with tomato sauce. The sum of this deep analysis are inputs to construct the argument of discourse.

As for the use of grammar, it is essential that educators become aware that from examples of everyday use coherence, cohesion and components of the statement (theme, rheme, topic and focus) can be analyzed. In the preceding example, it will be shown that in the statement: "I want spaghetti with tomato sauce". The subject is the subject "I" and the rheme is "I want spaghetti with tomato sauce." It becomes topical when there is a marking of the enunciation. For example: For me, I want spaghetti with tomato sauce. The phrase "for me" is the topic. and the focus is the emphasis on some pronoun. For example, "I want spaghetti with tomato sauce. You said it. The pronoun "You" is the focus.

The way of combining words, deleting, or replacing them makes statements to be interpreted differently. The components of the statement must be grammatically structured so that there is coherence and cohesion in what is said orally or written.

In short, educators will experience that the use of the language in context improves their reading comprehension processes. The processes of thought and cognitive skills that will be built at that time shall serve as input to understand that the use of language in context is an essential tool for discourse analysis.

6.1.6 Evaluation

Finally, conclusions will be drawn on the subjects studied and then the metacognition process will be applied. The lecturer and the teachers will contrast the previous information that teachers had regarding the analysis of a discourse with the new knowledge they obtained in the workshop. On the other hand, they will check whether or not they met the expectations they had at the beginning of the workshop. Because of the latter, it will be possible to analyze whether or not they changed in their way of thinking about the deep analysis of the texts and reconsider their teaching practices.

To see if the teachers had a meaningful learning they will analyze another type of text, in which they verify the intentions of the statements, the speech acts, the linguistic functions of the text and the relation of these sentences with the culture. The discourse to be analyzed is the following.

> The United States, from the German experiments, had elaborated an atomic bomb, Harry S. Truman, who assumed the American presidency after the death of Franklin D. Roosevelt, had estimated that the atomic bomb could be used to defeat Japan in such a way that it would cost less casualties to the United States than a traditional invasion. The first atomic bomb was launched on August 6 in Hiroshima. Eighty thousand people died by the fire or as a result of radiation; another seventy thousand were severely affected. Two days later, the Soviet Union declared war on Japan and on August 9, the Americans launched the second nuclear bomb on Nagasaki. The Japanese, by this demonstration of strength surrendered formally on September 2, 1945. Therefore, it was a hard and necessary historical fact to seek peace (Ministry of Education and Culture, Didactics of Critical Thought, 2011, p. 78).

The questions that will guide this analysis are:

1. What is the author's intention with this speech?
2. What would be the subject of this speech?

3. In the statement: The United States, from the German experiments, had produced an atomic bomb. What is the subject and rheme of this statement?
4. What are the discourse markers that the text presents?
5. What is the statement that marks persuasion?
6. What important arguments does the text refer to?
7. Is there a topic and focus on a speech statement?
8. Write two statements that have the intention of informing?
9. Could you say that this statement is coherent and cohesive? Support your answer.
10. How would you analyze the components of this statement applied to students?

7. Conclusions

This research is considered important because the teacher training in the use of in-context language improves reading comprehension processes and influences the way teachers think about their pedagogical practices, making it possible to innovate the learning processes.

The use of language in context serves as an instrument to improve the activities that teachers and students undertake in the innovation projects of the knowledge (PIS). One of the training fields in these projects is the integration of knowledge and culture contexts and languages and communication (Commission of Connection with the Society, Commission of Investigation, Commission of Innovation, 2018, p. 17).

Therefore, it is interesting to analyze how teachers and students interpret the knowledge of a community through language, and to do this they need to analyze the community's speeches and their ways of thinking.

Another important aspect in the document of the new redesign of 2016 is to develop critical thinking and not to take apart the thought of the action (Redesign Accuracies, 2016, p. 3). For that reason, it is also necessary to incorporate the use of language in the praxis of the Connection with the Society (VS) and in the Practice of Application and Experimentation of the LLearning (PAE). If teachers and students do not analyze the phenomena of a society, their context, and way of thinking in an appropriate way, their interpretations of reality and acquired learning will be biased and will not develop critical thinking.

There is another question that must be done after training in the use of language in context, can teachers apply what they have learned with their students? To what extent will they have changed their way of thinking? These and other questions may be subjected to another investigation, because it would be interesting to compile the progress of teachers on the application of these skills. Education will not progress if there are no changes.

The society requires innovative people with critical thinking, divergent and with the capacity to investigate and produce new knowledge for the society to generate changes. A non-educated society does not progress and the educator is responsible for forming leading transforming citizens.

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La evaluación al desempeño directivo y docente como una oportunidad para mejorar la calidad educativa

The managerial and educational performance as an opportunity to improve the educational quality

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Resumen

La investigación indaga las percepciones de directivos y docentes sobre la calidad educativa y las principales dificultades que enfrenta la educación en la actualidad. También evalúa el desempeño del docente en el aula, mediante la observación de la clase y la reflexión pedagógica permanente de los procesos de enseñanza. Siendo esta última una tarea prioritaria de los organismos de control. En la investigación fue necesario revisar las bases conceptuales inherentes al desempeño docente, acompañamiento pedagógico, liderazgo, estrategias de aprendizaje y la calidad de la enseñanza. La metodología de estudio se fundamentó en el enfoque cualitativo, apoyada en dos técnicas. La observación de la clase con el instrumento técnico denominado ficha de observación áulica que, permitió visualizar cómo se llevan a cabo los procesos de enseñanza y aprendizaje. Y la entrevista semiestructurada aplicada a una muestra de 43 investigados entre docentes y directivos de la Zona 9, Provincia de Pichicha. Los resultados obtenidos a partir de estos instrumentos permitieron conocer las fortalezas y debilidades reales existentes en la enseñanza. Finalmente, se determinó que las actividades propuestas para desarrollar la clase guardan

escasa relación unas con otras, no atienden a un enfoque pedagógico, ni a un método, técnica, estrategia o proceso de enseñanza. Además, la enseñanza se centra en el docente, quien expone sus saberes, mientras la participación del estudiante es mínima. Estos y otros hallazgos permitieron concluir que el desempeño directivo y docente influyen en el aprendizaje y el mantener prácticas pedagógicas tradicionales no contribuirá al mejoramiento de la calidad de la enseñanza.

Palabras clave

Acompañamiento pedagógico, calidad de la enseñanza, desempeño docente, estrategias de aprendizaje, liderazgo pedagógico.

Abstract

The research investigates the perceptions of managers and teachers on the educational quality and the main difficulties facing education today. It also evaluates the teacher's performance in the classroom by observing the class and the permanent pedagogical reflection of the teaching processes, being a priority task of the control organisms. In the research it was necessary to review the conceptual bases inherent to the teaching performance, pedagogical accompaniment, leadership, learning strategies and the teaching quality. The methodology was based on the qualitative approach, supported by two techniques. The observation of the class with the technical instrument called the observation tab, allowed visualizing how the teaching and learning processes are carried out; and the semi-structured interview applied to a sample of 43 investigated among teachers and managers of Zone 9, Province of Pichincha. The results obtained from these instruments allowed to know the real strengths and weaknesses existing in teaching. Finally, it was determined that the activities proposed to develop the class have little relation to each other, do not attend to a pedagogical approach nor to a method, technique, strategy or teaching process. In addition, the teaching focuses on the teacher, who presents his/her knowledge, while the student's participation is minimal. These and other findings allowed to conclude that managerial and teaching performance influence learning and maintaining traditional pedagogical practices will not contribute to the improvement of the teaching quality.

Keywords

Pedagogical accompaniment, teaching quality, teaching performance, learning strategies, pedagogical leadership.

1. Introduction

Improving the teaching performance and the educational quality in Latin America is a priority task as well as in Ecuador. In our country in the last 10 year changes have been generated in the educational politics, which are present in the Constitution of the Republic of the Ecuador, the Constitutional law of Intercultural education (LOEI), and the National Wellness Plan. The modifications are aimed at creating a new management model, updating the curricula, increasing infrastructure, among others, in order to achieve the desired educational excellence. However, the results obtained by the INEVAL when evaluating the levels of teaching performance place most of those evaluated at the fundamental levels and in training far away from the excellent and favorable levels.

Something similar happens with the results in the student´s test in the basic areas of knowledge (language and literature, mathematics, social studies and natural sciences)

where the highest percentage of students is located at the elementary levels and insufficient, and very few in the satisfactory. According to the National Institute of Educational Evaluation (2018) something similar happens with the results to become a bachelor student of the school year 2017-2018, "where the average evaluation is 7.49 points over 10" (p. 8), i.e., is at an elementary achievement level. As can be seen, there is a direct relationship between the teaching performance and the student's performance.

The results described generate a variety of questions about teaching and learning. Among them: What is the quality of education? How is the teacher performance during the teaching and learning process? Is learning interesting and lasting? What strategies can improve the quality of teaching? Other management-related concerns such as: is there a proposal for administrative and pedagogical advice that guides the management of the manager and the teacher? how is the pedagogical leadership of the managers and teachers of the educational institutions.

The answers to the questions, the results of the class observations and semi-structured interviews addressed to managers and teachers allow to identify the factors that influence the professional performance and to propose pedagogical and administrative proposals that contribute to the improvement of the teaching. The results of this research will be delivered to the Ecuadorian Ministry of Education to be considered in the generation of concrete, real and innovative projects generated in the territory -in the classrooms- and not in offices. The aim is to leave aside isolated proposals implemented in the educational system to meet administrative requirements.

Regardless ministerial decisions, the results obtained will benefit the educational community, and the teachers and managers who in a process of reflection continue their pedagogical practice and search for information and are satisfied with their renewal and permanent updating; as well as personal and social valuation for the work done. Students will be able to carry out the fundamental learning and skills to achieve substantial changes in their training and professional projection, as well as their parents and the society in general because they will meet their expectations of quality training for their children and citizens.

The article is structured in 5 parts. The first refers to the introduction in which are established the background that gave rise to the diagnosis and the research questions. The second part analyzes the conceptual bases concerning the teaching performance, pedagogical accompaniment, pedagogical leadership, learning strategies and the teaching quality of the teachers. The third part explains the methodology with the approach, type, level of research, collection of information with the characteristics of the population as participants in the investigation. The fourth part explains the results, composed of a series of classroom experiences and finally the conclusions.

2 Conceptual bases

2.1 Teaching performance

An alternative to improve the teaching quality is to renew the quality of educational services, based on the qualitative assessment of teacher performance in the classroom. Evaluation that ceases to be quantitative, as a sanctioning character, to constitute a process of personal and professional growth, which breaks the barriers of resistance to be observed. In this regard, Martínez and Lavín (2017) mention:

> ... Currently, talking about teacher performance in the formal education field implies addressing a topic that is part of everyday life, is a concept that is put into practice, encouraged, disseminated, observed and, above all, is used to evaluate the subjects, when the latter occurs, it most of the time implies awards or penalties for those assessed (p. 2).

This traditional evaluation concept with awards or sanctions is still used. However, it is important to consider that the results obtained do not always generate changes in the teaching, but they do generate changes in the ones observed, changes that are linked to demotivation, resistance, low performance, negativity and distrust in the educational system.

The quality of the teaching performance must focus in the human being, teacher, in the permanent reflection of how he/she teaches; and in the creation of external and internal necessities to improve the pedagogical practice, i.e., in the generation of a personal and social commitment capable of breaking the barriers of conformity, state of comfort towards research and continuous improvement. In his studies, Robalino (2005) states:

> ... it is essential to recognize that the quality of the teacher's performance depends on a set of factors which include, but overcome the management of discipline and didactics. For example: the degree of commitment to the results of their work and school, the interaction with other educational actors in and out the school, personal and professional self-assessment, the participation level in the definition of policies, the collective construction of the educational project, etc. Hence, the professional performance also depends on how involved and responsible teachers feel in the development of their school and education (p. 10).

Managers and teachers can contribute to the educational transformation if they construct the Institutional Educational Project (PEI) and the Planning Institutional Curriculum (PCI) in a collaborative and contextualized way to its reality. This created administrative and pedagogic tools executed and evaluated from the search of information, objective self-assessment and joint work can take them to the personal and social autoevaluation.

The observation results of the teaching performance should be conceived as an opportunity to investigate and look for other ways of teaching a different, being aware that the teaching methodology must change, as well as the search for didactic, pedagogical and psychological alternatives of meaningful teaching and learning. MinEduc (2010),... "The evaluation of the teaching performance will allow to promote didactic and pedagogical actions that favor the learning processes of the students, and the improvement of the initial teacher training, as well as their professional development" (p. 1). The results of the performance evaluation are valuable inputs to raise a pedagogical diagnosis, from which proposals for personal and professional development are raised; as well as a pedagogical accompaniment plan capable of stimulating changes in the educational institutions and launching new and better ways of teaching and learning.

2.2 Pedagogical accompaniment

The pedagogical accompaniment as a process of continuous improvement is a practice that has been carried out in different fields. It has been present in the private and public institutions and has helped to monitor the way of teaching and to raise strategies of educational quality. In the fiscal system, even though it is in the standards of School

Management, Dimension of Administrative Management, Component Development Professional D1. C2. GE5. MinEduc (2017) "support processes and pedagogic accompaniment are applied to the teaching practice in function of the institutional needs" (p. 85). In fact, during the visits to the observers or pedagogical companions it is seen: timetables of visits with seven continuous periods which do not allow to look at the class in its entirety, nor to reflect pedagogically with the teacher the difficulties in determining the strengths objectively, and teachers with lack of knowledge of the curriculum. It is therefore necessary to analyze the skills, school textbooks and other inputs to study the class and issue recommendations.

