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Facultad de Filosofía, Letras y Ciencias de la Educación

REVISTA
CÁTEDRA

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THE DIRECTOR/EDITORS

- To guarantee the quality of the journal.
- To exercise the legal representation of the journal in the absence of the Editorial Board coordinator.
- To appoint national and international scientific advisors.
- To check that the norms of publication are complied.
- To decide on the publication and dissemination of the articles.
- To propose the norms of publication.
- To apply objectivity criteria.
- To define the functions and duties of the rest of the editorial team.
- To supervise the work of the editorial team.Asegurar la calidad de la revista.

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- To attend to the meetings (onsite or online) convened by the Coordinator of the Editorial Board or directors of the journal.
- To guarantee the publication and periodicity of publications.
- To maintain scientific and editorial quality criteria.
- To propose external reviewers.

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- To propose improvement actions.
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- To suggest external evaluators.Asistir a reuniones convocadas por el Consejo Editorial.

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- To monitor optimization

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- To check that the manuscript comply with the standards.
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- To evaluate the work in the shortest time possible.
- Guarantee the academic and scientific quality of the manuscript.
- To respond to the scientific requirements formulated by the Editorial Board.

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THE EDITORIAL MANAGEMENT AND POLITICS

ABOUT US

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.

TARGET
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.

MISSION
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.

VISION
To be promoters in the publication of high quality scientific articles oriented by a research and from different areas of knowledge to constitute in the most prestigious reference in the comprehension and improvement of the educative process.

FOCUS AND SCOPE: Revista Cátedra has as theoretical bases the Education Sciences in its different specialties and levels of the educational system. It disseminates scientific-academic articles written under research parameters. It is open to national and international writers interested in contributing significantly to the solution of current educational problems.

PERIODICITY
The Revista Cétdra has a quarterly frequency, and is published the first fifteen days of the first month of each period from January-April, May-August, September-December.

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ARBITRATION SYSTEM
Revisión de doble ciego, mínimo dos revisores por artículo, con evaluadores externos.

DIGITAL PRESERVATION POLICY
The Revista Cétdra website provides access to all published articles throughout its history.

OPEN ACCESS POLICY
The *Revista Cétedra* provides open and free access to researches for the purpose of exchanging knowledge. The articles are published under the license of Creative Commons Attribution-NonCommercial-NoDerivs 4.0 Internacional (https://creativecommons.org/licenses/by-nc-nd/4.0/)

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The journal uses the *URKUND* antiplagiarism system.

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Commitment of the authors

- **Originality of the manuscript:** the authors confirm that the manuscript has not been published before and contains no content similar to the one of other authors.
- **Simultaneous manuscripts:** the authors confirm that the manuscript has not been sent for its publication as an article of a congress, article of another journal, chapter of a book or any other similar publication.
- **Original sources:** The authors correctly provide the bibliographic sources used for the manuscript. The journal through the URKUND anti-plagiarism system will review the originality, if the article presents a lower matching level it will be accepted; otherwise, it will be rejected.
- **Authorship**: The authors of the articles guarantee the inclusion of people who have made substantial academic-scientific contributions to the manuscript. The journal accepts the order of authors in the article, once sent to review none modifications will be done.
- **Conflict of interest:** the authors who write in the journal have an obligation to point out that there are no conflicts of interest with entities related to the manuscripts.
- **Responsibility:** The authors are committed to do a review of the relevant and current scientific literature to extend perspectives, visions and horizons of the subject analyzed; they are also committed to make all the corrections sent by the reviewers and to comply with the submission process of the article.

Commitment of the reviewers

- **Role of the reviewers:** the evaluation process of articles is presented by blind revision to guarantee impartiality; reviewers are specialists in the topic and the authors will not know their identities. The reviewers issue academic criteria with ethics, transparency and knowledge in order to maintain the scientific quality of the journal.
- **Fulfillment of the expected deadlines and academic reserves:** it is necessary that the reviewers comply with the time assigned for the revision of the manuscript; the date of the results will be notified by the platform. Similarly, the designated reviewers will retain the confidentiality of the manuscript**.**
- **Objectivity:** The reviewers are obliged to provide enough reasons for their appraisals. They will deliver their report critically, following the corresponding review template.
- **Publicity of the articles and conflict of interest:** Once the final report of the reviewers has been issued, whose rank will be 17 as a minimum note and 20 as maximum, the authors, through the platform, will make the corresponding changes

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until obtaining 20/20. In this process, there will be a sense of reservation between the two parties, and will be referred to reviewers taking care that there is no mutual interest for any reason

Commitment of the editors

- **Publication criteria of articles:** editors will issue judgments of academic value, for this purpose they will request criteria from at least two national or international reviewers, and based on the reports the publication of articles shall be carried out. Articles will not remain accepted without publication.
- **Honesty:** Editors will evaluate manuscripts impartially; their report will be made on the basis of scientific merit of content, without discrimination.
- **Confidentiality:** Publishers and members of the editorial board are committed to keep confidentiality of manuscripts, authors and reviewers.
- **Time for publication:** The periodicity of the journal is quarterly; therefore, editors are the guarantors of the fulfillment of time limits for revisions and publication of accepted works.

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Index

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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.

It is a pleasure for Catedra Magazine to present volume one, number one in the electronic version. The theme developed on this occasion has its theoretical bases in the Educational Sciences in their different specialties, and thus some relevant aspects are presented, such as: digital competence, speech symbolization, reflection on the hidden curriculum in the educational context and understanding of gender and culture; in general, the existing relations between society, digital development and the educational process are shown.

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

The volume consists of eight approved articles:

The first article, entitled *Instruction on the use of the template of Revista Cátedra*, by Sergio Luján-Mora and Verónica Simbaña-Gallardo. The purpose of the manuscript is to present and explain the rules of style and the template to be used when preparing an article. The objective is to maintain uniformity and internal coherence.

The second article entitled *Instructions on the structure of the manuscript* of Revista Cátedra, by Verónica Simbaña-Gallardo and Sergio Luján- Mora. The manuscript aims to improve skills in scientific writing through the explanation for the presentation and structure of the article.

The third article is entitled *Blended learning and digital education of university professors*, by Jorge Balladares-Burgos. The manuscript presents a review of different bibliographical sources to investigate experiences and results on the use of hybrid learning, which constitutes an effective modality for the continuous formation of the teaching staff.

The fourth article entitled *Impact on the use of ICTs as a learning tool of mathematics in students of Elementary School*, by Jorge Revelo-Rosero. The manuscript determines the level of impact that the integration of Information and Communication Technologies (ICT) as tools for learning mathematics has on secondary education students in Ecuador.

The fifth article entitled *An infallible relationship among gender, interculturality and biodiversity*, by Germania Borja-Naranjo. The manuscript carries out an analysis of the

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theoretical foundation of the concepts of gender and interculturality in order to demonstrate the relationship between theory and practice, action of the social, cultural, economic and ecological reality.

The sixth article, entitled *Cartography of the being, and meaning of women in the philosophical thought of the ancient and medieval times*, is by Floralba del Rocío Aguilar-Gordón. The purpose of the manuscript is to present reflections on the being, meaning and significance of women in the history of ancient and medieval philosophy; reflections that allow us to understand the protagonism of women in today's society.

The seventh article entitled *The dark side of education: its role in the formation of values, spirituality and ideology*, by Mauro Avilés-Salvador. The manuscript presents a reflection on new references and educational spaces that, in a field of educational sciences, respond not exclusively to a scientific vision -segregated and dichotomizing- but to a more complex and integrating vision that motivates and guides an authentic integral formation.

The eighth article entitled *Taboo and euphemism: the forms of speech in modern Quito society*, by Azucena Escobar-Miño. The manuscript carries out a descriptive analysis with a labeling of the words considered taboo and their replacement by other forms that, within Semantics, constitutes a study of the different changes of meaning that certain lexical constructions undergo in certain contexts. The aim is to understand how society is formed on the basis of linguistic experiences.

Cátedra magazine would like to thank 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/Editors-in-Chief

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Instrucciones de uso de la plantilla de la Revista Cátedra

Instructions for using the template of Revista Cátedra

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Resumen

En este artículo se presentan las normas de estilo y las instrucciones de uso de la plantilla de la *Revista Cátedra*. Estas normas de estilo e instrucciones son de uso obligado tanto en la preparación inicial del manuscrito para su revisión como en la preparación de la versión final del artículo para su publicación: un artículo puede ser rechazado si no cumple estrictamente con las normas de estilo y las instrucciones proporcionadas. El estilo de la *Revista Cátedra* se ha desarrollado teniendo en cuenta que se trata de una revista electrónica que será leída principalmente en una pantalla de un dispositivo electrónico como, por ejemplo, un ordenador, una tableta o un teléfono móvil. Si está leyendo una versión impresa de este documento, puede descargar el archivo Microsoft Word respectivo desde la página "Instrucciones para los autores" del sitio web de la revista para tomarlo como base en la escritura de sus artículos.

Palabras clave

Diseño, formato, instrucciones, plantilla, revista.

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Abstract

In this article, the style guidelines and the instructions for using the template of *Revista Cátedra* are presented. These style guidelines and instructions are of obligatory use both in the preparation of the manuscript for review and in the preparation of the final version of the article for publication: an article may be rejected if it does not strictly comply with the style guidelines and instructions provided. The style of *Revista Cátedra* has been developed taking into account that it is an electronic journal and it will be mainly read on a screen of an electronic device, such as a computer, a tablet or a mobile phone. If you are reading a printed version of this document, you can download the corresponding Microsoft Word file from the "Instructions for Authors" web page of the journal's website to take it as a basis for writing your articles.

Keywords

Format, instructions, journal, layout, template.

1. Introduction

This article aims to present and explain the style and template rules that should be used when preparing an article for Revista Cátedra. This template is intended to help authors in the elaboration of their articles, but it is the responsibility of authors to ensure that the norms defined for Revista Cátedra are fulfilled at all times.

Everything explained in this article is mandatory: **not complying with the style guidelines and with the template implies the non-publication of an article.**

All the instructions defined in this article should be taken into account in the initial preparation of the manuscript for its review, so as to have a good estimate of the length of the article when it is finally published. In addition, the effort required to prepare the final version of the article will be minimal. Not complying with the style guidelines and with the template in the initial preparation of the manuscript ensures the immediate rejection of the manuscript without sending it to the peer review process.

This document is not a scientific article, it is an **instruction manual**. For this reason, some basic rules that should be applied when writing scientific articles, such as not abusing the use of bold, not writing paragraphs with a single sentence or not repeating the same word several times in the same sentence, have been violated.

1.1 Main norm

The main norm in the creation of a document is **to maintain uniformity and internal coherence.** In many aspects, spelling and style give freedom when it comes to writing some things, and sometimes can be discussed whether, for example, something should be written in uppercase or italic. However, once the person has chosen to write in a particular way, the person must keep writing in the same way.

1.2 General norms

The template of *Revista Cátedra* developed for Microsoft Word program contains the styles needed to write an article that fits the magazine's style. General style standards are:

- **No first-line indent should be defined in paragraphs,** paragraphs are separated from each other because there is a posterior space of 8 pt. First-line indent often causes confusion and many authors forget to use it.

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• **No blank lines should be left to separate the content from the item,** blank lines hinder the correct layout of a document.
• **Underline should not be used to highlight a part of the content**, the content must be put in quotation marks or bold or italics should be used, according to the usual style rules. Underline is usually used to point to errors in a document, not to highlight content.
• **Capital letters should not be used to highlight a word or text,** as stated in this template neither the article title nor the titles of the sections are written in uppercase. To put the initial letter of each word in capital letters is a bad habit copied from the Anglo-Saxon style, where it is used in a generalized way.
• **Only two typefaces can be used,** Calibri Light for titles and Cambria for the rest of the text. Another typeface can be used in the figures when representing an algorithm, a fragment of a code, a fragment of a text in which it is important to retain the original typeface or when it is not possible to use Calibri Light or Cambria for the limitations of the program used for creating the figure. Microsoft Word file in this template has enabled the option "Embed fonts in the file", so the fonts used in the template are available in the file. This allows other people to open the document to view and use fonts, even if they are not installed on their computers.

1.3 Norms use of roman, bold, italics, quotation marks and capital letters

The purpose of this article is to explain the template of the *Revista Cátedra* and the styles it has defined. This article is not intended to explain all situations that may appear during the writing of a document and may require the choice of a typeface, such as roman, bold, or italic, or the use of quotation marks or capital letters. For example:

- How should a foreign word such as “pop-rock” be written?
- How should the title of a book like "The Pilgrim Progress" be written?
- How should a company name as "Microsoft" be written?

In these situations, writing often depends on the audience, topic and scope (a means of communication, a book or a web page), on the technical means used in the writing of a document, also on the type publication of the manuscript (printed or electronic) and the style guideline of the publication in which it is written. However, **there are also a number of general principles that are usually always observed**. These principles can vary from one language to another, so it is not the same to write an article in Spanish, in English or Chinese.

Quotation marks to be used are:

- Level 1: Double quotation marks "...".
- Level 2: Single quotation marks '... '.

A short textual quotation should appear in double quotation marks; if the quoted text includes quotation marks, single quotes should be used for that text included in the quotation. For example, “opening such paragraphs with a phrase like 'as I have previously discussed' will also alert readers to the status of the upcoming material” (American Psychological Association, 2010, p. 16).

Quotation marks that are composed of an opening quotation mark (“) and a closing quotation mark (”) must be used. Do not use straight quotes "...".

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To solve any doubts that may arise when writing an article in Spanish, it is recommended to consult some reference work, such as the spelling of the Spanish language (Real Academia Española y Asociación de Academias de la Lengua Española, 2010) and the Dictionary of the Spanish Language (Royal Spanish Academy and (Real Academia Española y Asociación de Academias de la Lengua Española, 2014). It is also recommended to consult the answers to specific questions that can be found on the website of the Fundéu[1]. For example, in this website can be found an explanation about the correct writing of titles (Fundéu, 2011b):

> Titles of the works — books, films, paintings, sculptures, musical pieces, radio or television programs...— are written, as mentioned in recent spelling of the Spanish language, in italics and with an initial capital letter only in the first word and in the proper names, if the title includes one: *Ulysses*, *War and Peace*, *The Great Gatsby*...
>
> When the original titles of works written in other languages are mentioned, it is advisable to apply the Spanish standard (*Vanity Fair* or *A man for all seasons*), although can be respected the writing rules of the corresponding language (*Vanity Fair* or *A Man for All Seasons*).

An explanation on the use of capital letters can be found (Fundéu, 2012b):

> In fact, in a number of cases the use of capital letters is not rigid and there may be style decisions. The academic spelling establishes it on page 446, where clarifying that the use of capital letters involve «many factors, such as the intention of the person who writes, the type of text or the context of appearance».
>
> And continues in the same page: «... it is impossible to foresee and explain all the contexts in which the writer can choose to use the capital letter or the lowercase according to very different variables, either will be considered correct».
>
> Therefore, works such as those of Martínez de Sousa and other style experts are also valid; even though the main source is the academic text, these can be very useful complements and even essential in specialized fields (because the spelling is destined to general texts).
>
> What is really important is to establish a single standard in a particular document to maintain uniformity and internal coherence (or even with an internal-style manual).

There is an important detail in the previous long textual quotation: the angular quotation marks "«...»", also called Latin or Spanish, and have been preserved because they appear in the original text.

Also, an explanation about the correct writing of the foreign proper names can be found (Fundéu, 2015):

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[1] https://www.fundeu.es/

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https://doi.org/10.29166/catedra.v1i1.757

Proper names need neither **italics nor quotation** marks for the mere fact of being **foreigners**.

In the media, there are sometimes unnecessary quotes or italics: «The "Foreign Office" indicated that the specialists will collaborate with the Nigerian authorities», «besides live music, there is a tribute to the El Último de la Fila and another to "The Beatles"» or «the airlines "British Airways", "Lufthansa" and "Swiss", among the best valued by the travellers».

Although common names are written as a general rule in italics if they are not adapted to the phonological and spelling system of Spanish, the proper names, of a place, a person, a mark, an organism..., **have the prominent of the capital letter**; therefore, it is not necessary to add neither quotation marks nor italics.

Therefore, in the previous examples it would have been better to say «the Foreign Office indicated that the specialists will collaborate with the Nigerian authorities», «In addition to live music, there is a tribute to El Último de la Fila and another to the Beatles» and «The British Airlines Airways, Lufthansa and Swiss, among the best rated by travellers».

In addition, in the **titles**, either in italics or quoted, the Spanish words **are not distinguished** from the foreigners: «The film *Minority Report* is based on a story entitled *El informe de la minoría*».

As noted earlier, the list of situations that can be given in the writing of a document is so broad that in these rules it is not possible to offer an exhaustive relationship of all of them. For this reason, the authors are invited to consult the indicated reference works and other similar works to solve any doubts that may arise.

1.4 About copying and pasting

When copying and pasting a text that comes from another document, such as a Web page or other Microsoft Word document, it **must be pasted with the "Keep Text only" option so that the source document format is not also included**, as seen in the figure 1.

1.5 Sections that cannot be eliminated or modified

The following sections of the template should not be deleted or modified, and will be defined by the journal once the article is published:

- The dates of received, acceptance and receipt of the final version in the first page.
- The suggested citation of the article in the first page.
- The header and footer of all pages.

2. Size of the paper

A journal that is published in electronic format goes to paper only when someone prints it and will almost always be made in A4 paper size (21 cm x 29.7 cm). That is why this paper size has been chosen for this template.

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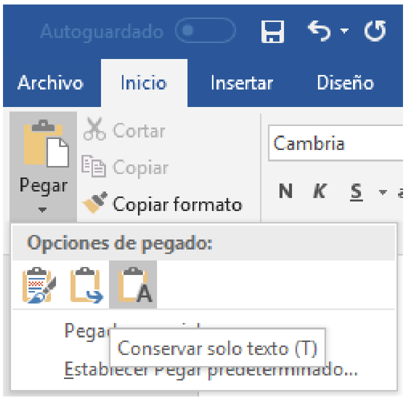

Figure 1. Option "Only keep the text" in the "paste option"

The text margins, as defined in Microsoft Word are:

- Left and right margin: 3 cm.
- Upper and lower margin: 2.5 cm.
- Header and footer: 1.25 cm from the edge.

Margins cannot be changed in any case to adjust the article to a number of pages.

3. Style of the article

Each meaningful part of an article has its style defined in the template: The main style, the title of the article, the authors, the summary and the keywords, the section titles, the lists and the quotations.

3.1 Main style

The main text of the article uses the "Normal" style that is defined as:

- Source: Cambria.
- Size:11 pt.
- Style: normal.
- Alignment: Justified.
- Anterior spacing: 0 pt.
- Rear spacing: 8 pt.
- Spacing: single.

In any case the styles of the text, such as size or spacing, can be changed to adjust the item to a number of pages.