In order to institutionalize the pedagogical accompaniment in the educational institutions, it is necessary to consolidate the pedagogical leadership with a clear mission, vision and purposes of the type of education sought to achieve. As well as a shared work with other educational actors, focusing on student learning and progress. This way of thinking will conduct to a systematic accompaniment process that is performed by an authentic pedagogical leader.

To carry out pedagogical accompaniment requires that the pedagogical companion (educational advisor, Rector/principal, member of the academic Bboard, area coordinator, etc.) expand his/her vision of the educational management, and go beyond the revision of curricular documents such as planning, teacher's portfolio, qualifications, etc., because this review only contributes minimally to improving the quality of the teacher performance. The goal is to become a true counselor and teacher support.

In order not to be limited to the documentary review, it is necessary to clarify the concepts of pedagogical accompaniment. FONDEP (2008) states:

> The accompaniment is not limited to external counseling focused on technical-pedagogical processes, it focuses on the development of capacities and attitudes of people; therefore, it cultivates relationships of trust, empathy, horizontality and exchange of ideas, experiences and knowledge in order to improve capacities and attitudes in the professional performance of the educators; consequently, it improves the learning quality of the students (p. 5).

As can be seen, the pedagogical accompaniment is a horizontal and permanent support process to the manager and the teacher in its management. It seeks to identify strengths and weaknesses, as well as to generate spaces to consolidate knowledge and skills to teach and learn.

The pedagogical accompaniment begins with the preparation of the pedagogical companion in aspects related to the accompaniment process, the curriculum, didactics, planning, evaluation, curricular adaptations, pedagogical approaches, human development, pedagogical reflection, among others. It continues with awareness and information to those involved about who and how they are going to participate, as well as the pedagogical diagnosis from the classroom observation and identification of strengths and weaknesses, the comparison and analysis of the curricular documents such as the plans of the teachers, materials of the students, qualifications and others. With these results it was proceeded to the pedagogical feedback supported in generating questions that allow the same companions to identify their potentialities and limitations; it is important to avoid a

punitive accompaniment based on the identification of only negative aspects. Finally, from the diagnostic information, strategies are applied such as: study circles, peer observation, pedagogical gatherings, workshops, trainings, role-playing, simulations etc., to update the pedagogical knowledge and raise the teaching quality.

2.3 Pedagogic leadership of managers and teachers

The quality of education requires considering and working from different points of views, perhaps the most important is to improve the quality of teachers. The latter should initiate by state policies aimed at training managers and teachers with skills, attitudes, values and solid knowledge of the area or subject they teach and classroom management. Other essential aspects are the role of the teacher, inform and motivate the teenagers to become teachers, among other aspects. On this matter Leithwoodet al. (2006) mention:

> ... to leadership, such as the ability to exert influence on other people, so that they can take the proposed lines as the premise for their action. This influence, not based on formal power or authority, can be exercised in different dimensions, especially at the organizational level, when n managerial office manages to reach consensus and mobilizes the organization around common goals (p. 34).

It is necessary to incorporate changes in the interior of the educational institutions in the way these are organized and operated. Doing so requires modifying the concept of leadership, authority, management, to a pedagogical that effectively supports the training of students, i.e., managers and teachers need to be trained, organized, and must agree and commit themselves to teach in the best possible way. In contrast to practices where the directors spend most of their time to tasks that are not directly related to the improvement of the teaching or the achievement of learning outcomes of the students. As can be evidenced, it seeks to change a vertical leadership by one that generates synergy in the work team, where students, parents, managers, community are directed to a common goal that is meaningful learning.

One of the factors for promoting educational change and the consistent quality of learning and teaching is to generate the pedagogical leadership in managers and teachers and raise their professional performance. Promoting new way of managing the education across the personal and human development, the reflection, feedback, the investigation, sharing of experiences, the pedagogic accompaniment of educational advice, and the generation of innovation proposals can be constituted the beginning of a real change in education. In this respect in the report of MCKinsey and Mourshed (2008) is expressed:

> ... the experiences of successful educational systems affirm that the main driver of student learning variations is the quality of teachers. Managers reported differences in the volume of learning of the various classes, which relied primarily on the quality of the education received. Furthermore, the negative impact of teachers with low performance is severe, particularly in the early years of school where an educational loss is irreversible. As can be concluded, the instruction of the teacher and the manager, the identification of the strengths and weaknesses of his/her work, the search of other ways of teaching, is decisive if one wants to undertake proposals of change (p. 13).

To support the change, the national education system must first address the problems that the institution presents and its actors such as: neglect in the formation of the future teacher, professional outdated, and teachers with other professions. In the first place, there must be commitment of the educational work, ethics and management recognition of the educator. Secondly, addressing labor disputes generated in the educational institutions by the overload of administrative work, and the lack of commitment of parents.

Finally, it is suitable to promote the paradigm change of the learning management with a priority to the pedagogic administrative aspect, the collaborative and reflectively work on the individual and the creation of innovation proposals. The aim is to modify the conceptions of the leadership based on written documents that are useful to present work evidences to the different governmental organisms, but that are little known by other educational actors.

2.4 Learning strategies

During class observations it is identified that most of the teachers observed develop isolated activities rather than applying methods, strategies, techniques and teaching and learning processes. These activities are of little relation to the elements of the curriculum (objectives, performance-criterion skills, teaching resources, methodological strategies and evaluation indicators). To meet this need, another basic proposal to improve the quality of teaching is to update teachers in new teaching strategies. According to UNESCO (2014) "Teachers can help make efficient policies. To meet this need, another basic proposal for improving the teaching quality is to immerse the teacher in the development of strategies to fill learning gaps" (p. 28). The educational policies and the Curriculum remain in paper if the teacher does not seek information, research and provide a range of strategies, new ways of teaching that support his/her teaching work.

According to the area or subject of study, the national curriculum presents a diversity of pedagogical approaches, methods, techniques, strategies and teaching processes that are little known by teachers and principals. This gap between knowledge of the epistemological and pedagogical foundations of the teaching area and classroom practice can be overcome by reading, analyzing, understanding, and applying the curriculum. Herrera (2009) states:

> ...the strategies involve a sequence of activities, operations or plans aimed at achieving learning goals; they also have a conscious and intentional character in which decision-making processes are involved on the part of the student adjusted to the objective or goal aimed to achieve. Therefore, it is important to replace isolated activities with strategies with a clear purpose aimed at achieving learning (p. 2).

Teaching with a clear purpose, being aware of how to teach, maintaining the didactic sequence of the class process and evaluating what is taught is a fundamental element to achieve the objectives and skills to be developed. Then, it is necessary to study the class and think what is the path to reach meaningful learning, and above all avoid improvisation.

To these cognitive strategies it is necessary to implement others of affective character that allow to put attention to the human being as center of the learning. In this regard Weinstein and Mayer (1986), affirm that "cognitive learning strategies can be classified into eight general categories: six of them depend on the complexity of the task, in addition to the cognitive goal strategies and the so-called affective strategies" (p. 315). Examples of affective strategies include relaxation exercises and self-communication or positive self-talk

to reduce performance anxiety; finding a quiet place to study in order to reduce external distractions; setting priorities; and scheduling a study schedule. This is how adequate climates are created for affective learning, eliminating distractions, improving attention and concentration.

2.5 The quality of teacher education

Educational quality is not achieved only by building infrastructure, expanding educational coverage, and increasing the number of students in the classrooms; quality is especially valued for teacher instruction and improved teaching and learning. In this regard, UNESCO (2014) declares:

> Strong national policies that give high priority to improving learning and teaching are essential to ensure that all children in school acquire the skills and knowledge they are supposed to obtain. Education plans should set targets and benchmarks as well as the means to achieve them. Improving learning, especially for the most disadvantaged children, must be a strategic goal. Plans should include a range of approaches to improving the teaching quality, developed in consultation with educators and their unions. They also need to ensure that strategies are backed by sufficient resources (p. 27).

Teachers and administrators state that the most significant problems they currently face are out-of-date professional and the presence of other professionals performing teaching roles; critical points that the education system must address. In the meantime, within educational institutions, study days and feedback on classroom processes can begin. In this regard, Education-International (2017) considers:

> ...that quality teaching is fundamental to quality learning. In view of the global challenges facing the teaching profession, such as the abuse of standardized tests to assess different levels of education, the educational institution strongly believes that teaching professionals and their organizations should lead the debate on what is quality and excellence in teaching" (p. 1).

Quality teaching and learning require teacher training and strengthening in various areas such as planning, diagnostic and formative evaluation, methodology, academic reinforcement, among others. It is necessary to remember that a well-trained teacher, highly trained and with a proactive attitude, achieves significant learning. Thus, it is important to stop theorizing about quality and start demonstrating a high professional level, commitment and ethics in educational work.

Other factors that contribute to the achievement of educational quality are the establishment of alliances with other government agencies interested in supporting education, in addition to didactic resources and economic stimulus. For Braslavsky (2006), the Ten Factors for Quality Education for the 21st Century are:

> The focus on personal and social relevance; the conviction, esteem and self-esteem of those involved; The ethical and professional strength of teachers and professors; The leadership capacity of principals and inspectors; Teamwork within schools and education systems; Alliances between schools and other educational agents; The curriculum at all levels; The quantity, quality and availability of educational materials; The

> plurality and quality of didactics; and The minimum materials and socio-economic and cultural incentives (p. 36).

The factors proposed by the author are considered in the description of this conceptual basis, which must be considered when directing education. At the ministerial and institutional levels, pedagogical leaders must pay special attention to each factor if they really want quality education.

3. Methodology

The research approach is qualitative, based on phenomenology because it is necessary to interact with teachers and principals so that they can issue their opinions and perspectives on teacher performance, and present proposals on how to improve educational work and achieve significant learning.

The level of research used is descriptive because it characterizes how teacher performance influences students' meaningful learning. The type of research is field research because it obtains data directly from reality, from what happens in educational institutions with teachers and principals.

Observation and interview techniques are used to collect information. The instrument called class observation card is applied, built and validated by experts in education whose purpose is to assess objectively and meticulously the way students learn. In this regard, Bernal (2010) expresses "...as a scientific research technique, it is a rigorous process that allows to know the object of study in order to describe and analyze situations on the studied reality" (p. 257). During the class observation, the detailed record of the actions of teachers and students, without the influence of emotions and personal appreciations of the observer, contributes to the subsequent analysis of each of the criteria.

The observation card is designed by 3 components: the first component starts with the general criteria, 8 indicators and the evaluation scale Yes or No. The second component with the specific criteria of the teaching-learning process is used as an evaluation scale of L. (achieved), P.L. (Partially achieved) and P.A. (To be achieved). In this block 3 phases are taken into account: the first is for the initial moment with 3 indicators; the second is for the development with 11 and 4 for the consolidation and evaluation. The third addresses the classroom climate, with the assessment scale L. (achieved), P.L. (Partially achieved), and P.A. (To be achieved), N.A.; (not applicable) and 5 indicators are evaluated.

This instrument was applied in the class observations to identify the strengths and aspects to be improved by the teacher in the classroom. It also made it possible to raise a pedagogical diagnosis based on the results obtained from the evaluations of the indicators based on the conceptual bases of meaningful learning. From the diagnoses, managers and teachers determined the problematic situation, the causes, effects and solution strategies in the educational institutions to support the path to teaching, meaningful learning and educational change.

In the second case, a semi-structured interview was applied with questions aimed at identifying the significant problems facing the Ecuadorian education. Hernández et al (2014) mention that "semi-structured interviews are based on a guide of issues or questions and the interviewer is free to introduce additional questions to clarify concepts or obtain more information" (p. 403). The questions have alternatives to obtain information and in

other cases they are open for the purpose of collecting personal appraisals that enrich the investigation.

The interview was applied to 43 professionals, among managers and teachers, in zone 9 of Pichincha. It is structured by 12 closed questions with alternatives focused on the research problem, which were structured with a group of experts in Education, and educational advisors. Questions 1, 4 and 7 are open because they allow interviewees to express their criteria, experiences, discomfort, ideas to improve the teaching-learning processes, training needs, among others.

4. Results

The creation of a real diagnosis of the teaching performance based on the observation of the teaching and learning process, with the support of the instrument called the class observation card. The information obtained from the observation and recorded in the forms allows to know the teaching performance and to establish strategic solutions to promote changes and improvements in the teaching. In this regard, Estrada (2016) indicates:

> ... to design an instrument that detects the real needs in the teacher training in ESCA, UST of the IPN, that allows through the statistical process and analysis of the information the generation of a diagnosis of conditions in which the teachers of the USAT are, in the field of training (p. 7).

From this diagnosis, solutions of improvement cab be proposed. The results of the pedagogical diagnosis allow the design and implementation of teacher training strategies directed towards the improvement of the performance. The main purpose lies in the generation of interventions that strengthen, generate and encourage teaching practices according to the academic needs of the institutional educational model. At the same time, it seeks to replace obsolete, incongruous and non-educational practices of the National pedagogical model and to strengthen the pedagogical leadership of the managers and teachers of the participating educational institutions.

The application of various counseling and pedagogical accompaniment strategies such as: workshops, modeling, video forums, exhibitions, appreciative inquiry strategies and critical thinking techniques, accompanied by class study, role play, case studies, process reconstruction, reflection and feedback processes implementation contribute to the awareness of the educational practice and the interest to change.

Initial changes in the way of understanding the teaching and learning process in the face of the behaviorist conception that the student's learning depends directly on the teacher's teaching and the teaching methodology he/she employs. These conceptions and comprehensions are analyzed and discussed in the discussion groups and proposals that contribute to increase the professional performance of teachers and the consequent improvement of the teaching processes will be generated.