3.2 Title of the article

The title of the article uses the "title" style, which is available in the list of styles as shown in Figure 2.

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Figure 2. “Title” style selected from the list of styles

The “title” style is defined as:

- Source: Calibri Light.
- Size: 28 pt.
- Style: Bold.
- Alignment: centered.
- Anterior and posterior spacing: 24 pt.
- Spacing: single.
- Color: RGB (47, 84, 150).

The style of the title cannot be modified to highlight a part with bold, italic or any other format.

A final point is not used at the end of the title.

The title of the article should not be written in uppercase. The first letter of the words that do not normally require should not be capitalized. For example, “Instructions for the template use of Revista Cátedra” and not “Instructions For The Template Use Of Revista Cátedra” or “INSTRUCTIONS FOR THE TEMPLATE USE OF REVISTA CÁTEDRA”.

3.3 Title in another language

The title of the article in another language uses the “Title in another language” style that is defined as:

- Source: Calibri Light.
- Size: 20 pt.
- Style: bold and italic.
- Alignment: centered.
- Anterior and posterior spacing: 24 pt.
- Spacing: single.
- Color: RGB (47, 84, 150).

To write the title of the article in another language, follow the additional style rules defined in section 3.2.

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3.4 Authors

The author's name uses the “author” style that is defined as:

- Source: Cambria.
- Size: 14 pt.
- Style: normal.
- Alignment: Right.
- Anterior spacing: 6 pt.
- Rear spacing: 3 pt.
- Spacing: single.

The affiliation of the author uses the style “affiliation” which is defined as:

- Source: Cambria.
- Size: 11 pt.
- Style: normal.
- Alignment: right.
- Anterior and posterior spacing: 0 pt.
- Spacing: single.

The author's e-mail and Open Researcher and Contributor ID[2] (ORCID) use the “affiliation” style for the paragraph and the “hyperlink” style for the text. the "hyperlink" style is defined as:

- Font: the same as the source font of the related text.
- Size: the same as the default size of the related text.
- Style: underlined.
- Color: RGB (5, 99, 193).

3.5 Abstract and keywords

The titles of “abstract” and “keywords”, use the “Unnumbered title” style that is defined as:

- Source: Calibri Light.
- Size: 16 pt.
- Style: normal.
- Alignment: left.
- Anterior spacing: 12 pt.
- Rear spacing: 0 pt.
- Spacing: single.
- Color: RGB (47, 84, 150).

A final point is not used at the end of titles.

The text of the sections “abstract” and “keywords” uses the “Normal” style. The abstract written in English must use British or American English, selected in Microsoft Word.

---

[2] https://orcid.org/

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3.6 Title of sections

Titles of sections use the styles "Title 1", "Title 2" and "Title 3", which are generally defined as:

- Source: Calibri Light.
- Style: normal.
- Alignment: justified.
- Spacing: single.
- Color: RGB (47, 84, 150).

And particularly:

- Title 1:
  - Size: 16 pt.
  - Previous spacing: 12 pt.
  - Posterior spacing: 0 pt.
- Title 2:
  - Size: 13 pt.
  - Previous spacing: 2 pt.
  - Posterior spacing: 0 pt.
- Title 3:
  - Size: 12 pt.
  - Previous spacing: 2 pt.
  - Posterior spacing: 0 pt.

The style of a section's title cannot be modified to highlight a part with bold, italic, or any other format.

A final point is not used at the end of a section's title.

The title of a section should not be written in uppercase. The first letter of the words that do not normally require it should not be capitalized. For example, must be written "section titles" and not "Section Titles" or "SECTION TITLES".

A depth level of more than three sub-divisions should not be used because it hinders the reading and understanding of the article. Section titles are numbered according to their depth level as follows:

- Title 1:1. Title
- Title 2:1.1 Title
- Title 3:1.1.1 Title

Section titles are numbered for an easy reference in other parts of the document. A point is not used at the end of the title.

Titles of "Acknowledgements", "References" and "Authors" sections use the "unnumbered title" style defined in section 3.5.

The correct use of styles for section titles can be checked in the "Browsing" panel, "Titles" option, as shown in Figure 3.

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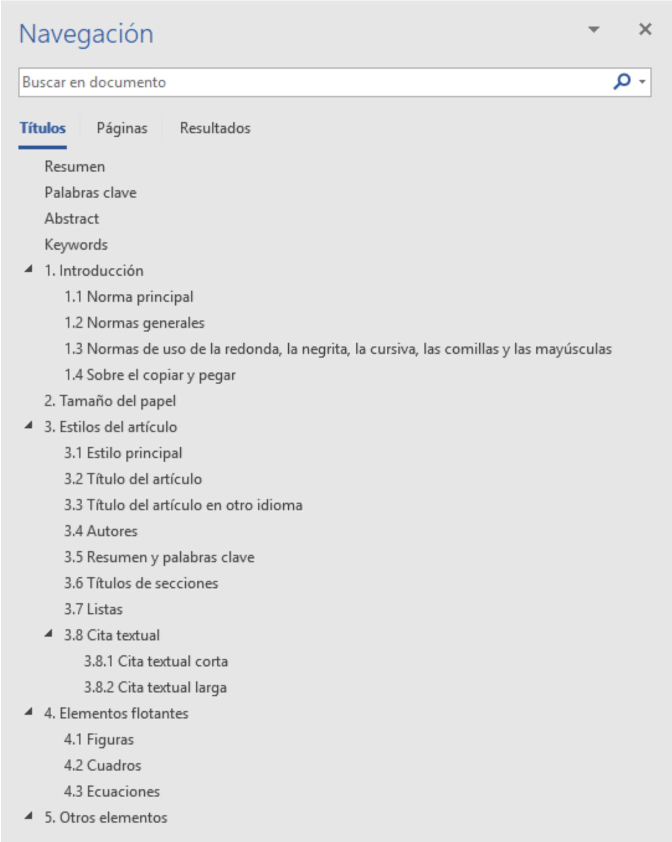

Figure 1. “Browse” panel with the section titles of a document

3.7 Lists

Lists help to highlight the main details of a text, while making it more visually attractive, but should be used with moderation; if an article has a lot of lists, these will lose their effectiveness. Therefore, lists should not be used to emphasize unimportant things.

Numbered lists must follow the following sequence according to the depth level:

1. Level 1:An Arabic number with a point, starting from “1”.
    a. Level 2: A lowercase letter with a point, starting from “a”.
        i. Level 3: A roman number with a point, starting from “I”.

Unnumbered lists, also called bullet lists, must follow the following sequence according to the depth level:

- Level 1: A fill square.
    - Level 2: a filled circle.
        - Level 3: an empty circle.

Highlighted lists can be used, both numbered and unnumbered. In a highlighted list, each item in the list is highlighted in bold and the following paragraph (s) includes the element's explanation. For example, some typical errors in writing scientific articles are corrected:

- **The prefix is written together with the accompanying word.** According to Fundéu (2011a), “Prefixes are written together with the accompanying word (*antivirus, supermodel, exhusband, vicepresident, overfeeding,*

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counteroffer, precandidate); Therefore, the spelling in which the prefix appears united with a script (*vice-minister, anti-mafia*) or separated by a blank space (*vice minister, anti mafia*)" is not appropriate. However, there are some exceptions: "The prefix will be written with hyphen when the next word starts with a capital letter or a number"; "the prefix will be separated only if it affects several words that behave like a unit"; and, "if several prefixes are put before several words that behave as a unit, they will be separated from each other and from the group of words to which they modify".

- **"And/or" combination is an unnecessary formula.** According to Fundéu (2011c), "**the formula and/or** which is a calque of the English *and/or*, is almost always **unnecessary** because **the conjunction or is not exclusive**; therefore, as indicated by the Pan-Hispanic Dictionary of Doubts, its use is discouraged, «unless it is essential to avoid ambiguities in very technical contexts»".
- **% is written separately from the number it accompanies**. According to Fundéu (2012A), "When written **a number followed** by a symbol, such as **the percentage** (%), it is advisable to leave a space among them".

Each item in a list, even a single word, **must start with an initial capital letter and end with a point.**

A depth level higher than three sub-divisions cannot be used in the lists because it makes it difficult to read and understand the article.

It is not recommended to use online lists (in the text), but if necessary the following style must be used: 1) first element; 2) second element; 3) third element.

3.8 Textual quotation

A textual quotation is a literal copy of a fragment of another author's work. To prevent plagiarism from being considered, **the author and the origin of the fragment must be correctly identified**: in addition to indicating the work of the other author, **the page number in which the copied fragment is found must be indicated**. If the work is not organized in pages, such as in the case of a web page, try to indicate the number of paragraph in which the copied text is located.

As explained in section 1.4, when copying and pasting a text that comes from another document, such as a web page or other Microsoft Word document, pasting must be done with the "Preserve text only" option so that the source document format is not included. However, in the case of a textual quotation the highlight of the original text must be kept, such as bold or italic.

Two types of quotations are distinguished, the short textual quotation and the long textual quotation. There is also paraphrase, although it does not use a special style to highlight it.

3.8.1 Short textual quotation

A short textual quotation is one that has **less than 40 words and is not a single full paragraph** (i.e. if the textual quotation has less than 40 words, but is a full paragraph, should be treated as a long textual quotation). The limit of less than 40 words is taken from the American Psychological Association (2010, p. 170).

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A short textual quotation should appear in double quotes; if the quoted text includes quotation marks, single quotes must be used for that text included in the quotation. The source should be indicated at the beginning or end of the short textual quotation.