Proposal of pedagogical and administrative counselling based on the pedagogical accompaniment to the manager and the teacher. A relevant, sustainable and transferable proposal in time because it is institutionalized in the institutions as a daily practice. That is part of the identification of good pedagogical practices, training and consolidation of pedagogical leaders; the institution's own mentors, which support educational improvement.

For reasons related to the qualitative research analysis, question 2 of the interview is considered:

2. Do you consider that the learning quality has improved in recent years?

ALTERNATIVE	FREQUENCY	PERCENTAGE
NO	24	55.81
SI	19	44.19
TOTAL	43	100.00

Table 1. Survey applied to teachers and managers of Zone 9, Pichicha Province

The biggest percentage of the polled population thinks that the educational quality in the last years has not improved and they argue that this situation happens by the following reasons:

- Educative system. This system has created conformist and negligent students in the fulfillment of their tasks, because the students consider that the law protect them; the students lack of their responsibility about their own learning process. "Lack of infrastructure": classrooms, technology and insufficient laboratory equipment in educational institutions.
- Curriculum. Reduction of the time of certain areas and subjects despite the increase in the learning content present in the new curriculum. Planning remain in the archived portfolios without any application in the classroom. The learning contents are very broad and due to changes in the curriculum teachers are not trained at 100 %. To this is added poor quality texts with many educational and pedagogical mistakes.
- Teachers. Lack of training and minimum support for teaching work. There is no willingness by part of professors for changing and innovating in the learning process. In addition, there is overloading of administrative tasks for teachers, many documents to fill, reason for which there is not enough time to prepare classes and investigate. The teacher always needs to finish work at home: To qualify evaluations, tasks, notebooks, to fill templates, etc. Attending continues meetings. Loss of working hours by formations, review and preparation of activities for the programs of the institution and others arranged by the Ministry of Education and the District.
- Students. Agglomeration by the high number of students in each classroom, permissiveness for the students; the students know more about their rights than their obligations. They make up with obtaining grades of 7/10, they do not mind studying. Lack of interest in assuming academic responsibilities.
- Parents. Little stewardship of parents in the education of their children, as they do not assume their role and expect the Ministry of Education to grant them everything, books and uniforms. There is no parent support.

Among the findings obtained in the class observation are: lacking in didactic sequence, scarce relation between the elements of the curricular structure; also scarce collaborative work, few participation of the students in the construction of the knowledge and meager development of the critical and creative thought.

5. Conclusions

The most relevant problem observed in the research during the class observation, planning review, analysis of student materials and pedagogical reflection with teachers, are: the activities developed in the classroom that are oriented to collaborative work students. The students are not allowed to construct their knowledge through interaction: student-students, student-teacher and teacher-student. The activities are mostly not developed according to a methodological sequence aligned with the pedagogical approach of the area. The conclusions, definitions and other generalizations are elaborated by teachers in most cases.

Student participation is not very active when they generate ideas, conclusions, definitions or develop actions that allow them to create their knowledge. There is lack of relationship between the components of the curricular structure, how they are articulated and applied in the classroom. This situation is evident when teachers pose a skill with performance criterion that is not considered at the time of teaching, because isolated activities are carried out during the development of the class without didactic sequence.

Working in professional learning communities allows to exchange ideas, learn from each other, self-evaluation of the work and the feedback. The manager's administrative and pedagogical leadership is strengthened during the observation of the teacher's performance in the classroom. The latter are supported by a pedagogical leader who does not judge, but accompanies n the improvement of the teaching processes.

Throughout the class observation process, it was identified that the observers or pedagogical companions present an assessments diversity of the process, and therefore it is necessary to delimit and clarify the meaning of each of the observation indicators before attending the class. Another limitation is the ignorance of concepts related to the moments of the class, as well as didactic, pedagogic, planning and evaluation conceptions.

Future researchers referring the evaluation related to the management and teaching performance must design proposals of pedagogical accompaniment at the level of educational counseling and leadership of the authorities and teachers of the educational institutions. The educational system has prioritized educational quality as an increase in educational institutions. Infrastructure has strengthened, leaving behind the successful experiences of other contexts such as: to select and train the best people that will work as professors; identify and develop the skills of teachers and managers to transform them into effective pedagogical leaders and ensure a quality education.

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Pertinencia del método ARTE para la enseñanza del cuento latinoamericano en Educación General Básica (EGB)

Relevance of the ARTE method for the teaching of the Latin American story in Basic General Education (EGB)

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Resumen

El método ARTE es un conjunto de actividades reflexivas, teóricas y experimentales basado en las teorías de aprendizaje de Piaget, Vigotsky y Ausubel. La metodología usada para la investigación fue de enfoque cualitativo, teniendo presente que es una investigación de corte humanista; pensada en la diversificación del aula de clases. La pertinencia e importancia de este método se evidencia a lo largo del proceso metodológico de la investigación tomando en consideración la integración que se dio entre las prácticas preprofesionales (PPP) del año lectivo y la recopilación de fundamentos teóricos. El método ARTE dentro de su proceso de evaluación reconoce a la diversidad y el diálogo como principales actores y fundamentos para la mejora de la calidad del sistema educativo, puesto que al estudiante le otorga autonomía y consciencia de los procesos de aprendizaje. El proceso también considera todas sus dimensiones, es decir, el contexto del alumno. El

proyecto se lo aplicó en la institución educativa (IE) Francisca Dávila fue la escogida para realizar las PPO del séptimo ciclo de educación general básica, mención Lengua y Literatura. El punto de partida para el diagnóstico de las metodologías y técnicas de enseñanza-aprendizaje de Lengua y Literatura fue precisamente el transcurso de séptimo a décimo año de EGB paralelo B.

Palabras clave

Cualitativo, aprendizaje, ARTE, método, proceso,

Abstract

The ARTE method is a set of reflexive, theoretical and experimental activities based on the learning theories of Piaget, Vygotsky and Ausubel. The methodology used for the research was a qualitative approach, bearing in mind that it is a humanistic research thought about the diversification of the classroom. The relevance and importance of this method is evident throughout the methodological process of the research, taking into consideration the integration that took place between the preprofessional practices of the school year and the compilation of theoretical foundations. The ARTE method within its evaluation process recognizes diversity and dialogue as the main actors and foundations for improving the quality of the education system, since the student is given autonomy and awareness of the processes in all their dimensions.

Keywords

ART, qualitative, method, process, learning.

1. Introduction

Education has evolved rapidly in this time, fact that is alarming not necessarily because of the updates that have been made to improve it, but because it is not effective enough to educate in the 21st century. The work of the teacher is to seek innovative methods, strategies and activities that improve the teaching process in any of its application fields; this does not mean that traditional practices are wrong, but that they can be improved to transform education.

The student must be an active actor during the class, however, it has been observed that this does not happen due to the non-fulfilment of the skills necessary for the sublevel. The educational institution Francisca Dávila was chosen to carry out the preprofessional practices of the seventh cycle of basic general education – language and literature, from this cycle it is sought to approximate the tenth year of parallel EGB B, in the Language and literature subject. The target is to present diverse alternatives to the inclusion, diversity and interculturality, since there are concepts that may not be internalized completely in the educational reality.

The educational institution is located in the urban sector of Cuenca, being also one of the most prestigious institutions of the city. Currently, it offers basic education and baccalaureate, thus modifying the school's status (first from basic to seventh of basic). EI is known because it was a school only for girls, but in the last four years it has accepted men, and it is now a mixed school. It has 859 students, out of which 605 are women and 254 are men; in the same way, the school has 24 women teachers and 5 men teachers, for a total of 29 teachers.

The tenth year of parallel EGB B was formed by 29 students (10 men and 19 women) in ages ranging from 14 to 17 years old; this indicator was taken as a starting point to understand the diversity existing in the classroom in psychopath, emotional and behavioral aspects. In the area of language and literature, students do not have an outstanding advantage, because the homework is not done, and as for the evaluations made throughout the school year, the students do not give the importance they should.

In general, it is observed that the classes of the subject are taught in a traditional way; no experimental or reflective activities are carried out. In addition to this reality, there is no evidence of the complete development of the skills that each sublevel of education seeks to develop. Therefore, this research designed, implemented and evaluated the ARTE method (reflective, theoretical and experimental activities) in the specific topic of the Latin American tale, having a diversified evaluation model for the personalization of the teaching process. The theoretical modality corresponds to Duarte, Amer and Pascual from the learning environment; Rodríguez from the diversification of the education; Montico and Ospina from the motivation; Barrera from education - learning of the Language and Literature; Monzón from the methodological activities, the Organization of the International Baccalaureate from the personalized evaluation; Ausubel, Piaget and Vigotsky from Constructivism; Canclini from the explanation of art and culture.

The school reality is more complicated than it seems: the attention of the students that must be caught at every moment, the dynamics and innovation of the class and the methodological reflection are some aspects that can be improved and that should be the focus to achieve a correct teaching-learning process. For these reasons, the research question arises: how does the application of the ARTE method influence the teaching of the Latin American tale in the tenth year EGB parallel B students?

Pre-professional practices make it possible to observe the various situations that occur in the school environment. In the area of language and literature, it is possible to see that classes are taught in a traditional way, which means that the student is not the main actor of his/her learning nor actively participates on it. Group activities, dynamics and contextualized activities are, to a certain extent, uncommon. It has also been identified that not all the essential skills for the sublevel are being fulfilled, since the methodology and the evaluation processes are not adequate to achieve their development.

The general objective of the research is to evaluate the relevance of the implementation of the ARTE method in the tenth year of parallel EGB B. In order to fulfil the general objective, research tasks are described as:

- To investigate theoretical foundations that support the project.
- To systematize the information to adapt it to the context of the institution in which the problem was identified.
- To design the Art method for later execution.
- To design the customized evaluation tools for the implementation of the ARTE method based on the teaching of the Latin American tale.
- To implement the ARTE method based on personalized learning in the teaching of the Latin American tale.
- To evaluate the relevance of the implementation of the ARTE method based on the personalized teaching of the Latin American tale.

2. Diversity of education

Diversification arises in the educational field as a curricular need to satisfy the organization of contents and subjects. In this way, the idea is to achieve the fulfillment of objectives and competencies, however, the "term diversification is directly related to the modification of pre-established patterns in various fields whether educational or social" (Amer and Pascual, 2015, p. 8). This conception was observed throughout the nine weeks of the PPP, in which it was accompanied and experimented in the role of teacher at IE Francisca Dávila.

According to the Royal Academy of the Spanish Language (2018) diversification is "1. Tr. To change into multiple and diverse what was uniform and unique" (p. 78). The above explains that the diversification process consists in expanding the options that are presented to a student or the class for the accomplishment of work or task. So it should be planned taking into account the distinctions between one student and another.

Teaching is a continual process of preparation and search. In this regard, Rodríguez (2013) mentions that: "teaching means allowing the students to learn, i.e., to encourage the conditions to freely express their needs in a favorable affective climate of compression, acceptance and respect" (p. 36). This is translated into a harmonious and effective environment for achieving meaningful learning based on the potential of existing diversity. The student is the one who sets the needs inside the classroom, since the previous ones have already been satisfied. In many of the situations the student does not create needs consciously, but these needs appear as the educational process is developing.

One of the most common problems that a teacher faces in the educational practice is that the classroom is conceived as a space full of rules and limitations. According to Viveros (2003) "The classrooms have become enslaved spaces giving empowerment to the teacher because he/she "possesses the knowledge" and "possesses the power to assign the qualifications" (p. 5). Teachers should modify the conception of the classroom and the students to transform it into the appropriate space for generating joint knowledge; they should also motivate and generate high expectations about the work of their students.

The teaching work should allow broadening the horizons of each of the members in the class, for this reason Rodríguez (2013) mentions that "the objectives of education are: to develop individuality, to recognize oneself as unique human beings, to develop their potential" (p. 38), but how to identify and develop the individuality of each member of the group? There are tools that help to identify the existing interpersonal relationships in the classroom as well as the learning styles of the students in the classroom. Class diversification should be prioritized, since the design of methodological activities will occur based on the diversification.

The Vak test designed specifically to identify the learning styles of outstanding performance in the classroom does not mean that teachers should concentrate on the predominant artistic styles but in all in the extent possible. According to Aragon and Jiménez (2009), learning styles offer the teacher "a conceptual framework to understand the behaviors observed in the classroom, which provide an explanation of the relationship of these behaviors with the way the students are learning and the type of teaching strategies" (p. 7). For this reason, diversifications of the teaching processes must start from the knowledge of individuality of each of the students.
From another point of view, the socio-metric technique understands the interpersonal relationships of each of the students. It is very important to know how positive or negative integration is in the classroom, because in this way students can help each other by

enhancing their leadership skills and helping to develop abilities for their peers. García (2013) explains that the Sociogram is a data analysis technique in which the social links established in the classroom are identified. These instruments guide the teacher to another key point in the execution of the class. For a class to develop effectively not only there must be the necessary resources, but it must be conceived under motivational parameters throughout the process.

3. Motivation in the classroom

Motivation is one of the most neglected factors in the classroom, because it is thought that motivating should only occur in the classroom, the observations of the class showed the little attention given to the motivational role. According to González (1999), motivation "is the set of internal states and processes of the person who direct and sustain a specific activity" (p. 106). While talking about a particular activity does not mean that it should not be encouraged at all times of the class.

The motivating act provokes in the student different behaviors, because he/she feels more confident and with much more security to participate. According to Montico (2004), "Motivation causes students to act or behave in certain ways" (p. 107). This is then the search for satisfaction through stimuli to achieve a goal. Ospina (2006) mentions that "motivation influences the student's thinking, thus the outcome of learning" (p. 159). This conception shows that the more motivated the student is, the better the result in the teaching process.

4. The teaching of literature in basic education: The Latin American Tale

The teaching of language and literature from the experience is given in a retention and unique way, thus, being monotonous without grace and appreciated with little interest by the students of Upper EGB level. According to Barrera (2011) "The Teaching-learning of the language has undergone profound changes" (p. 28). This means that the teacher must not remain static when facing modifications and new implementations in the area, reason for which the teacher must be updated in order to carry out its teaching role, not as a simple transmitter of contents, but as an aid in the sharing of knowledge.

It is important that the teacher has knowledge of the subjects he/she will teach during the classes. Similarly, the teacher also needs to remember that a class does not only mean knowing and managing concepts. The Latin American tale is one of the topics addressed in Unit 4 of the language and literature text of the 10th year of EGB. It specifies that the objectives to be met are in accordance with the skills raised in the National Education Curriculum (2016) in the curricular block number 5. The block is titled literature and is intended to achieve: the interpretation of a text based on the gender to which it belongs, the critical debate, the choice of readings based on the preferences of the student, the composition of texts with various literary resources, among others, to form readers and writers with critical reasoning and power of expression.

To get the training of good readers, writers and critics, it is important to keep in mind that not only the theory will feed the individual, but the spaces that are conducive to the imagination. In this way, it can be said that learning must be empowered and the mind must be focused on the development of skills. Therefore, it is understood that contexts, environments and learning scenarios are essential for proper training.

4.1 Contexts, environments and learning scenarios: Language and Literature

Contexts, environments and learning scenarios are those spaces that are suited for the learning process to develop in an optimal way. The teacher is the main actor in the creation of scenarios and learning environments, because he/she wants to achieve the development of certain skills in the students.

4.2 Learning contexts

Learning contexts cannot be modified because they are pre-established before the student enters the EI. According to (Hativa, 2000, Trevisán, 1995 and Cubero, 2005) "the context refers to the climate or social context suitable for learning, to the sociocultural scenario that considers: relationships, participation rules, ways of participation, activities, learning strategies, modes of communication, reasons, goals, etc." (p. 4). The latter refers to the existing parameters for the correct development of the learning process. However, not only is the context part of this process, but it needs other components to teach the teaching in an ideal way.

4.3 Learning environment

The creation of functional and adequate learning environments is necessary for the student to feel comfortable when learning; according to Duarte (2003): "The environment derives from the interaction of man with the natural environment that surrounds him" (p. 2). This means that the effectiveness of an environment is due to the comfort that the main actor of the educational process feels. According to Duarte (2003) the learning environment "is an active concept that involves the human being, hence, the teaching actions that the learners receive and are able to analyze about their own action and the others in relation to the environment" (p. 2). There is so much need to improve the educational practices that it should start from the most basic, but more complex element for the teaching process, i.e., the learning environment. Therefore, the importance of the environment, because it is propitiated the methods, techniques, strategies, tools and didactic material suitable for the class.

A learning environment in an educational institution is in many cases formal, because they are committed to the knowledge that the students must have, the skills that must develop and the skills that must be fulfilled during their schooling. This formal environment is not just about the experience in the classroom or the educational institution, but the psychosocial environment of each student.

4.4 Learning scenarios

The learning scenario is that space that the teacher and the students create to get the most benefit in the educational process in which they are. Figueroa et al., (2017) state that the scenario "is the space as a fundamental axis that gathers aspects like: ventilation, lighting, distribution and organization of the furniture and the support material, ad it also includes what is related to the teaching purpose" (p. 177). It is in particular the physical space in which the learning is developed. The construction of a scenario has several components, according to the authors mentioned above "an educational scenario is built with the active participation of actors who meet different roles and assume different levels of commitment in the educational process: teachers, students, family and community with their own actors"(p. 176). This is conceived as the social and community need to improve education from all its edges.

5. Methodological activities

The activities are specific processes that the teacher designs, implements and evaluates during the teaching learning process. In other cases, as with the strategies, the teacher may not necessarily design them, as he/she can investigate, select and even adapt them to the needs of the classroom. The activities should be contextualized and, as far as possible, customized to the learning style, the intelligences and contexts of the students. "Methodological activities should always be focused on diversifying and signifying skills, content or processes in general" (Albares, 2017, p. 45). Therefore, methodological activities should not fall into an automation, or in a preconception of acts, but in processes, moments and spaces destined to reflect, conceptualize and experiment with learning.

5.1 Design of methodological activities

García Vega (2010) conceive methodological activities as a "creative and systematic process" (p. 34), since it requires research skills learned and developed throughout the teaching. It is the teacher who should be able to understand the context of their students, become aware of it and work towards the development of the skills. "Activities should be thought to work several cognitive fields" as stated by (Sarah, 2011, p. 28), for example, memory, creativity, reflection, language, imagination among others; always thinking on the possible scenario of use and the recognition of the brain as a whole, which is complex and lattice. It is therefore unlikely to work only one area in a pure way without approaching or relating to another.

5.2 Reflective activities

The reflection is an intellectual and even emotional process that allows the human being to rethink what is learned, the conceptual and the experiential in a new environment, focus or situation. But there are many aspects and nuances that require a reflection that can help to learn meaningfully and critically from the mistakes made in its use or application.

Domingo and Gómez (2014) mention that "reflecting is not introspection, is not to turn to our own ideas, it is to analyze from our own experience the evidence collected and then value them by contrast with relevant references"(p. 56). Therefore, it is also mentioned that reflecting is an activity of thought that is stratified in the three levels of thought: basic, when the individual only reflects at the moment, is almost instinctive, is a reminder that it is necessary to update it; intermediate level, when the reflection in addition to being intuitive is directed to be improved, not only as a souvenir, but as an activity. The individual proposes to use what he/she knew to modify it for this new situation, and finally the advanced or higher level, in which the individual is in the capacity of, as he/she acquires new information. That is why synaptic networks must be created in the fields of memory and the skills to restructure and approximate them to a possible new use. At this stage of the reflection, the individual does not occupy the memory but the skills and rethinks its use, thus generating another learning state, and moving it to another learning area.

As a teacher, it is necessary to consider reflective activities in all learning levels. In this way the students can be challenged and the professors can provide the value that the environment need, the knowledge and feelings, which are normally forgotten or less valued by teachers.

It is important that reflection always be accompanied by dialogue, as well as guiding processes. It is important that in class the student focuses their cognitive efforts on reflecting in an oriented way, with a clear goal to improve this thinking ability in all its dimensions.

There is an interesting mention that makes Carrera and Mazzarella (2001), "all learning in school always has a previous story, every child has already had experiences before entering the school, therefore, learning and development are interrelated from the child's first days of life" (p. 43). This postulate is understood from the position that there is a quantity of knowledge that the child is not taught in school, but is reinforced.

5.3 Theoretical / conceptual activities

The design and execution of the theoretical/conceptual activities raises the use and development of the memory, as well as the concentration to generate a meaningful learning; the mental schemes must be established from the recognition of the concept to generate the idea of its possible use.

According to Ausubel, within the significant learning is established a theory that derives various considerations of interest, both psychological and pedagogical, mainly highlighting its conception of outline as a stable mental representation operating in long-term memory (Ausubel, 1973, p. 80). It is a cognitive theory that allows to understand and explain crucial aspects of the cognition process.

Therefore, concepts and conceptualization are processes that cannot be excluded from methodological activities, since they allow students to carry out assimilation processes. According to Rodríguez and Moreira (2002) "teachers design theoretical-conceptual activities with the intention of learning" (p. 19). Understanding this new situation and confronting it is a representation that endows it with explanatory and predictive power and that is a mental model.

5.4 Experimental activities

Experimental activities and, in particular, direct contact with phenomen according to Luneta is of paramount importance in the reconstruction of scientific explanations, since it allows to endow the physical events with a special kind of meaning. It represents one of the most valuable experiences to promote students' interest in science, knowledge of concepts and scientific procedures, as well as the development of skills to achieve new understandings (Lunetta, 2007, p. 45).

The development of experimental activities allows and facilitates the reconstruction of concepts since it makes it possible to place the student on the same level as the "expert" at the historical moment that founded the idea and shape the concept, making the student to give meaning to what he/she learns or knows (Colado, 2003, p. 19). When learning has meaning, it is because it has been rebuilt by the person, so it is not forgotten and can be applied in everyday life. Coll (2013), in the reflections on meaningful learning, the curriculum and the reform proposes that "one of the conditions that facilitates a meaningful learning in people is the disposition and attitude to learn or to know" (p. 58). It is understood that learning is meaningful when it relates to its needs, interests, reasons, concerns, conflicts and the environment in which learning takes place.

Conforming to the aforementioned on significant learning, Rodríguez (2004) explains that this theory of Ausubel serves to "know and explain the conditions and properties of learning, which can be related to effective forms of provoke stable cognitive changes, capable of providing individual and social meaning" (p. 2). Learning is complete in its most important areas: formal education and society-community-family.

5.5 Application of methodological strategies

According to Mozón the evaluation processes are designed to establish parameters that allow measuring, criticizing and obtaining qualitative and quantitative results of the teaching-learning process. The information provided by the evaluation is useful for the teacher to have these relevant data in order to analyze critically the educational intervention and make decisions about it (Mozón, 2015, p. 63). Therefore, the evaluation is a process that intervenes in all educational, curricular and pedagogical levels to strengthen and improve the process that is being given. The evaluation should be seen as a process of recognition, research and strengthening of the educational, curricular and pedagogical process.

6. Traditional model vs Evaluation model of ARTE

The evaluation of the teaching process also allows to detect the needs from the human and material resources: training, infrastructure, etc., by being a cyclical process and in each of its parts serving as a constant diagnosis and a sample of the reality in which the educational processes are being developed. According to Rojas (2010) in the analysis of curriculum reform and educational innovation processes, he mentions "it is important to emphasize that the evaluation of the own teaching practice, either individually or in groups of professors is shown as one of the most powerful training strategies to improve the quality of the teaching-learning process" (p. 48).

On the other hand, González y Pérez (2014) emphasizes that the "evaluation of the teaching members as a whole allows to detect factors related to the functioning of the coordination, the personal relations, the work environment, organizational aspects" (p. 26). All the factors mentioned above are significant elements in the functioning of the educational institutions, and the good functioning is highlighted.

To do this, it will be necessary to contrast the information provided by the continuous evaluation (headings, teacher's log, written evaluations, oral, etc.) of the students compared with the strategies that the teacher implements during the formative process. Therefore, it evaluates the planning of the teaching process and the intervention of the teacher as manager of this process. The resources used are: the spaces, the expected times, the grouping of students, the criteria and instruments of evaluation, the coordination, i.e., everything that is enclosed in the field of the teaching-learning process is evaluated.

For this reason, in the ARTE method is no longer evaluated the repetition or recreation of the content, but instead is sought to approach the creation, cognition, application of memory and other skills. Based on the activities carried out, the students have obtained the necessary skills to build processes and these to be evaluated from a personalized and also communitarian perspective thought of the student as part of a larger group, respecting their personal characteristics.

7. Structure base questions

The multiple option or objective tests are composed of a set of clear and precise questions that require by the student a brief answer, generally limited to the choice of an option already provided. The term objective refers to the conditions of application of the test, as well as to the treatment and subsequent analysis of the results, but this does not imply a greater objectivity in the evaluation of the student's performance.

In the selection of the contents, all those that are relevant in relation to the domain to be measured must be specified in an operational way, referring to the objectives sought, as well as according to the capacities of the students. The level at which these contents will be measured should be established, as well as the weight they will have in relation to the whole of the test. For this, a table of specifications is made, consisting of a double entry table that indicates the contents and competencies (skills that are put into play in front of the new situations) in the corresponding columns and rows.

Each intersection presents an evaluative objective represented by the proposed items in each case. It must be confronted with the test results table once it has been corrected. An example of a specification table, extracted from Fleitas et al., (2002), is the one shown in the present work. This is a test of 30 items in total. Here are some details:

7.1. The rubric

Rubrics are a set of related criteria in order to evaluate the acquisition of learning objectives. It is a qualification tool used and highly recommended to carry it out co-evaluations, self-evaluations and hetero-evaluations. The most innovative thing about this tool is that it gives the students the opportunity to design and establish their own criteria, making the qualification more simple and transparent.

It also gives teachers and students the opportunity to evaluate complex, subjective or objective criteria, fostering the understanding and dialogue. So it allows to increase the student's authority in the classroom in an equitable way. Students have the opportunity to establish by themselves the criteria to which they will be assessed, since it is not only the teacher who evaluates them.

In this case, the teacher evaluates with the student, and the student at the same time co-evaluates with the rest of the classmates in the classroom. The students score using the criteria previously mentioned in the classroom. In this way, they analyze and acquire the criteria to know how to score, fact that makes them think.

7.2. Qualification bands (evaluation techniqye for the art method)

Qualification bands describe in an integrative way the expected performance, and these are used to evaluate the students' responses. They constitute a single holistic criterion, divided into descriptors level. Each descriptor level corresponds to a range of points, which makes it possible to differentiate students' performance from the point range of each descriptor level, the score that best corresponds to the level attained by the student is chosen.

7.3. Evaluation criteria of the qualification bands

When the evaluation task is open (i.e. it is raised in such a way that it encourages a variety of responses), evaluation criteria are used. Each criterion is focused on a specific skill that students are expected to demonstrate. The evaluation objectives describe what students should be able to do and the evaluation criteria describe what level they should demonstrate in doing so.

The evaluation criteria allow to evaluate in the same way very different answers, that is how each criterion is composed by a series of descriptors ordered hierarchically. Each achievement level descriptor is equivalent to one or more points. Each evaluation criterion is applied separately, and is located the descriptor that more adequately reflects the level obtained by the pupil.

Different evaluation criteria can have different maximum scores depending on their importance. The points obtained in each criterion are added, resulting in the total score for the work.