For example, the following is a fragment containing the single quotes because the original document uses double quotes to highlight a few words: “Opening such paragraphs with a phrase like 'as I have previously discussed' will also alert readers to the status of the upcoming material” (American Psychological Association, 2010, p. 16).

Quotation marks that are composed of an opening quotation mark (“) and a closing quotation mark (”) must be used. Straight quotes "..." are not allowed.

Since a short textual quotation already has the highlight of the quotation marks, it is not necessary to add another highlight like italic.

A short textual quotation should not be written in an independent paragraph, because that is the purpose of the long textual quotation.

3.8.2 Long textual quotation

When the extension of a textual quotation **is 40 or more words or consists of one or more paragraphs**, a long textual quotation must be used, and **it does not use quotation marks**. The long textual quotation must be written in one or more separate paragraphs. The source of the text must be indicated before the long textual quotation or at the end.

The style used is “Quotation” which is defined as:

- Source: Cambria.
- Style: normal.
- Alignment: justified.
- Spacing: single.
- Anterior spacing: 10 pt.
- Rear spacing: 8 pt.
- Left and right indent: 1.52 cm.
- Color: RGB (64, 64, 64).

This is an example of a long textual quotation:

> If the quotation comprises 40 or more words, display it in a freestanding block of text and omit the quotation marks. Start such a *block quotation* on a new line [...] At the end of a block quotation, cite the quoted source and the page or paragraph number in parentheses after the final punctuation mark. (American Psychological Association, 2010, pág. 171)

3.8.3 Paraphrase

Paraphrase is the “amplifying explanation or interpretation of a text to illustrate it or make it clearer or intelligible” (Real Academia Española and Asociación de Academias de la Lengua Española, 2014). A paraphrase should cite the original source on which the interpretation is based on. If referring to a full text, it is not necessary to indicate the number of pages, because they would be the same pages that appear in the bibliographical reference; however, if referring to a specific part of the text, it is necessary to indicate the specific pages, as if it were a textual quotation.

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4. Floating elements

In some editing programs, floating elements are those that can vary their position in a document depending on the text around them. Normally, the floating elements are the figures, the tables and the equations.

Figures and tables must have a short but descriptive and explanatory title of the content. The title can occupy several lines of text, but it is advisable not to exceed three lines. Equations are only numbered.

Due to the limitations that Microsoft Word presents in the handling of floating elements, these must be inserted in the text. Figure 4 shows the "Design options" that appear in Microsoft Word when an image is inserted, the "in-line with the text" option must be selected.

The floating elements should be centered on the width of the page so that there are no exaggerated vertical blanks on the pages.

The floating elements should be quoted correctly, as if they were text:

- If the floating element is created by the author, no indication should be included.
- If the floating element is taken directly from another work without any modification, at the end of the title must be added "Source:" and the corresponding reference, including the page. For example, Figure 5 has been copied directly from the book *Writing Science* by Schimel (2012).
- If the floating element is taken directly from another document but has been modified or has been redrafted from scratch (for example, it has been improved or translated), at the end of the item's title must be added "adapted from:" and the bibliographic reference including the page number. For example, Figure 6 is the same as shown in Figure 5, but it has been translated from English to Spanish, so it is indicated "Adapted from:" Instead of "Source:".

Figure 4. Content menu "Design options" of a figure

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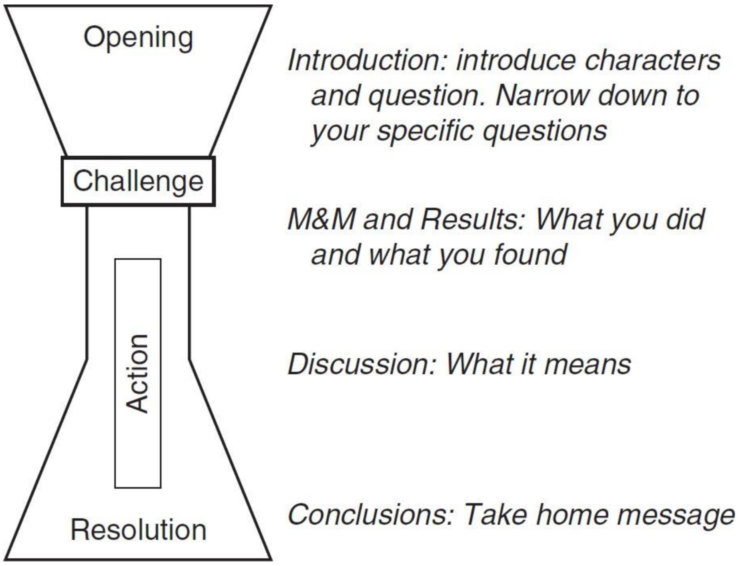

Figure 5. The structure of an article. It begins with a wide opening, then narrows with the challenge and action, and is widened again in the resolution. Source: (Schimel, 2012, p. 33).

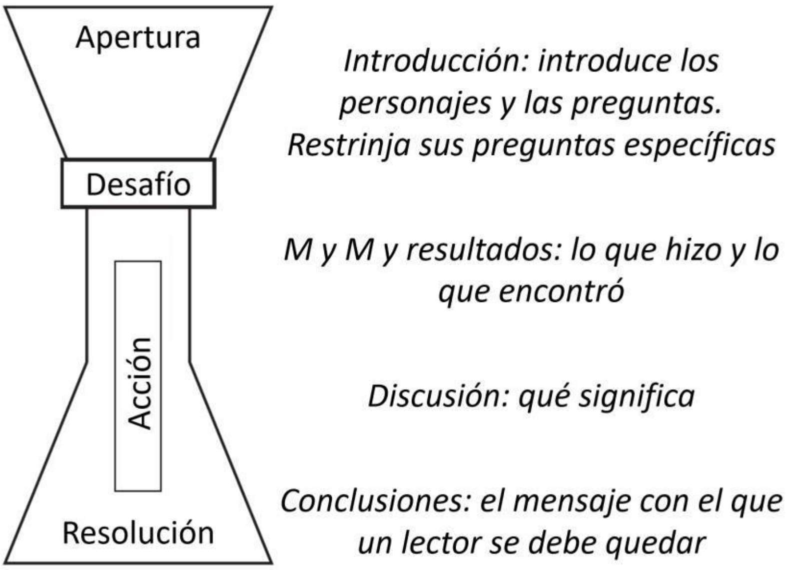

Figura 2. La estructura del reloj de arena de un artículo. Comienza con una apertura amplia, se estrecha con el desafío y la acción, y se ensancha de nuevo en la resolución. Adaptado de: (Schimel, 2012, pág. 33).

4.1 Figures

A figure can be a photograph, a drawing, an illustration, a graph, an algorithm, a part of a code, etc. A table (see section 4.2) should not be treated as if it was a figure, and a table cannot be inserted directly into the document as an image.

Figures should be mentioned and referenced in the text at least once, and before they appear in the text. The first explanation of a figure should provide a summary of its content and an

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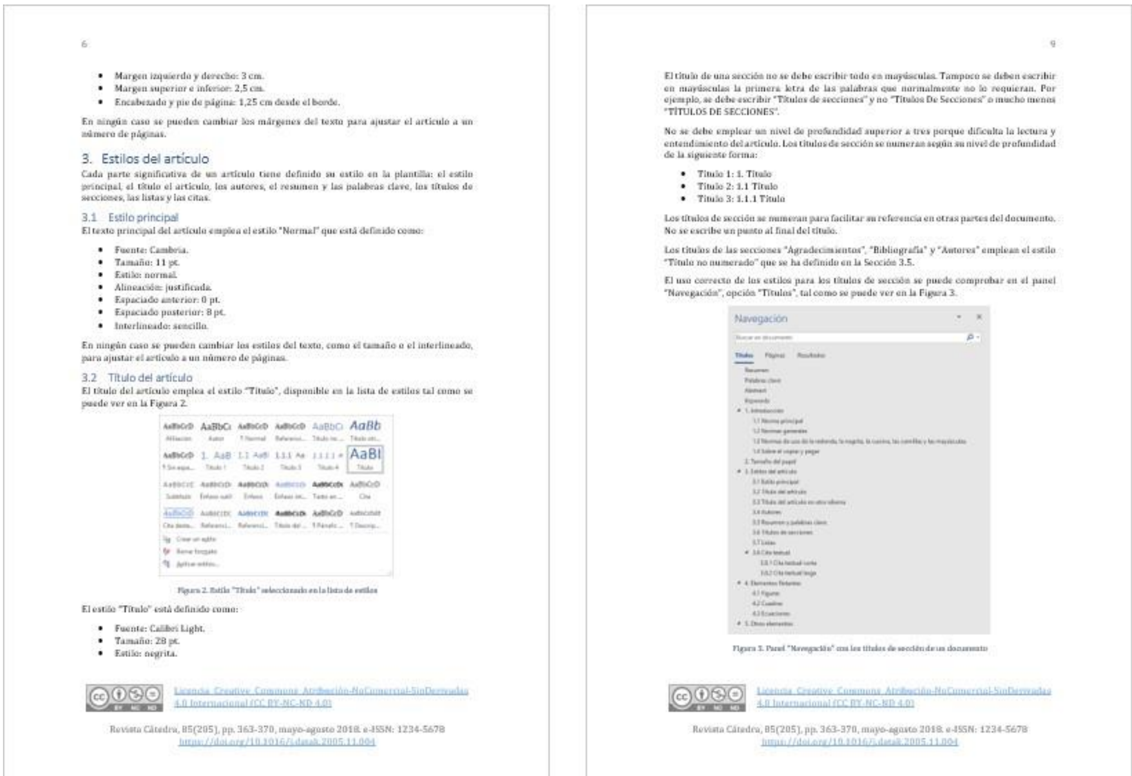
explanation of its organization. The interpretation of the figure should appear just after this; however, if this causes a negative result, such as the wrong position of the figure or that there is an excessive spacing; the interpretation can be placed just after the figure.