8. Art for art

This point is one of the central axes of the investigation because as its name explains the ARTE method also includes the art itself. Hence, this concept of methodology is formed from the conception of art and its main characteristics. Palacios mentions that art has been degraded from the Renaissance, however, and based on this same author Palacios (2006) mentions that "it is not art that has been degraded, art retains its value, it is the industrial and postindustrial society that has degraded art" (p. 3). What has been degraded is the value that the human being gives to art, either for social, cultural or economic reasons.

The conception of art is so worn that it is thought that the person who dedicates completely to this area is doomed to failure. García Canclini (1995) says that "generational struggles about what is necessary and what is desirable show another way of establishing identities and building what distinguishes us" (p. 14). What is necessary has become so difficult to understand that it has been lost in the self-identification process, since the own and the conceptions become abstract.

García Canclini (2011) presents the following question: "How to build a vision of universal validity that interrelates diverse cultures and that would allow to compare them and find a common denominator without knowing its singularity?" (p. 14). This broadens the field of art, making it more versatile and capable of adapting to the needs that society has; and education is an important part of the society, so: What happens when education and art are combined?

9. The ARTE method

The ARTE method is created with the purpose of responding to diverse educational needs observed in a classroom. This method encompasses activities of reflective, theoretical and experimental nature that are combined among them to achieve a more effective teaching.

Thus, taking the educational theories of Ausubel, Vigostky and Piaget, the connection of all these theories has concretized to support this method. Piaget's conception of constructivism and its importance is one of the engines of this method because it is the point of connection between these three theorists, since it is observed the correlation they have in trying to give the necessary prominence to the family, community and school.

10. ARTE method design

The ARTE method arises from the need of students to generate meaningful learning in the subject of language and literature, with special emphasis on literature with respect to the Latin American tale. This was considered the theoretical foundations underpinning this proposal from: motivation, meaningful learning, diversification, learning environments and the most relevant and personal evaluation models. To begin with the curricular design, the VAK test and the sociogram study were implemented.

Based on the VAK test, student activities were selected and designed; and in relation to the Sociogram, the classroom was arranged to generate a better classroom environment. Once the classroom was diagnosed, selected and the activities designed, it was proposed to establish methodologically the activities related to the ACC planed structure (anticipation, construction and consolidation), in relation to the Literature of the Latin American tale.

In order to organize the teaching process, it was taken into consideration to provide the students in the process of reading, the necessary tools to be able to approach to the study of the Latin American tale. In this way, it was started with the generation of experiences and experimentation with imaginative situations such as: What do you think the title means? Questions of style allowed students to reflect and experiment with literature. In other activities they created the covers of the books based on some ideas provided to them, all these situations made them appropriate more and more of the subject and approach to the theorization.

The development of the pre-reading and its components were considered in the first part, in which the students briefly analyzed the texts, identified the basic structures and it was corroborate that the students were able to extract the main ideas, as well as the supporting ideas. Then, it was proceeded to identify some specific situations of the narrative and some concepts were developed. In this first moment, there was special emphasis to experience and reflection.

In the construction of knowledge, the students were given theoretical activities without neglecting the reflection and experimentation of the content. The emphasis was in the literary prescriptive and the introduction to structuralist literature from dynamics and activities conceived in the joint construction of knowledge through the reorganization of the groups, thanks to the use of the Sociogram technique.

With the support of the VAK test analysis, groups were organized according to their predominant learning styles, so that in the conduction of the activities they are supported from their abilities. For the consolidation of learning in the learning process, it was considered to evaluate from the diversification criteria proposed by the International Baccalaureate Organization with the application of the skill bands. This system allowed the students to be immersed in the evaluation process throughout their stages, so the students were aware even before their qualification.

The whole planning process allowed to generate another class structure gradually improving the learning environment and even the relationships of the classroom. The ARTE method was effective in this first stage of management and execution, since it allows to reflect on its limitations and the possible improvements required for its replication in new contexts and other subjects.

11. Explanation of the proposal

The proposal arose after a week of observing the language and literature classes taught by the teacher. The observation allowed outlining that the proposal is intimately related to the actions that were assigned by the professional tutor (teacher of the language and literature course).

After having compiled the observed in the field diaries, it was seen the lack of diversification of the literary learning, as well as the incipient methodology and activities of reflective, theoretical and experimental character to teach it. During the nine weeks of internship, and based on the observation, methodological activities were designed that allow the student to reflect, theorize and experiment what this topic offers.

The following activities are created based on the individual characteristic of the students, shown by the VAK test, in which was proved that most of the students are kninesthetic, i.e., they learn through movements:

- Diversity in the classroom: The diversity that was present in the classroom was respected and it was sought to enhance the learning from the individualities. Likewise, the activities were diverse and were agreed to be applied, always with the dialogue as a vehicle capable of approaching diversity.
- Motivation: It is extremely important for the teacher to maintain the motivation in the classroom, the high expectations make the students work better, motivate themselves and their efforts to prevail, for that reason teachers must maintain constant dialogues with the students.
- Methodological activities: Methodological activities are didactic sequences designed for the student to learn through the environments and learning scenarios. These activities can be reflective, theoretical and experimental in this case.
- Meaningful learning: It was one of the guiding axes that oriented the process of design, management and evaluation of the art method, since it was intended that the fulfillment and development of the skills would have place in becoming meaningful learning, i.e., thoughtful learning, theorized and experienced by students.

12. Conclusions

The theoretical foundation is the main foundation of this research, since it holds the processes of design, management and evaluation of the proposal. The theoretical contributions allowed to approach the scientific reality and similar experiences that are taken as a starting point for the execution of this methodological design.

In the same way, concepts and experiences were linked before, during and after the investigation, allowing to deepen the subjects to the exigency level of the project. Therefore, the collected and systematized information was adjusted to the reality of the project, giving a follow up to the theory in contrast with the application of its reality, improving, joining or discarding theoretical, concepts and precepts.

ARTE method is the result of an arduous process of research, analysis and reflection. It is taken as part of the experiences, the theory and the expectations, ARTE method is a set of theories, knowledge and educational, pedagogical and didactic precepts conjugated in the literature. This methodology gives the possibility of diversifying the classroom, from the potentialities and personal characteristics of the students.

ARTE method also carries an intimate relationship with art, whatever its diverse, creative and dynamic manifestation, ARTE method does not ignore the art and does not oppose or conceptualize, or enclose it; on the contrary, in the subject of Language and literature these dialogue, gather and dissociate. Basically, they coexist and they contribute to each other. Its design is reflective, theoretical and experimental, but also educational, pedagogical and didactic, supported from the methodology and reaffirmed by the evaluation.

The evaluation instruments of the ARTE method are reflections of the same, and are conceived from the diversification, the inclusion and the interculturality that is present in the classroom. The evaluation methods are not seen as final or closing phases in any aspect, the evaluation is continuous and is based on the personalization and awareness of the learning process.

This particular evaluation method happens through dialogues, in which teachers and students generate more knowledge during this process, including reflection processes. The instruments of the ARTE method are designed by all, however, in its application and valuation process, personalization and diversification are demonstrated.

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Saber, enseñar y cambiar. Aproximación a las tecnologías en la educación superior

Know, teach and change. Approach to technologies in higher education

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Resumen

Con el objetivo de repensar el rol del docente en función de los nuevos escenarios educativos, en el presente trabajo se analizan algunas tendencias tecnológicas que vienen afectando a la educación superior en la medida en que aquellas han venido evolucionando como parte natural del quehacer humano. Este tema cobra particular relevancia debido a la naturaleza de los cambios tecnológicos y su manifestación en el ámbito de la enseñanza. La metodología consistió en analizar algunas de las principales tendencias que se anuncian en diversas investigaciones e informes recientes sobre la presencia de las tecnologías en el ámbito educativo. Como resultado se presentan algunos desarrollos tecnológicos adoptados en el contexto de la educación superior, particularmente las tecnologías inteligentes que se han venido incorporando al proceso de enseñanza aprendizaje. Asimismo, se consideran las habilidades que demanda el desarrollo profesional y personal ante las nuevas tendencias tecnológicas. Y finalmente, se aborda el rol del docente en función de los nuevos escenarios que plantea la tecnología. El trabajo concluye poniendo de relieve que la formación docente debería orientarse a fortalecer el pensamiento sintetizador, creativo, respetuoso y conectado, pues se trata de asumir los retos que supone saber, enseñar y cambiar en la era

de las tecnologías inteligentes que hacen posible la emergencia de nuevos escenarios educativos.

Palabras clave

Educación superior, formación docente, habilidades, tecnología educativa, tecnologías inteligentes.

Abstract

This paper analyzes some technological trends that are affecting higher education in order to rethink the role of the teacher in terms of new educational scenarios. This context acquires particular relevance due to the nature of the technological changes and their manifestation in the field of education. The methodology consisted of analyzing some of the main trends mentioned in various researches and recent reports on the presence of technologies in the educational field. As a result, some technological developments adopted in the context of higher education are presented, particularly the smart technologies that have been incorporated into the teaching-learning process. Also, the skills demanded by professional and personal development in the face of new technological trends are considered. Finally, the role of the teacher is addressed in terms of the new scenarios posed by technology. The work concludes by pointing out that teacher training should be aimed at strengthening synthesizing, creative, respectful and connected thinking. It is about taking on the challenges of knowing, teaching and changing in the era of intelligent technologies.

Keywords

Educational technology, higher education, intelligent technologies, teacher training, skills

1. Introduction

> That had the effect that good books generally have. Fool people became dumber, intelligent people got smarter and thousands were unscathed
>
> —Georg Christoph Lichtemberg, *1742*

One of the subjects always in force in the academic field has to do with the training of the teachers since it is in synergy with the exigencies of the labor field. The technologies have been affecting and changing all the spaces of work and the university context.

It is worth highlighting, as mentioned by Partovi (2018) the emerging economies and the future curriculum, which according to McKinsey Global Institute's latest prediction, approximately 50% of existing work activities can be displaced, replaced or modified in any way by the automation. This will be caused by traditional software, robotics, artificial intelligence or new automatic learning algorithms.

In this sense, some of the issues taught today will no longer be relevant in 2030. The processing of large data will be increasingly under the control of the machines, and the Internet will continue to replace the need to structure and memorize many basic data.

In this context, the aim of this research is to revise and analyze some tendencies based on the technologies that are affecting higher education by demanding new competencies that lead to rethinking the role of the teacher according to the new educational scenarios.

It is believed in the idea that technology is not an extrinsic process to human activities, but has been naturalized as part of the daily activities of man. This trend has been clearly stated by Hardt and Negri (2017) who emphasize the digital dimension of the human existence. Both the soul and the body have adopted an immanent relationship with the technology that has accelerated in recent times.

Technology has gone from being an artifact to becoming a natural extension that amplifies, modifies and recreates reality. Although this does not necessarily mean that the presence of technology is conducive to innovation by itself if there are no cultural conditions that allow it to be adopted and developed.

This takes on particular relevance in the educational field because although technological developments are demanding new skills, the effectiveness of their use depends on their proper incorporation in the learning process, so that these guarantee the academic quality. An effective teacher should know, teachand change.

In order to address this issue, the methodology consisted of exploring and interpreting the main trends presented in various research and recent reports on the presence of technologies in higher education. In this sense, the technological context in higher education was analyzed. In the same way, the new skills and competencies demanded by the presence of technology were identified and characterized. Finally, the main obstacles and the successful experiences that point to the development of competencies and the new role of the teacher in the university context stand out.

The work is divided into three parts. In the first, some technological developments adopted in the context of higher education are presented. It will be stated how technologies, and particularly intelligent technologies, have been incorporated into the learning process.

In the second part, the skills demanded by professional and personal development will be considered for new technological trends. It is a question of revising these skills from the perspective of the student and the professor.

In the third part, the role of the teacher will be addressed according to the new scenarios generated by the technology. It seeks to examine these trends on the need to take on and promote a more complex, personalized teaching conducive to autonomy and lifelong learning.

2. Recent technological trends and their use in Higher Education

Technology has influenced higher education at various times and shows its transition to its incorporation as a fundamental part of the teaching learning process. In 2009 Cabero pointed out that "the incorporation of ICT to educational institutions will allow new ways of accessing, generating and transmitting information and knowledge, and will transform, change and extend the educational act" (p. 151). Indeed, the effects of ICT on educational settings have shown at various stages. At first, technology operates as a complement where the instructor and the institution control the social interaction and the content. To the extent that technology evolves, applications are developed for content management through teaching platforms.

This is followed by a process of accelerated development of various applications that are incorporated in multiple forms to the educational process. It increases the capacity to serve

a more diverse audience and there is a change in relation to schooling as long as short and open courses are offered, coursed that would meet the needs of training for the market.

Currently, we are in a process of technological transformation that is observed in the use of intelligent technologies with a strong impact on teaching and learning. García (2017) in his analysis of the report Horizon 2017, pointed out how technologies can generate disruptions in the ways of teaching and learning, and he said that the report "proposes technological-based trends in educational innovation referred to higher education" and refers particularly to "the most relevant technologies to be adopted in the future"(p.16. In this sense, it emphasizes the adaptive learning and the mobile learning as fundamental tendencies that can define the education of the future.

Revising the Horizon 2018 report are also identified some trends that are accelerating the adoption of technologies in higher education in the long term. In the same way, the progress of the innovation culture and the collaboration between institutions is highlighted. In the medium term, emphasis is placed on the adoption of open educational resources and the emergence of new forms of interdisciplinary studies. Finally, in the short term, it is called attention to both the boom in the measurement of learning to adapt more and more to a demanding and changing working market, as well as the redesign of learning spaces oriented to the development of more and more practical experiences (NMC Horizon Report Preview, 2018, pp. 10-21).