Figures should be placed at the top or bottom of a page, never in the middle of the page, with information before and after the figure. For example, in Figure 7, two possible pages of a document created with the template of this journal are shown in parallel. In the page on the left, the figure is incorrectly positioned because it appears in the middle of the page, with text before and after; on the right page, the figure is correctly positioned because it appears at the bottom of the page and there is only text before the figure.

The width of a figure should not exceed the limits set for the text, that is, a figure should never invade the margins of the page. A figure should not be larger than a page and should not be placed between two pages.

The font of a figure should be either Calibri Light or Cambria. Except where it is not really necessary to read the text containing a figure (for example, when it is a screenshot in which the important thing is the general distribution of the contents on the screen and not the specific detail), the size of the text must be large enough so that it can be read without difficulty.

The title of a figure should be located below the figure and on the same page, never on the next page. The title of a figure uses the “description” style that is defined as:



6

- Margen izquierdo y derecho: 3 cm.
- Margen superior e inferior: 2,5 cm.
- Encabezado y pie de página: 1,25 cm desde el borde.

En ningún caso se pueden cambiar los márgenes del texto para ajustar el artículo a un número de páginas.

3. Estilos del artículo

Cada parte significativa de un artículo tiene definido su estilo en la plantilla: el estilo principal, el título el artículo, los autores, el resumen y las palabras clave, los títulos de secciones, las listas y las citas.

3.1 Estilo principal

El texto principal del artículo emplea el estilo "Normal" que está definido como:

- Fuente: Cambria.
- Tamaño: 11 pt.
- Estilo: normal.
- Alineación: justificada.
- Espaciado anterior: 0 pt.
- Espaciado posterior: 8 pt.
- Interlineado: sencillo.

En ningún caso se pueden cambiar los estilos del texto, como el tamaño o el interlineado, para ajustar el artículo a un número de páginas.

3.2 Título del artículo

El título del artículo emplea el estilo "Título", disponible en la lista de estilos tal como se puede ver en la Figura 2.

Figura 2. Estilo "Título" seleccionado en la lista de estilos

El estilo "Título" está definido como:

- Fuente: Calibri Light.
- Tamaño: 28 pt.
- Estilo: negrita.

Revista Cátedra, 85(205), pp. 363-370, mayo-agosto 2018. e-ISSN: 1234-5678

9

El título de una sección no se debe escribir todo en mayúsculas. Tampoco se deben escribir en mayúsculas la primera letra de las palabras que normalmente no lo requieran. Por ejemplo, se debe escribir "Títulos de secciones" y no "Títulos De Secciones" o mucho menos "TÍTULOS DE SECCIONES".

No se debe emplear un nivel de profundidad superior a tres porque dificulta la lectura y entendimiento del artículo. Los títulos de sección se numeran según su nivel de profundidad de la siguiente forma:

- Título 1: 1. Título
- Título 2: 1.1 Título
- Título 3: 1.1.1 Título

Los títulos de sección se numeran para facilitar su referencia en otras partes del documento. No se escribe un punto al final del título.

Los títulos de las secciones "Agradecimientos", "Bibliografía" y "Autores" emplean el estilo "Título no numerado" que se ha definido en la Sección 3.5.

El uso correcto de los estilos para los títulos de sección se puede comprobar en el panel "Navegación", opción "Títulos", tal como se puede ver en la Figura 3.

Figura 3. Panel "Navegación" con los títulos de sección de un documento

Revista Cátedra, 85(205), pp. 363-370, mayo-agosto 2018. e-ISSN: 1234-5678

Figure 7. Example of a positioning of figures in a page

- Source: Cambria.
- Size: 9 pt.
- Style: normal.

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- Alignment: centered.
- Anterior spacing: 6 pt.
- Rear spacing: 10 pt.
- Spacing: single.
- Color: RGB(68, 84, 106).

The title of the figure serves as identification and explanation of this, **therefore the figure should not include a title on it.**

The quality of figures must be excellent. The “Do not compress file images” option is selected in the Microsoft Word options in this template, as shown in Figure 8. This option should not be modified.

It is recommended to work with images with the maximum resolution possible and in PNG or TIFF format. The JPG or JPEG formats, which are very common nowadays, are formats that achieve high compression levels, but at the cost of reducing the quality of the images.

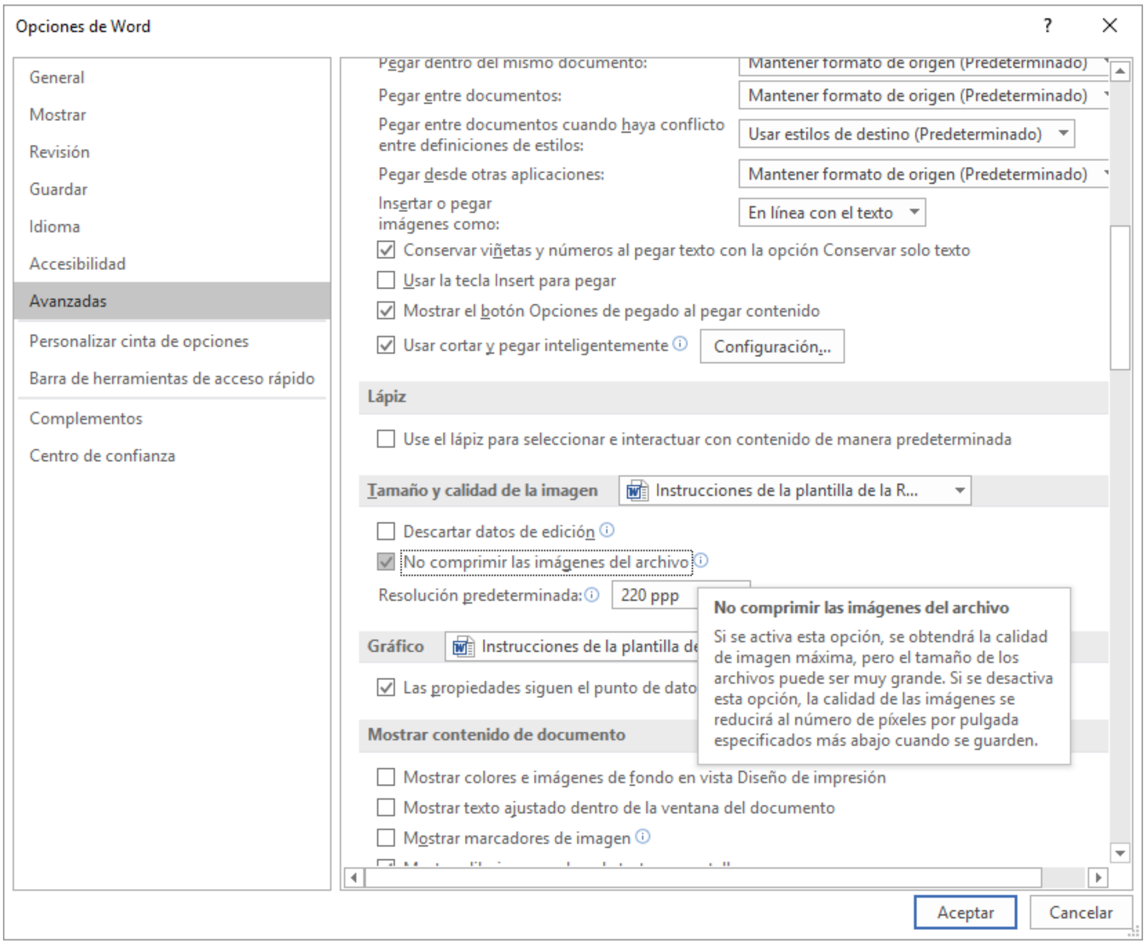

Figure 8. “Do not compress file images” option selected in “Options of word”

To include a reference to a figure in the text, use the “cross-reference” feature available in the "References" menu. If when editing the expected numbering is not displayed in a cross-

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https://doi.org/10.29166/catedra.v1i1.757

reference, all fields can be updated in a document by selecting the entire document (typically Ctrl + E) and pressing F9, as explained in *updating fields*[3].

4.2 Tables

In the Anglo-Saxon publishing culture, the term table is used to refer to the two-dimensional representation, organized in rows and columns of a data set. In Spanish the use of the term table is used as a calque of English, but the tradition recommends the use of the term picture. Therefore, in this journal is used the term picture, which in *Diccionario de la lengua española*[4] de la Real Academia Española (2014) appears with the following meaning:

> 9. m. A set of names, figures or other data presented graphically, in such a way as to warn the relationship between them.

Tables should be mentioned and referenced in the text at least once and before the table appears. A summary of the contents of the table and an explanation of its organization and interpretation should be provided. For example, table 1 is included in this article to show how a table is referenced.

Tables should be placed at the top or bottom of a page, never in the middle of the page with text before and after the figure. The width of a text should not exceed the limits set for the text, that is, a box should never invade the margins of the page. A box should not be larger than a page and should not be placed between two pages.

The font of a table must be Cambria, like in the rest of the article. The design of a table should only use horizontal division lines; vertical lines should be avoided.

The title of a table should be placed under the table and on the same page, never on the next page. The title of a table uses the "description" style and is centered.

The title of a table serves as identification and explanation of this, **therefore the table should not include a title on it**.

4.3 Equations

Microsoft Word Equation Editor must be used to create the equations. Inserting equations as images should be avoided.

Equations should be mentioned and referenced in the text at least once and before the equation appears.

Header of the colum	**Header of the colum**	**Header of the colum**	**Header of the colum**	**Header of the colum**
Header of the line	123	123	123	123
Header of the line	56	11456	456	456
Header of the line	1789	33	789	789
Header of the line	123	1234	123	123
Header of the line	44	456	456	456

[3] https://goo.gl/fW66cE

[4] **"Titles of works** —books, films, paintings, sculptures, musical pieces, radio or television programs...— are written, as the recent spelling of the Spanish language states, **in italics** and with **an initial capital letter** only in the first word and in **the proper names**" (Fundéu, 2011b).

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Header of the colum	Header of the colum	Header of the colum	Header of the colum	Header of the colum
Header of the line	789	789	789	789

Table. Example of a table

Equations should be centered and identified with the title “Equation n”, as observed in Equation 1.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Equation 1

The title of an equation should be placed under the table and on the same page, never on the next page. The title of an equation uses the “description” style and is centered. The symbols of an equation must be defined before they appear in the equation or immediately thereafter.

5. References

It is recommended to use a bibliographic manager, such as Mendeley or Zotero, to create the bibliography of an article. Otherwise, the Bibliographic manager that incorporates Microsoft Word is another option. It is not recommended to create bibliography and quotations manually because of the errors that are usually produced.

Figure 9 shows the Microsoft Word “font manager” main window, which is available through the "References" menu. Through this window can be selected fonts for the current document and new fonts can be created.

Microsoft Word's bibliographic manager has some limitations that must be solved manually. For example, when two or more articles are quoted from the same authors and in the same year, Microsoft Word does not automatically number the year as “2018, 2018b, 2018c,...”, and it should be corrected manually.

6. Other elements

6.1 Header and footnotes

The authors of an article should not modify the header and footnotes defined in this template. Its contents will be established by the technical team of the *Revista Cátedra* in the final version of the article.

6.2 Footnotes

Footnotes are allowed but its use should be limited as they hinder the reading a document. Footnotes should indicate additional information that is not essential for understanding the main text.

6.3 Cross references

If referring to a section, a figure, a table, or an equation, the “cross-reference” option available in the “References” menu should be used. The name of the reference element must be typed in uppercase. For example, Figure 10 shows the “Cross-reference” window of Microsoft word and the word “figure” has been written in uppercase by being a reference.

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6.4 Links

Links, which are also call hyperlinks, must use the “Hyperlink” style.

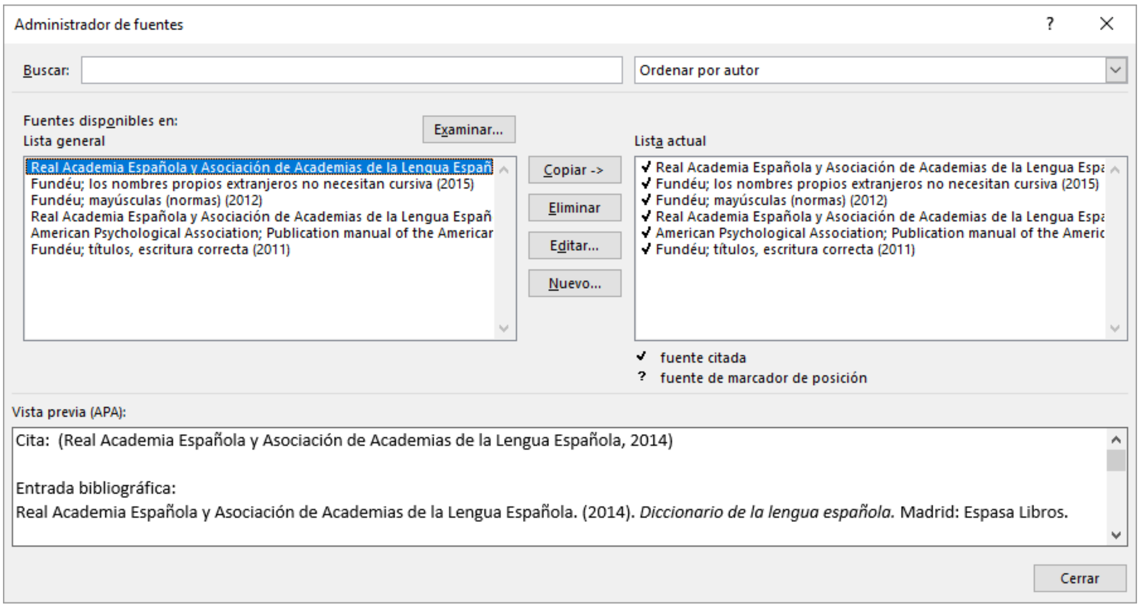

Figure 9. Main window of “Source administrator” “of the “References” menu

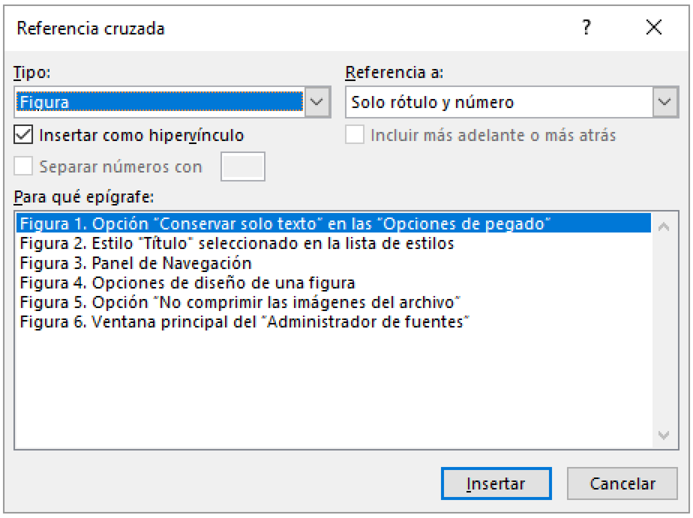

Figure 10. Insertion of a cross reference

Acknowledgment

This section is optional.

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Authors

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Instrucciones sobre la estructura del manuscrito de la Revista Cátedra

Instructions about the manuscript structure of Revista Cátedra

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Resumen

El presente artículo tiene como objetivo explicar la presentación, estructura y envío del manuscrito de la *Revista Cátedra*. Las instrucciones son de uso obligado, pues, hoy en día, es necesario regirse a normas para que el artículo cumpla con estándares de calidad e indexación. La revista se alinea a la estructura IMRAD, que son las siglas de los cuatro apartados de un artículo: introducción, materiales y métodos, resultados y discusión

Aunque el formato IMRAD solo incluye el cuerpo del artículo hay otros aspectos importantes que se deben considerar: tema, autores, resumen, palabras clave, revisión de la literatura, agradecimiento (opcional) y bibliografía. En este artículo, de una manera clara, descriptiva, concisa y fácil de entender, se detalla cada componente del manuscrito que se debe enviar cuando se quiera publicar con la *Revista Cátedra*. Las instrucciones presentadas en este artículo pretenden mejorar la escritura científica de los manuscritos y garantizar su publicación, pues este es el medio más efectivo que tiene un investigador para mostrar su trabajo y los resultados de un proceso investigativo.

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La *Revista Cátedra* tiene como bases teóricas las Ciencias de la Educación en sus diferentes especialidades y niveles educativos; sobre la base de estos principios y la reflexión de la práctica docente, publicará artículos originales, innovadores y estratégicos para fortalecer al perfeccionamiento del proceso educativo y su vinculación con la comunidad científica.

Palabras clave
Estructura, normativa, presentación, publicación, redacción.

Abstract
This article aims to explain the presentation, structure and submission of the manuscript to *Revista Cátedra*. These instructions are of obligatory use so that the article complies with quality standards and indexing. The journal is aligned with the IMRAD structure, which stands for the four sections of an article: introduction, materials and methods, results and discussion.

Although the IMRAD format only includes the body of the article there are other important aspects that should be considered, such as: topic, authors, abstract, keywords, literature review, acknowledgment (optional) and references. In this article each component of the manuscript is detailed in a clear, descriptive, concise way and easy to understand. The instructions presented in this article aim to improve the scientific writing of the manuscript to guarantee its publication, since the manuscript is the most effective means that a researcher has to show his/her work and the results of an investigative process.

Revista Cátedra has as theoretical bases the Education Sciences in its different specialties and educational levels; based on these principles and the reflection of the teaching practice, it will publish original, innovative and strategic articles to strengthen the improvement of the educational process and its linkage with the scientific community.

Keywords
Presentation, publication, regulations, structure, writing.

1. Introduction
This article aims to explain the rules for the presentation, structure and process of a manuscript to Revista Cátedra. The proposed norms aim to improve skills in scientific writing. Writing a scientific article is a fact that is linked to the recognition, relocation and the professional success of the investigator. In this regard, Howe (2000), states “publication in refereed journals and reputable congresses represent the researcher's personal prestige” (p. 22). Nowadays, it is common to measure the academic quality of the institution or the professional according to the number of publications and the importance of its scientific content.

The publication of articles in scientific journals is the last stage of the investigative process. When the manuscript is submitted to publication in an arbitrated journal, the academic peers review it thoroughly in both form and content. *Revista Cátedra* is aligned to the needs of the authors and determines presentation and structuring formats, built under the parameters of the research methodology, with academic and scientific rigor.