Is worth insisting on the advancement of intelligent technologies that have become increasingly present in different areas of higher education. Their impact could mean a break of the traditional training system and the development of new ways of assuming teaching and learning. The report mentions that among the most complex aspects that limit the use of technology in higher education are: the complexity of the role that younger educators must have to use multiple technological resources; apply innovative teaching methodologies; work collaboratively; participate in online dialogues; research, publish and work on a teaching methodology that is more and more adapted to the needs of the students.

Among the most important technological developments to be adopted in higher education are identified the analytical technologies that allow to visualize, represent and interpret a big amount of data and respond to the educational needs, such as personalized training and care for at-risk students. These technologies allow to make documented decisions and predictions. Similarly, Makerspace technology poses informal learning spaces to experiment with technology and learn through practice and exploration; these spaces are for self-directed learning and training that enrich research-based learning.

In the next two to three years, in the Horizon 2018 report is highlighted the development of technologies for adaptive learning. It seeks to adjust the teaching environment to the skills, styles and needs of the student by customizing the learning process. In this same period, it is mentioned the massive incorporation of artificial intelligence that has evolved in the development of simulation processes of human perception, decision-making and learning. It significantly emphasizes the simulation of the functioning of neural networks, which involves, among others, the recognition of the voice and the processing of natural language. This creates a wide range of applications to enrich learning and teaching (NMC Horizon Report Preview, 2018, p. 9).

On the other hand, in the next four to five years, the impact of mixed reality and robotics on higher education is anticipated. Mixed reality implies the combination of physical and virtual reality in the real world, which facilitates the study of multiple phenomena from

perspectives that have never been seen. For its part, the accelerated development of robotics implies the realization of various functions that will form a significant part of our environment as a natural reality. Many of these technologies are currently being applied in research centers and universities in the most developed countries and have been extended in a global way to the field of higher education.

Indeed, smart-calling technologies are recently impacting the educational experience. Its presence will certainly contribute to enrich the teaching environment, promote the autonomy and personalization of learning and the socialization of knowledge. All this will be shaping new facets of higher education that are now showing progressive changes insofar as it incorporates the complexity and versatility of these technologies.

Internet and the new technologies have spread with unimaginable speed a few years ago. The digital world permeates all economic activities and has global reach as connectivity and mobile technologies grow, but these processes of change are not occurring in a similar way in all countries. ECLAC (2015) reports that:

> The countries of Latin America and the Caribbean continue to move forward with large gaps, taking advantage of the ubiquity of the Internet, technological convergence, high-speed networks and the data revolution to expand access to the use of digital technologies (p. 8).

The Internet of things and the analytics of the big data are developed with an impact in higher education. "The world that is coming", using an expression of Oppenheimer (2014), is modifying the way we interact, present ideas, information and the way we communicate. The speed of the devices connected through the network acquires a dominant character.

This added to the proliferation of open concepts, open content, open data, open resources, coupled with transparency and easy access to data and information. The other dominant element is the personal, understood as the attention to the individual need in terms of content, place and time. We are heading towards the production of services and products more and more personalized.

In this way, new macro social tendencies are being formed, identified with the following denominations: "Contribution", which "consists in the evolution towards a high influence capacity of the individuals in the decision making, through its organization in groups with common objectives", "hybridization", which" involves mixing different worlds as the physical-digital, in-person-virtual, entertainment-professional, public-private, etc. "; "Hyper stimulation", which "consists of the evolution towards a constant reception and overload of external stimuli by individuals" and, finally, "experimentation", which "consists of the evolution towards participation in activities with a greater experiential involvement and the emergence of emotional consumption" (Fundación Telefónica, 2012, pp. XII-XIII).

Affected by these tendencies, education in general and in particular higher education is entering a period of radical transformation where its most relevant traits could be characterized as:

- Permanent: Lifelong learning throughout life, constituting a constant renewal process of the Learning.
- Personal: Programs adapted to the necessities and individual requirements. It is about the individual selecting his/her own training course

- Open: Open resources, open curriculum, demanding flexibility and versatility in the training offer.
- Mixed: Model convergence of formal and informal education, in-site and online with particular predominance of online education and convergence of different technologies.
- Ubiquitous: education in every place as a result of the idea that knowledge is disseminated in different spaces, objects, times.
- Social: learning with others thanks to the development of knowledge networks that allow the interaction and creation.

These traits are presented in educational institutions that face the challenge of adapting quickly or leaving the market. This, is made more evident in developed countries. However, educational institutions in developing countries are incorporating these trends at a slower pace and with inequalities.

3. Skills for professional and personal development to new technological trends

The changes that technologies cause in all fields are accompanied by the need for new skills to be able to respond to the Labor market demands. As indicated in the report 2018 of the Organization for Economic Cooperation and Development (OECD, 2018):

> Achieving greater equity in education is not only an imperative for social justice, but also a way of using resources more efficiently and increasing the supply of knowledge and skills that drive development and social and economic cohesion (p. 5).

In this sense, beyond the skills in the management of technology, tasks in the work field are demanding increasingly interactive and collaborative activities while retaking the old idea of learning as an essential principle for keeping workers updated. In this regard, Accenture (2018) points out:

> Thanks to advances in neuroscience and technology, the development of experiential learning techniques has progressed significantly in recent years. These techniques are dedicated to learning through practical application, rather than absorbing knowledge by listening or reading (p. 17).

Big corporations stand out as spaces for continuous training and work. The skills required in the field of work will continue to change and these will become increasingly complex as they combine technical skills with social skills. The Accenture report (2018) states that:

> Education and corporate lifelong learning systems must be accessible to all in order to truly close the skill gap. Workers who are vulnerable to disruption of technological change must be identified for targeted interventions (p. 25).

Given the rapid and permanent technological evolution, continuous updating is at the same time an individual responsibility, except in those most vulnerable populations, such as those quickly displaced by automation. The elderly and those with a disability who require the state's effort to ensure their productive insertion into the labor market.
That is why the culture of the 21st century has a multimodal character, with multiple supports, and is shown in a variety of formats or languages. It is mentioned the need for

various types of literacy: audiovisual, digital and informational. The current citizen should know how to communicate, collaborate, seek information, participate in public life and learn to learn. It is essential to take into account the scenarios that are entrenched in the 21st century (Monereo and Pozo, 2007, p. 16), i.e., the educational, the professional and the work, the linked to the community and the staff. It is the man facing the challenges of the "second modernity" (Beck, 2000; Shook and Knickrehm, 2018) considered in the context of globalization and the challenges of the technological revolution.

While the adult of the 21st century is an analogue migrant that must be adjusted to the own generation of digital natives, the educational paradigm moves to incorporate the audiovisual, digital and informational as important dimensions for teaching and learning, while distances are blurred and virtual education, mixed and collaborative learning becomes relevant. Indeed, "while distance education has been the most widely used term, the growing diversity of educational programs, the personalization of learning and the types of evaluation deserve the development of a more comprehensive and unified construction." (Siemens et al., 2015, p. 45).

In this context, among the skills required by technological development, in the first place there is the complex thinking, understood as the combination of critical reasoning, deductive, active learning, and in general, a set of higher-order cognitive abilities (Morin, 1999, p. 47). Secondly, the emotional intelligence that involves active listening, social perception, persuasion and negotiation. Thirdly, sensory perception and intelligence that incorporate a wide range of capacities that have been stimulating in an increasingly intimate interaction with technology is made relevant. Indeed, as Gardner (2015) points out, "the existence of a nuclear computational capacity anticipates the existence of a symbolic system that takes advantage of this capacity" (pp. 4-5).

These skills are also manifested in the context of higher education where relevance is given to the dominance of one or more disciplines along with the development of the aforementioned skills for successful performance in the academic or maket world (Fundación Telefónica, 2012). It is no coincidence that media literacy has been highlighted among the skills and technological competences. On the other hand, the skills related to critical thinking, and finally, the socialization of knowledge through networks.

In addition, social and self-management competencies, including flexibility and adaptability, initiative, social and collaborative skills, productivity, leadership and responsibility are socially coupled; and finally, as noted above, the competence for continuous training, which implies the acquisition of lifelong learning capacity.

As Dorfsman (2012) mentions, although there are four dimensions that must be strengthened in the teacher, i.e. academic-disciplinary, technical-pedagogical, reflective personal, and social and community critic, these dimensions must be restructured from the presence of the digital dimension that

> It considers the most specific components of the information society and its impact on teaching: the possibility of appropriating the technological environments, of building new spaces of work and cooperation, of leading communities, of publishing ideas and private, public and semi-public content, the multimedia potential at our reach (pp. 17-18).

These dimensions comprise the domain and management of digital environments, the interaction in the world of networks, the processing, hierarchy and use of information, and the transformation of information into knowledge.

4. Readjust the teacher formation

Readjust the teacher´s role according to the current social and cultural scenarios supposes various aspects that allow to place it critically in the context of the new technological tendencies.

First, it is about understanding teacher training in the technological context from complex, divergent, critical thinking to processes that involve a permanent transformation. From this perspective, technology is seen as an extension of the human and as a generator of new spaces for learning and teaching, while taking into account its status as an instrument of dispersion, isolation and misinformation.

Secondly, stimulated teaching can be highlighted because the technologies allow the implantation and use of multiformat content to stimulate and get the attention of the students. The teaching is enriched to the extent that the enlarged and virtual reality converge, and where the processes of simulating, broadening the vision, manipulating reality, are just some of the training possibilities and transmission of knowledge.

Third, it extends the so-called "lattice learning" because of the proliferation of the world of networks. Although it should be noted that there is no such thing as a homogeneous structure for the development of the networks, but rather its interweaving in a spiral way is seen, especially if taking into account the presence of the inter and intradisciplinary investigation that considers the emergence of new connections in the various areas of research to be part of the teacher in the process of generation and socialization of knowledge (Astorga and Martínez, 2017, p. 72).

As stated by Pérez Gómez (2012), "it seems clear that the teaching-learning processes can no longer be understood where individuals are in contact with the information and knowledge available, without the powerful and friendly presence of ICT and the network of networks" (p. 69). Indeed, the key agents of the education system are organized in communities to share the learning process, while the teacher articulates the interaction with the peers, with the students, with the community. The networks are forming a complex network of exchanges that enrich the process of production and transmission of knowledge. The networks also facilitate the exchange of educational services ubiquitously, not restricted to a specific physical or geographical environment.

In fourth place, it is worth highlighting the personalized learning where education adapts to the needs and the rhythm of the student. It is talked about adaptive technologies that, based on artificial intelligence, allow the development of teaching platforms that follow up the student's pace and learning needs. The teaching is being developed in response to the interests, rhythm and needs of each one. While working on the creation of open resources and open-curriculum experiences, the possibilities for more and more personalized learning and teaching are broadened.

Fifthly, it is necessary to strengthen the so-called "learning in practice" that involves an accompaniment process during the teaching career, the offer of updated programs both in the didactic, technological, as well as in the specialty area. This is accompanied by the generation of spaces for collaborative and reticular work, as well as the creation of stimuli during the academic trajectory of the teacher.

Within this context, the teacher's training and especially the teacher in higher education are particularly relevant. This issue is complex to address because it involves the interaction of various aspects that do not always depend on the teacher itself. In this sense, it is advisable to remember Fullon (2002) when saying "The teacher formation has the honor of being, at the same time, it is the worst problem and the best solution of Education" (p. 122). Certainly the teacher training is presented as a complex and diverse phenomenon that has to take into account new and complex interrelations that involve the will of formation, the social dimension seen as peer learning, and finally the institutional dimension that demands new teaching contexts that favor the search for improvement goals in the organization.

Even though these dimensions have been part of the process comprehension of the teacher training, they assume to be aware of the main obstacles that hinder the development of the teaching career. This takes on particular complexity as technologies acquire greater presence in higher education. For example, in the personal dimension, individualism and isolation; resistance to change; low motivation; lack of stimulus and recognition. In the social dimension: absence of spaces for group work; absence of accompaniment in the teaching career; lack of programs to strengthen skills. Finally, in the institutional dimension: the poor endowment of resources; insufficient support for teachers' initiatives; disarticulation and fragmentation of teacher training; the little planning of times, spaces and resources that ensure the participation of teachers in accordance with the demands posed by the university.

Teacher training must be addressed as a process of reflection, construction and reconstruction of the practice from the personal, social and institutional dimension as a constantly growing spiral, as an ongoing process that favors the rethinking of the teaching action in correspondence with the demands that the context raises. It is a process of personal development that is being formed as an intelligent route that allows a holistic and flexible training and facilitates the mobility of the teacher according to their needs (Martínez and Amaro, 2008, pp. 56-59).

In correspondence with these dimensions, the society demands in turn new competencies to which teachers must be prepared. The aim is to orient the formation process towards the development of autonomous, critical and collaborative thinking in the new environments generated by the society. In this sense, the teacher's role follows a profound transformation process as a facilitator of the conditions for apprentices to build their own learning path.

Given this context, teacher training must be reconfigured in such a way as to contemplate the understanding of new educational scenarios beyond school boundaries. It is not only the learning of new communication codes, the incorporation of new artifacts or the creation of new relationships; rather, it is about getting ready to respond to the demands of a global context in permanent transformation.

In short, it can be argued that new technological trends are obligatory reference in the consideration of teacher training. Technology has become a transversal axis of teaching, research, linkage and management, and nowadays it is taken more and more frequently for the recognition of the teacher, but beyond that technology is creating new educational scenarios that cannot be clearly anticipated. In other words, what can be said is that the changes will continue, are unstoppable and continue to demand the permanent restructuring of the teacher´s role.