The structure of this work consists of six parts: the first describes the guidelines in what is supported *Revista Cátedra*; the second part explains the contents of the Microsoft Word

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template and some syntactic aspects that are necessary for the submission of articles; the third details the structure of the article; the fourth part mentions instructions on bibliographic references; the fifth part numbers some tips for writing the manuscript, and the last part explains the process of submission and evaluation of the manuscript in *Revista Cátedra.*

2. About Revista Cátedra

Revista Cátedra has been a means of communication since 1992; the academic voice of teaching was expressed through newsletters whose objective was to improve the quality of education based on the experience, wisdom and knowledge of professors and teaches. On May 2018, the journal is updated, renewed and aligned to the demands of supervisory bodies responsible for monitoring the quality of higher education. The Office of Higher Education, Science, Technology and Innovation (SENESCYT, 2012), in agreement No 2013-157, states that "the Constitution, in article 387, determines the responsibility of the State to promote the generation and production of knowledge, promoting scientific and technological research in order to contribute to the realization of good living" (p. 1). According to these academic and scientific perspectives, *Revista Cátedra* emerges as a space that creates and disseminates articles oriented to the improvement of the educational process and its linkage with the society.

Revista Cátedra, with the aim of assuming an effective participation in the society, aligns itself with the fulfillment of the objectives and policies of the Good Living National Plan, in which the orientations are embodied to comply with the Government program to guarantee the rights of the citizens; for example, objective 2 points out that "the higher education system constitutes a powerful agent for the empowerment of the citizen capacities, when they generate appropriate contexts for the development of 'positive freedoms' with emphasis on scientific research" (p. 162). The Journal agrees with these guidelines and promotes scientific exchange networks based on Education.

Education Sciences, in its different specialties and educational levels constitute the theoretical basis of *Revista Cátedra*. The diversity of disciplines allows analyzing and explaining the educational phenomena in their multiple aspects, as well as understanding the dynamics in the teaching-learning process. *Revista Cátedra* promotes the dissemination of articles from a multidisciplinary approach; the Education Sciences that make up these knowledge are: Pedagogy of the Experimental Sciences Informatics, Pedagogy of the History and the Social Sciences, Pedagogy of the Language and the Literature, Initial Education, Pedagogy of the Experimental Sciences of Mathematics and Physics, Pedagogy of the Experimental Sciences Chemistry and Biology, Pedagogy of National and Foreign Languages English. These careers are described below according to the mission, the vision and the teaching practice.

- **Pedagogy of the Experimental Science: Informatics**
  The School of Informatics is presented as a challenge for education, it works in parallel with the technological innovations that characterize society nowadays. Due to the permanent advances that occur in this field, the school is renewed continuously; it constitutes the process of technological mediation to promote and accompany the teaching-learning process from the different technological aspects and demands that this entails. The subjects in the curriculum are presented as a means of vital communication in the interaction and the social organization, in this

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way they foment new forms of more interactive and global learning, which help the student to have computational domain, as well as creative and critical thinking.

- **Pedagogy of History and Social Sciences**
  This branch of study contributes to society as it transforms the present and allows a projection into the future by educating teachers with skills in the analysis and understanding of historical facts; it contributes to the construction of the environment and history. The professionals who are trained in this school can perform in different work spaces related to the educational field, as in the formal education system, where programs are fulfilled based on the scientific knowledge and in the achievement of the critical thinking sustained in the analysis. Another space for the application and practice of this knowledge are the community educational institutions, which emerge as inclusion spaces to foster awareness and change from within the human being.

- **Pedagogy of Language and Literature**
  The School of Language and Literature has a tradition in the training of professionals with solid knowledge of language, both in their traditional conception and in the new theories that arise to understand it in their different ways. In the literary field, the study is focused on knowing and analyzing the literary production that has emerged in contexts of each nation. The whole of this knowledge is directed to the future professionals to cultivate an analytical and critical capacity on language, as it is considered a living entity. Likewise, the academic competences related to the literary area are oriented towards the mastery of concrete theories and methods that lead scientifically to the comprehension of the text, to the construction of meanings and successful critical judgments. Moreover, it must also be considered that the career motivates the literary creation, the theatre and spaces of analysis and reflection on the use of Spanish. In this way, disciplinary academic excellence is built between the arts of language and culture.

  • Initial education
  The initial education career is one of the most accepted careers in the Faculty of Philosophy, it is formed by professionals with the capacity to respond effectively, efficiently and according to the context to the particular requirements of early childhood; the theoretical and practical inputs are determined to teach according to the demands of the current societies. Thus, the formative work of future teachers of this level is aimed at acquiring tools to achieve that their learners raise a level of independence, self-sufficiency and performance criteria, based on values, knowledge and acceptance of the culture that sets them up. The integral training of the learners at this stage is one of the worries of the career, so it is also working in the application of strategies and innovative tendencies

- **Pedagogy of mathematics and physics**
  This career is focused in the fact that the future teachers understand the teaching of mathematics and physics as a strategy for understanding the phenomena that occur in the environment and in the daily life. In this way, the management in the mechanics of the calculation, the capacity of deduction and induction of laws and logical and scientific principles form a synergy that allows the future teacher to tie the formal knowledge of the mathematical science and of the physics with the explanation of natural facts. This bond that has been achieved functions as a hinge

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that unites the formality of theory with close facts. The vision that is applied in the teaching of these sciences implies an integral domain (cognitive, affective and procedural) to achieve an approach and the understanding of the students in the construction of meaningful learning.

- **Pedagogy of the Experimental Sciences: Chemistry and Biology**
  The study of chemistry and biology is a scientific-technical branch specialized in natural sciences. This school explores the diversity of actions and elements of everyday environments to get the theory to have a solid theoretical foundation in the practical application, where knowledge of formal education is combined with everyday and natural situations, so that the observation and analysis of these spaces become the main laboratory. Thus, the pedagogical training, the practice and the contents revitalize the curriculum. In the same way, the future teachers are endowed with tools that allow them to investigate and experiment, contributing in this way to the educational and social transformation.

- **Pedagogy of National and Foreign Languages: English**
  The professionals who are trained in this career have the possibility of entering into another culture through language. The dominance of this competition allows them to be more efficiently inserted in the process of global integration of current societies. The pedagogical preparation that accompanies the learning and future transmission of this foreign language, both to children and to young people and adults, is designed to develop linguistic competences based on social needs and experiential cases, being this the best way to master a foreign language. Future teachers of this career have the possibility to teach not only another language, but the culture that comes from it, so the methodologies and techniques used for their transmission are experiential.

- **Psychopedagogy**
  The aim of the study program is to analyze the main methodological proposals for problem solving in an interdisciplinary way. Develops psycho-pedagogical intervention programs with an emphasis on improving the teaching-learning process. Exercising the professional work with ethics, responsibility and social awareness is another aspect of the career praxis.

In the description of these careers it can be determined that the philosophy that bases them is a significant contribution to the field of research, where the common factor is the work with the human being, its context and its environment; based on these guidelines, will be able to consolidate and renew multidisciplinary scientific articles, unpublished, developed under the parameters of the research methodology, written with academic rigor and based in the teaching practice.

Revista Cátedra is aimed at all national and international researchers interested in publishing quality works that contribute to the improvement of the educational process.
Scientific papers submitted to the journal will be filtered through the peer process for validation. Articles to be published must comply with certain standards, it is necessary to conform to specific formats in order to meet quality requirements, reason for which *Revista Cátedra* has worked on the construction of these requirements for guiding the author in the presentation, structure and submission of the manuscript.

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3. Presentation and structure of the manuscript

The instructions on the presentation and structure of the manuscript that *Revista Cátedra* presents are aligned with national and international publication criteria and standards, such as the Office of Higher Education, Science, Technology and Innovation (SENESCYT), the United Nations Educational, Scientific and Cultural Organization (UNESCO), LATINDEX in its catalogue 1.0, 2.0 and Scielo[5].

3.1 Presentation

The manuscripts presented for their publication in *Revista Cátedra* must comply with the characteristics that are detailed in the instructions of the template of the journal. The template details: Font, size, style, alignment, anterior spacing, rear spacing, lining and color as for main text style, title of the article, authors, abstract, keywords, section titles, lists and citations. The followings are detailed aspects that must be fulfilled for presenting the manuscript.

- To write the article with an extension of minimum 10 pages and maximum 20 pages, apart from the title, abstract, bibliography and presentation of the authors.
- To avoid extensive paragraphs and short paragraphs composed of a single sentence.
- To write the article in an impersonal way.
- To quote according to the international standards of American Psychological Association (APA), in its sixth edition.
- To use the accent and punctuation marks correctly.
- To present the manuscript in the Microsoft Word template proposed by the journal.

3.2 Structure of the manuscript

The structure of the manuscript that *Revista Cátedra* presents is aligned to the IMRAD format, acronyms of the four essential sections of a scientific article: introduction, materials and methods, results and discussion (International Committee of Medical Journal Editors, 2018). The IMRAD structure allows to communicate in an orderly, precise and logical way the results of the investigation process, used by doctors, engineers, academics, and in general any professional who wants to write an article. The structure is considered as the axis for all scientific work that wants to be published; although the IMRAD format includes the body of the article there are other important aspects that must be considered as:

- **Title**

[5]SENESCYT
https://www.educacionsuperior.gob.ec/wpcontent/uploads/downloads/2017/10/Acuerdo-095-A-2013-Reforma-al-Reglamento-Definicion-de-terminos-becas.pdf
UNESCO
http://acreditacioninvestigadores.senescyt.gob.ec/static/documentos_plantillas/documentos/reglamento_acreditacion.pdf
LATINDEX 1.0 http://www.latindex.org/latindex/revistaselec
LATINDEX 2.0 https://cuedespyd.hypotheses.org/3531
SCIELO. https://www.educacionsuperior.gob.ec/wp-content/uploads/2017/12/GU%C3%8DA-DE-EVALUACI%C3%93N-

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Is the first aspect that is read in an article. It must be written in English and Spanish. It must be brief, interesting, clear, precise and attractive to arouse the interest of the reader. The title presents a solution to the problem studied in the article. A maximum of 20 words (including prepositions, conjunctions and other words) is recommended.