5. Conclusions

The evolution of technology into increasingly intelligent forms is exerting pressure to change the traditional role of the teacher. These technologies are being integrated as part of the individual's natural environment, propitiating the emergence of new frontiers for the development of knowledge, amplifying the modes of connection and contributing to the personalization of teaching.

Technologies are fostering new, increasingly open spaces for learning. We are in the presence of a rupture with the traditional spaces and formation models. This is forcing to create more versatile, interrelated and multi-way communication scenarios with all the folds of society, where the subject becomes an apprentice who dictates his/her own training in the midst of a growing network of points that do not depend in the use of a foundation but in the construction of a trajectory of infinite possibilities.

The environment is demanding changes in the ways of relating, this implies the need to develop adaptation with more emphasis. Adaptation had been considered as a natural process of man's relationship with the world around him. What is significant in these times is the immense power and transformation speed that technology provokes and the urgent need to assume changes from unprecedented situations that demand the emergence of new and increasingly complex skills.

Similarly, although the development of networks creates a stronger nexus between exchange and creation of knowledge, they gather attitudes and skills that propitiate empathy and at the same time the struggle for recognition that creates more affection. These are subjectivity aspects that are rapidly being modified to the extent that they are required by the work market. Technology isolates and at the same time connects; it makes people being alone and at the same time generates new forms of sociability, it strengthens autonomy and creates inescapable dependencies.

In the face of changes of this type, the teacher finds in the need to confront his/her own transformation process, since the professor is no longer the source of knowledge but is only a link, a point in the learning path of the other. This process certainly requires the permanent adoption of new resources and new communication codes, the openness to divergent and complex thinking that manages to confront the tensions that exist between the global and the fragmentary.

In this context, teacher training should be reviewed for the authentic and critical incorporation of technology in the learning process. The flexibility and creativity are essential aspects to face the commitment to work in order to converge the models of formal and informal education, to combine in-site and online in the strategy as in the management of the resources. This in response to the growing demand for an increasingly multimodal and personalized education where the learning process is articulated with the experience of being part of a community and acquiring skills to communicate and act.

In short, as Gardner (2010) said, teacher training in the demands of the new technological age should be aimed at strengthening a new way of thinking, understood as a synthesizing mind that analyses information. It is at the same time to promote the development of a creative mind that raises different questions and new answers. In the same way, it makes possible a tolerant mind that seeks to locate oneself in the place of the other, and an ethical mind that pursues not only excellence but also commitment. A connected mind that creates and shares through networks. It is about assuming the challenges of knowing, teaching and changing in the era of intelligent technologies.

It is worth closing this brief incursion on the teacher in the world of technologies with the suggestive words of Pérez Gómez (2012):

> All our knowledge, love and doing concentrate on helping each individual, every apprentice, to build himself/herself as a singular, unrepeatable, autonomous and admirable individual, an original combination of wisdom, solidarity and beauty. Our creation is reflected in helping to create, stimulate, accompany and orient the unlimited creation of others. Is there a more open, dignified, attractive and absorbent profession? (p. 314).

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Evaluación sobre las relaciones de poder, estado y educación

Evaluation about the relations of power, state and education

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Resumen

Las relaciones entre Poder, Estado y Educación, desentrañan los opuestos materialmente existentes y las consideraciones teóricas del contenido esencial de poder. Desde la vertiente dialéctica se explica las implicaciones de la existencia del poder en el aparato del estado que es un órgano de dominación. El control que tiene el poder sobre el estado y sobre la educación, que es poderosa herramienta para trasmitir la cultura dominante en cada etapa de la historia, consolida ese control. Esto explica que la educación es parte de una realidad compleja que está unida a procesos económicos, políticos, jurídicos de los que el estado es un moderno administrador de empresas y, pretende que la educación esté sometida a las leyes del mercado. Por otra parte, pone en evidencia a la enajenación que sin ser exclusiva del capitalismo es el enemigo central de los humanos, ante lo cual se debe tomar conciencia hacia una resistencia crítica que permita consolidar una formación independiente, autónoma y solidaria. Se trata de evaluar la relación entre poder, estado, educación y cuáles son las condiciones de la producción del saber en cuanto a qué se lo produce, la finalidad social de éste, en qué se lo utiliza y sobre todo quién lo controla. El objetivo es evaluar por qué hay una relación directa entre saber/poder como extensión de todo y la relación con las inequidades sociales de las cuales el estado es el garante incondicional. Para demostrar lo expuesto, el artículo de forma cronológica relaciona el estudio al estado liberal conservador

que hace su aparición a principios del s. XX, posteriormente al estado desarrollista que surge desde los años sesenta del mismo siglo y durante la aplicación del modelo neoliberal.

Palabras Clave

Educación, estado desarrollista, estado liberal conservador, neoliberalismo, relación saber/poder.

Abstract

Relations among Power, State and Education uncover the existing opposite and theoretical considerations of the essential content of power from the dialectical aspect. The implications of the power existence in the State apparatus are explained, that is a domination and control organ, which exerts the power and its capacity to handle the State and the education as a transmission tool of the dominant culture in every stage of history. It is explained that education is part of a complex reality, linked to economic, political, legal processes, of which the State is a modern business administrator, and it aims that education is subjected to the market laws. On the other hand, it reveals the alienation that without being exclusive of capitalism, is the central enemy of the human being, so awareness should be taken toward a critical resistance, which allows to consolidate an independent, autonomous and solidarity formation. It aims to explain the relation among power, State and education and the conditions of the knowledge production, as for what is produced, the social purpose, in what it is used, and above all, who controls it, as there is a direct relation in knowledge/power, and as an extension, the relation with the social inequities, in which the State is the unconditional guarantor. This article relates the study of the liberal, conservative State in a chronological way, which appears at the beginning of the XX century, later to the developmental State which arises in the sixties of this century and during the application of the neoliberal model.

Keywords

Education, relation of knowledge/power, alienation, critical thinking, liberal conservative State, development, neo-liberalism

1. Introduction

> An old proverb says that teaching how to fish is better than providing the fish. Bishop Pedro Calsaldáliga, who lives in the Amazon region says that it is a good idea, but what if someone buys the river, which belong to all, and forbids the resto to go fishing? or if the river gets poisoned, and it poisons its fish, for the toxic waste? I mean, what would happen if the current situation occurs?"
>
> —Galeano, *2011*, p. 334

Indeed, education is a complex reality linked to national and international economic, social and political processes, where the hegemonic presence of transnationals willing to be more capital and less world large is evidenced, especially in modern times. This reality exists to the extent that natural resources are exhausted, the food and cultural sovereignty of each country is getting weaker with the time, supranational legal instruments are created; governments consciously and unconsciously become modern "business" managers and education is intended to be controlled by the law of the market.

Education is a social phenomenon that ultimately depends on the whole of social phenomena. The interest of some modernist and postmodernist philosophers and educators is to watch over the material basis of capitalism, to leave it untouched, to divorce their social and cultural analyses of the study of the production mode. Thus, they would formulate solutions to the chaos of the present world only in the superstructural aspect, which explains that the relations of power in any of the levels and processes of the educational system do not detach from the social relations of production.

From the side of the "excluded", "the disposables", "leftovers" and "outraged", i.e., it is possible to make a critical and organized resistance. This, in educational terms, means building fervent friendships, maximizing intelligent company, encouraging critique with collective action in such a way that we are willing to use the aesthetics of defeats to say no to immobility, no to intellectual, moral and political domestication by the ladies who often try to enshrine their arrogance as acts of good faith and for our own good.

The formation of human beings and higher professional level, which is linked to critical thinking, is based on education for freedom, so that it is a democratic challenge in this world homogenized by the market, making humans to alienate with consumerism. A main principle of education is not only to form qualified professionals, but also to be human beings who are protagonists of historical and social changes.

Specifically, it will reflect objectively, but at the same time in a critical way between knowledge, power and education, since it is considered that there are implications in the school practice, since the power given by the place that occupies in a creation process of the richness determines that the starting point is not the same for all children. The first form of social discrimination is given by the poor origin of a human being in economic terms, which is explained in the preceding paragraph; there is a second in relation to the cultural capital that will accumulate during the life and that guarantees to some people a dignified life, stable work and better developed capacities. It also refers to school practices that are not isolated from the social processes of the context and that are a reflection of the power relations, and it justifies this work and one of the objectives that is related to the approach that states that the forms of culture and learning evaluated as valid are those accepted by those who hold power, and in turn determine what is true and what knowledge will be discriminated against in silence.

Therefore, investigating to find the true path through which education should be carried must have a transformative value that justifies this effort, so that there is not only academic or epistemological interest in the sense of developing the theory or verify it in the praxis. In addition, there is the possibility of aiming at the objective of facing positions that convert education into a human act to humanize the social coexistence of solidarity, free egalitarian and equitable in all forms.

It could be understood from another perspective that the importance of executing this research has to do with the quality of education in general and university in particular, which is accurate to the extent that it is determined by its response to the demand that is related to the dignified life that has been referred to. It is also justified because it is directed to the lovers of the freedom, we follow the ideals of those who died by the reconquest of everything that is irreducible to the systems and the paralyzing bureaucracies.

Then, the study used qualified bibliography of the social sciences and a professional practice linked to the University Academy which, in addition has transcended the physical limits of the school, since it is understood that uniiversity is not enough to educate. In addition,

professors must make the necessary theoretical reflections that underlie the practices that along with the theory evidence the spiral theory-practice.

The study constitutes an indissoluble encounter between the educational praxis of which the professors are first-line protagonists and the theory in social sciences. This explains the relationships of production that is not a theoretical anachronism, but it opens the possibility to access to critical content, ideologically committed, where neutrality is not possible.

2. Knowledge, power and education in the colonial times

One of the main issues in education related to the issue is the question of power, and this means to know:

- Who controls it?
- How did you get to it?
- What do you use it for?
- What means are used?
- What is its purpose?

From this point of view and historically considering the problem of education, it is observed that it has been used by the power to reproduce social inequities throughout the state. As Merani (1980) says, "What is not politically exhibited is simply hidden. Thus the power built in the way of the big mafias interrelates with the antisocial" (section Presentation, paragraph X) since the power discriminates from the set of knowledge, those valid for their permanence and socialize and disseminate. As evidence of the above, in the colony, and until many years after the independence processes of Latin America, the university in particular and education in general was managed by the church. The name of the Christian God has been permanently used as an alibi for the plundering of natural resources, the expropriation of lands and incompatible knowledge with their processes of conquest.

In order to consolidate the fundamentals of the proposal of the present article and its objectives, the Ecuadorian historian Ayala (1994) states:

> The entire political apparatus of the royal Audience of Quito which included the chapter and the church itself under the state control. Indeed, thanks to a concession of the Pope, the Spanish sovereigns received the right called Patronage on the American Church" (p. 43).

The author relates the power, the control of knowledge and education. As known, the Catholic Church had the power over education and in turn, the church had control of the colonial state. Ayala continues (1994) "In this way we find the church firmly entrenched in the colonial State apparatus, exercising a virtual monopoly of the ideological dimension of society" (p 43). This makes it possible to affirm that the priests had the function not only of evangelizing the indigenous masses, process that fulfilled it in the parishes and convents and the educational function of the colonizers with what Ayala (1994) continues saying "impose its Worldview of Christianity as an ideological horizon" (p. 43), in saying he refers to the church as a human institution, not as an individual right to religiosity, and that develops political interests.

In Altoperú, as for the authority of the monarchical state at the University of Charcas during the colonial period, it was taught that the Jesuits as they are followers of St. Thomas Aquinas, taught their doctrine, which according to Vázquez (1983) "Arrived by Syllogisms according to which the authority of the State resides in God from whom it passes to the people, which

in turn yields that authority to a person who is the head of the state, in this case the monarch" (p. 165). This is the Spanish scholastic that in an artificial game of words reflects the reality of the relationship between power, those who possess knowledge and education.

On the other hand, that syllogism shows that in these power relations the intervention of people is recommended, which is a reflection of a democracy that is more fiction than reality. This shows the difference in the position of the French kings of the 17th and 18th centuries that consolidated absolutist authoritarianism when arguing that power comes directly from God to the King and education will reflect that reality.

What was taught? It is a key question to find know-power relationships, and then it is very clear to determine that initially were conquered towns that were not known by them, a activity conducted through armed violence, but as it was impossible to maintain an army of occupation in such a huge continent, it was necessary to seize the conscience of its inhabitants. The medium used and very effective is the culture, and specifically the diffusion mechanism which is the education. Native Indians were taught the catechism, sacred music along with agriculture and handicrafts to produce what the escutcheons and creoles required for their maintenance. They did not consider reading and writing necessary.

In the case of Ecuador, for 1767 the church not only owned about 109 farms in the Royal Audience of Quito-the Catholic Church also had the best weapon of control which are the various cultural expressions that have a strong social root, such as the celebrations and forms of the social being of the time that accommodate cultural forms strange to the American world of those centuries, building a religious and cultural syncretism but that, building a religious and cultural syncretism but that, from this conjunction, the native culture loses its nature.

3. The know, power and education relations in the Republican years

The history study of Republican Ecuador shows a social and economic becoming that begins in 1830, called by the popular wisdom as the last day of despotism and first of the same thing that makes relation with the maintenance of the Colonial exploitation forms and elitist education forms under the power of the church. The Republic for The Independent America of Spain did not mean any economic emancipation or anti-feudal struggle, it was only a political process in which the landowners and Creoles came out promising.
Within the artistic works, in Lima, Potosí and other cities, the theatre was developed that had a religious and historical character, written in Quechua and Aymara languages with the aim of evangelizing. Vázquez 1983) states:

> The theatrical pieces were specially represented in Corpus Christi and in the nights of feast called Pagans or masquerades and in the *novena* of New Year or of some saint that they surrendered cult were made comedies of sacred character (p. 179).

The colonial universities taught philosophy that was conceived as a servant of theology, since the objective is to justify the existence of God by rational means. In the royal audience of Quito there was the philosophizing of San Fulgencio, who also taught scholastic and moral. Law faculties taught the laws of the Indies: real, civil and canonical laws, grammar and Latin were taught. The medium-level free educational centers that were destined to educate the middle sectors of the population taught to read and write, catechism and sacred music, which shows that education is at the service of the temporal power of the church and the monarchy. Russell (2004) In this regard, indicates:

> Religion as their advocates often say is the source of our sense of social obligation. When a man did something that displeased the gods, the Divine punishment falls on everyone, hence this conduct was a matter of general interest... this implies that private vices provoked public calamities (p. 128).

With these reflections related to the religion, the social and the education, it is shown that the knowledge accepted by the church and obligatory for the people is instrument of social control. When revising the literature related to the process of historical development of Ecuador, there are coincidences with other countries because it is a continent that lived similar realities, determined not only by the internal processes but also by the chain that binds us to the north of the planet in a sort of unequally justified relationship in the name of the International Labor Division, that led our countries to join to the world capitalist system. In this process, education will be managed by the State which assumed in the social becoming forms of: conservative liberal state, developmental state and neoliberal state.

When societies subjugated by colonialism, Acosta and boxes (2015) affirm.

> They became capitalists and could not base their original accumulation at the expense of other weaker societies, and chose to focus on the local exploitation of their workforce. Thus, these societies became a "late capitalism" where the accumulation process was conditioned by its historical dependence on early capitalism "(p. 134).

These realities are of paramount importance to understand the processes of acculturation and alienation not only of the product of labor that in capitalism is given through the surplus value, but also implies alienation of the consciousness of the reality itself by means of knowledge. This knowledge is transmitted from the school and the professors are often unconscious instrument of these processes, in addition to other practices and customs that detract from identity to people and are promoted from the north.

4. Knowledge, power and education in the conservative liberal state

The prevalence occurred from 1880 and 1930 and is consolidated with the Liberal Revolution of 1895, but in spite of the bourgeois triumph, the landowners and the church retain the liberal triumph, a high economic, political and ideological power, which allows the name used. While the gradual extension of public and free education to all social strata is produced under the positivist criteria thought illustrated against the clerical, it fails to emancipate itself from its class character. For the Latin American liberalism, the suppression of slavery was an easier achievement to solve than the elimination of indigenous servitude, a structural problem that along with the interests of significant capital, generates marginalization, inequity and poverty for many sectors and indigenous and *mestizo* social strata. Moreover, for many years the teaching state does not have its own educational establishments, which are held by the landowners in many cases. Salaries for teachers are low, lack of specialized administrative personnel, as well as in school furniture and teaching materials. The situation is more complicated in rural areas, where the abuse of the regional oligarchy slows down the advancement of culture and education.

The countries mistakenly called as developing countries, have a proletariat as exploited as at the beginning of the industrial revolution, but under conditions of backward agrarian societies, with a strong landowner semi-feudal class that requires little knowledge against a technology up to the fifties of the twentieth century. According to Merani (1980) power

demanded only two things to educations "capacity for work, achieved with that rudimentary primary education, and submission to its ends, obtained by the rule of the law applying force and, above all, with the pressure of the hunger of the unemployed" (p.25).

With the developmental State (1945-1981) where an industrialization model for import substitution is shown, education is growing quantitatively. However, as analyzed in the work of Rodríguez (2005) under the fundamentals resulting from the application of the two agrarian reforms, the most favored sectors are going to be precisely the middle classes not the popular sectors, since once separated from their means of production, many of these migrate towards the cities as a subproletariat full of necessities and problems dissatisfied. Thereafter, many countries of Latin America and particularly Ecuador, will cease to be a country eminently rural to become accelerated in an urban country (Rodríguez, 2005, p. 45).

According to the sectors of power, the developmental model would allow to reach an economic, social and educational level in a short time equivalent to that of the rich countries, where some significant contradictions related to poverty would be resolved, the unemployment or inflation. However, the reality was different and the disenchantment more. As Juan Cepeda says in the work of Jorge Núñez:

> In a country where misery and backwardness coexist with the development of capitalism, the symptoms of progress seem to manifest in the cities and practically reduce to the reality of Quito and Guayaquil..... 1.5% of the Ecuadorian population is made up of large agricultural, industrial, merchant, banker and financiers owners; 20% for the middle classes and 78.5% for the popular class comprised by artisans, drivers, small and rural intermediaries, proletariat, urban subproletariat and peasantry (Cepeda, 1992, p.265).

However, the development as an economic and political model imposed from outside emphasizes the processes of export and investment, without bumping the problem of ownership and unfair distribution of wealth. The effects of this model have been observed in the quality of education, and are felt with respect to school infrastructure, administrative bureaucracy, school dropout, illiteracy, school nutrition, educational research, pedagogical thinking and educational equity.

Tensions are running high or attenuate according to the problems of the international market, since it is decided on the part of many countries to entrust their destiny in the sale of a single export product. In our case, if we do well with the sale of cocoa, then the banana and finally the oil, education can improve (feminization of school enrolment, creation of educational centers of initial education, access to children with special educational needs), but when there is a crisis in the international sale, the situation is complicated. Even more when American imperialism with its international development agencies, with the diplomacy of the dollar and through the use of force manages to deform the national productive apparatus and places us in a situation of economic and social prostration that at the ideological and political level will deal with all the cunning to strengthen the dependence to which we were subdued.

During the implementation of the Keynessian developmental model, illiteracy was lowered significantly with an extension of educational coverage, but this process failed to reconcile with the quality of education. Once returned democracy, the neoliberal state (1981 until today) will undress the egocentric nature of capitalism as a selfish civilization that privatizes profits and socializes losses to such an extent, that again the structural problems

of corruption, unemployment and poverty grow significantly "from 136 million of poor in Latin America in the year of 1970, to 300 million in 2002" (Saltos, 1999, p. 34). About "600 billion dollars is the cost of corruption in Latin America over the past 25 years, equivalent to its external debt" (Robles José, 2008, p. 141). In the case of Ecuador, the country has paid an external debt of around US $100 billion, which means that it has paid five times the debt that was 16 000 million in that year.

This means decapitalizing national economies, reason for which the aforementioned educational problems are intensifying, in addition to the attempts to privatize public schools; human capital formation according to the market needs and not the needs of the popular sectors; curricular changes emphasizing the technical aspects rather than the humanistic ones; control of educational services under the business criterion that measures cost-benefit; it is evident that education works for the market and with the internal logic of the market, promoting the formation ofcompetencies.

Sepúlveda (2002) "From this economic reading, competition refers to 'progress' "fundamental instrument for achieving greater productivity and competitiveness" (p. 3). It warns that this is stimulated from the power because education becomes dependent on the decisions of a type of economy which leads the neoliberal model, this evidences what the work requires from the schools, that is the same what the power needs of the school.

Everything described causes processes of social injustice that, among other aspects, promotes the silent war between teachers for wage stimuli, among students for obtaining scholarships, and between the different educational levels by the absorption of public funds; academic offers of self-employment and micro-enterprises. The aim is to liberate the equivalent of easing State regulation systems for teachers' contracts, recognition of professional qualifications, validation of international studies and payment of salaries and destruction of trade unions teaching.

The ethics of competency-based training aims to make a concept that offers equal opportunities for liberalism in economic and legal terms is part of its essence and axiom as it does not need to be proven, given the economic inequalities of individuals, what is easily demonstrated by statistics presented by OXFAM: (2018). "The richest 1% in Chile has at least 36% of that country's GDP, in Sweden the figures are that the same 1% owns 9% of the wealth. These data helps to understand what was quoted by Sepúlveda (2002) "The idea of equal opportunities for all citizens is a pious fiction; but if we analyze it in its material dimension, it becomes an unreal concept "(p. 17).

With all these facts, the educational task is denatured and in agreement with the globalization processes, fundamental aspects related to the educational financing are exacerbated the school-work relationship and the standards of academic excellence. It is not intended in any way to be unaware of the contextual, regional or global framework, education cannot be thought out of the demands of society and history which, in this last stage, has been strongly structured by the predominance of an economy position, depending on the power interests of the market.

With regard to educational funding, neoliberalism poses as a single solution the privatization of education, hence education rather than being a right becomes a privilege for those who can afford it. With regard to the relationship between education and work, neoliberalism aims to form the "economic man" as labor or as a brain in the service of capital. Finally, with respect to academic excellence, the amount is confused with quality, knowledge becomes a commodity, teachers and parents become clients, and the public school becomes a company, where the human factor is not taken into consideration.

From this economic reading, progress is confused with competition that presumably gives higher productivity and competitiveness factors of backwardness and marginality for those who fail to adapt to the conditions of the scenario that mark the new social and economic relations. The demands of the work become an objective from early ages to develop skills supported by an unused development of technological applications that have become like the panacea of those who believe in Education. This is a difficult mistake to combat as they do not understand that education is a phenomenon of social essence.

> • **What to do?**
> In a society where lie prevails, the truth is known as terrorism
> oil flows and the jungle bleeds
> and where is justice crucified in the altars of capital
> Prostitutes will take the power, their children have failed
> the government of Sixto belongs to the weak gender
> (Graffiti taken from the streets of Quito, 2005).

Even though the story is not easy, the elements of the solution are found on it, in such a way that it is possible to build a pedagogy of resistance, without having to wait for everything to be well to start doing the job. This means:

- To know the different modes of resistance throughout national and Latin American history to see how they have been disseminated in the past and how they can be developed in the future, mainly in their emancipatory aspect.
- To connect the school with the active forces of society and the popular organizations to recover the relationship of the past with the present; the action with the conscience, the critique with the proposal made with the people, from the people and for the people.
- To organize defense of public and free education at all levels, where democratic alternatives to traditional education must be increased. It is not possible that the children of the major contributors to the national treasury as they are workers, peasants and employees have minimal representation in the university classrooms.
- To bear in mind that the school cannot change itself the society, nor is it almighty, as a result, there must be a relationship with the active forces of society that not only consume but produce, that is not only passive but critically questions a set of information, symbols, norms and impositions.
- Llevar a efecto políticas compensatorias de educación como parte de políticas generales de reinserción laboral, cultural, y social de los ciudadanos que han obtenido menos oportunidades, de tal forma que desmonte mecanismos de discriminación que existen a lo largo de todo el sistema educativo. Es importante establecer conexiones orgánicas con aquellas mayorías excluidas que habitan los barrios, pueblos, comunidades y ciudades en los que se localizan las escuelas, para mediante su involucramiento volverlos sujetos políticos de su transformación y no simplemente objetos de las políticas oficiales. Con mayor razón, si a pretexto de la objetividad de los test de inteligencia, no se permitió a negros, indígenas, migrantes es decir pobres, ingresar al mejor establecimiento educativo de muchos países latinoamericanos.
- To carry out compensatory education policies as part of general policies of labor, cultural and social reintegration of citizens who have had less opportunities, in such a way that they dismantle discrimination mechanisms that exist throughout the entire education system. It is important to establish organic connections with the excluded majority that inhabit the neighborhoods, towns, communities and cities in

which the schools are located, to become political subjects of their transformation and not simply objects of official policies through their involvement. Even more the rejection to enter the best educational establishment in many Latin American countries of indigenous people, migrants, i.e. poor people with the pretext of the intelligence tests.

- To understand that the main problems of education are not methodological but fundamentally political. From educational policies and from a position with respect to the world, teachers assume positions of struggle for and against something.
- Education as an awareness process of the oppressed, depending on the subjective conditions for social transformation are broadened. For these purposes, it is not enough to know how to read and write, it is essential to know how to understand the reality to return to it after having raised its education transformation.
- To rethink the role of the State in education, the problem of knowledge, the notion of power, democracy and citizenship. Because it is not appropriate to delegate the public affairs to certain representatives who change their T-shirt without the corresponding mental hygiene, especially when the power hides more than it reveals, and is able to direct the public attention to the relations of the man with the nature or psychological aspects related to concepts of "personal fulfillment"; "be well", and "self-realization". It is essential to know all about the structural and ideological forces that restrict our lives.
- Relation of the school with the popular culture, because the walls of the classroom can no longer protect children and adolescents from the influences of the trans-nationalized culture, i.e., of the dominant culture that mechanizes the reason and forces the human being to accept its rules as a destination. Paraphrasing Freire (1990) not having a voice means to be impotent in such a way that it is essential to give people and to the future generations the possibility of producing, reinventing and creating ideological and cultural tools to break into the myths and structures that infuses the mistaken idea that the "weak" were born to obey the "strong" (Freire, 1990, p. 20).

5. Conclusions

To conclude, when people are born we have made an essential pact with life, but when we decide to be professors our pact is with the country, so that the contradiction that does not give truce if we want to achieve the development, which is not the same as growth, implies a dispute over education and citizenship. Educating is a task that engages social movements, artists, teachers, intellectuals, political parties that oppose the neoliberal model and workers' unions that have carried in many parts of the world the weight of confrontation against Neoliberalism and its servants.

Everything is telling us that the transfer of the training of teenagers, young people and university professionals to the competency model induces the idea of consolidating a curriculum that tends to replace citizenship, solidarity and equality for the competitiveness, productivity, growth and non-development. To humanize, there is no need to walk the shortcuts that make you lose your way.

It has already been said, dominant culture of a society is the culture of the dominant class of that society. Perhaps this is not an ancient conclusion that is well known by some, but is forgotten by others, because true knowledge that does not serve the class in power is silenced. The school being a means that society needs to derive the culture to the young generations, only conducts the valuable knowledge for the power.

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