- **Authors**
  The authors of an article are those who assume responsibility for the criteria of originality and authorship. The participation order of the authors is according to the importance of contribution in the research process and must contain these data in the following order: name and last name of the author, institution to which he/she belongs, city, country, institutional email and ORCID[6] identification.
- **Abstract**
  It allows identifying in a short way the general content of the manuscript, that is, essential aspects of the research process. The contents of the abstract should include: justification of the subject, objectives, methodology, important results and conclusions. It will have as minimum extension 200 and maximum 250 words.
- **Abstract (in another language)**
  Summary in English or Spanish, with the same extension and structure as the previous abstract.
- **Keywords (Spanish) and Keywords (English)**
  The keywords are directly related to the essential content of the article and serve to locate in bibliographic databases. There must be a minimum of 5 and maximum of 8 words, separated by commas and sorted alphabetically.
- **Introduction**
  It is the first paragraph of the body of the article, and briefly describes the topic, the approach of the problem, the objective of the investigation, the presentation of the idea to defend, the justification, the interest, the importance, the topicality and relevance of the study. Bibliographic citations must be used. Finally, the structure of the manuscript is written.
- **Revision of the literature**
  Is the collection of relevant information. It is one of the most essential parts of the investigative process. Bibliographic sources should be updated and taken from trusted sites, relevant to the development of the research and quoted at the end of the document.
- **Materials and methods**
  This section is written in past tense as it relates what happened in the research process. This is the most important section of the research. The data must be detailed in a precise and logical way so that another author can repeat the study and compare its results. It is the development of a research and usually answers to the following questions: How are we going to investigate?, who are we going to investigate? And what are we going to investigate with?

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[6] It is a unique identifier for authors of scientific works; It is the scientific signature to which an author is visualized and is distinguished from others.

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- **How are we going to investigate?** It should be taken into account whether the focus is qualitative, quantitative, or both. In order to determine the aspects or components surrounding these approaches, the functions that each of them fulfills in the investigation are detailed in Table 1. The table is created according to the study of Hernández, Fernández and Batistas (2010).

Aspects	**Quantitative**	**Qualitative**
Aim of the investigation	• Explanation • Prediction • Control	• Comprenhension • Identification of a reality • Emancipatory social action
Vision of the reality	• There is a unique reality • Fragmented and reduced to "the information provided"	• There are multiple realities that are socially built • Vision of the reality affected by studies
Relation subject-object of the knowledge	• Describes the phenomena • Testing of theories	• Transforming interaction
Role of the values	• "Neutral" investigation	• Investigation committed and influenced by values
Scientific generalization	• Natural and inmutable laws	• Contextualized explanations
Methodology	• Interventionist-experimental	• Hermeneutics-dialectic • Adequation of the method- object of study • Participative
Design of the investigation	• Predetermined by experts • Rigourously defined	• Open, flexible, never finishes
Emphasis in the analysis	• Quantitative	• Qualitative

Table 1. Paradigms of the investigation. Adapted from: (Aguilar, W. 2012, slides 6-8).

The basic modality to develop these approaches is the field research, bibliographic and experimental documentary and is given through investigative levels, which are defined according to the analysis of the theoretical postulates proposed by Hernández, Fernández and Batistas, (2010) define:

- That a level of exploratory research is given through the review of the literature, the systematization of experiences and the orderly organization of the information collected.
- That the level of descriptive research presents details, compares two or more phenomena characterizes and correlates data of the variable. The variable is a technique that allows the investigator to order the different theories on which its bibliographical research is supported, for this it should be considered that the variables will be consulted in deductive form from

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the general to the particular, that is, it starts from: paradigm, theory, thesis, hypothesis, arguments, definitions and concepts.
- That the level of explanatory research verifies, experiences a hypothesis, discovers the causes that caused the problem, analyzes the causes that deepened the problem, explains its consequences and formulates alternatives of solution.

Who are we going to investigate? To the population that is the universe and to the sample that is the subset of the population. The sample is two classes: probabilistic and non-probabilistic or directed. In the probabilistic, as understood, sample elements are selected by means of procedures (selection, number tables, drawing with papers, etc.); and it is given through simple random sample, systematic random and stratified.

- Simple random sample. It is the one in which each element of the population has the same probability of being selected to integrate the sample, this sample should be used when the individuals of the population are homogeneous, it is not recommended when the population is very big, because the individuals present different characteristics.
- Systematic random sample. It is the one that selects for the sample an individual randomly and systematically, for example, the first of every 10.
- Stratified sample. It is used when the investigator wants to highlight a specific sub-group of the population. This procedure is used to observe and compare.

The **non-probabilistic or directed** sample, the author selects participants for one or several purposes, is not intended to provide individuals with equal opportunities to be selected, this type of sample can be used to demonstrate that there is a specific trait in the population, it aims to carry out a qualitative, pilot or exploratory study.

What are we going to work with? With techniques that can be observation, survey and interview.

- Observation technique. Observe, according to the Dictionary of the Royal Spanish Academy and Association of Academies of the Spanish language. (2014). Dictionary of the Spanish language is "to examine attentively, to look carefully and modestly". It is an empirical procedure in which judgments, reflections or feedback should not be issued.
- Survey technique. This instrument by means of questionnaires designed aims to obtain information of the people surveyed.
- Interview technique. Data-collection instrument used by an informant, it is an interested dialogue with a prior agreement and expectations on both sides.

- **Results**

  The realization of scientific research studies implies presenting the quantifiable results; such presentation must have a logical and orderly sequence using illustrative materials (tables and figures). It is recommended to take into account the following aspects to write the results:

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- This section is written in the past, although sometimes it is also used the impersonal form ("It has been found that...").
- Tables and figures presenting the most important research results must be numbered consecutively, and must have a title and a source if were not own elaborated (see an example in the template). The titles of the tables and the figures must be brief and clear.
- The results should also be referenced in the text at least once.
- Each result must be justified.
- A summary of the contents of the figures and pictures should also be provided, an explanation without inferences, that is, without interpretative judgments.
- It is advisable to have as a maximum 6 illustrative materials.
- Paragraphs must be used repeatedly.
- Some data can also be presented in text form, in simple sentences with summarized data.
- It is important that the drafting of the results correspond with the research objectives set in the introduction.
- The error and uncertainty measures should be indicated if the investigation so permits.

- **Discussion and conclusions**

  The **discussion** examines and interprets the results presented in the previous section; the followings are some recommendations for writing this section:
    - The author must be careful in not to repeat explicit results, since the idea is to find the answers that have been raised in the analysis of the results.
    - The results should be assessed and graded with respect to the original hypothesis; it is to suggest new knowledge and hypothesis to be verified in other studies.
    - The current contribution of the study should be recognized.
    - It should be explicit, that is, to write literally the conclusions obtained and the theoretical and practical implications that can be inferred from the study.
    - Conclusions should be made without support in the data obtained and avoid superficial discussions, which instead of contributing to enrich the study obscure it and limit it by generating ambiguity for the reader.
    - This section should be written in present. ("These data indicate that...")

  Finally, the **conclusions** of the study are formulated. The conclusions must have an objective and impartial character to avoid mere speculation. Inferring or deducing a truth from others that are admitted demonstrated or presupposes; it is recommended to draw up conclusions that are supported by the findings.
- **Acknowledgment**

  It is directed to those who, without being authors or coauthors, have supported the research in an intellectual or financial way.
- **Reference**

  Bibliographic references will be cited according to APA standards, in its sixth edition. It should be taken into account that the bibliography responds to the authors mentioned in the development of the article.
- **Presentation of the authors**

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Al finalizar el artículo se describirá en el mismo orden de participación y por cada autor dos párrafos: el primero detalla los títulos obtenidos; el segundo relata las actividades profesionales que desempeña, la temática en la que se basa sus investigaciones y una breve descripción sobre su participación en revista de alto impacto (ver ejemplo de plantilla). No se debe incluir foto. Se aceptará de uno hasta cuatro autores por artículo. Si un artículo requiere de más autores con extensión a un proyecto, se deberá indicar previamente a los editores de la revista.

At the end of the article authors will be described in the same order of participation, and there will be two paragraphs by author: the first details the obtained titles; the second relates the professional activities he/she plays, the topic in which he/she bases the research and a brief description on its participation in a high impact journal (see an example in the template). A picture is not included. One to four authors per article will be accepted. If an article requires more authors with extension to a project, it must be previously indicated to the editors of the journal.

4. Elaboration of bibliographic references.

APA was founded with the purpose of creating publishing standards and good practices in the dissemination of information. APA-style standards come from psychological literature from editors and authors with experience in academic writing and from recognized authorities in the field of editing practices.

Students and researchers generally consult the APA standards publication manuals for their articles to comply with writing standards, as it should be considered that an investigation is complete when the results are shared with the scientific or academic community in favorable media (scientific journals) and with standards accepted by this community (APA standards).

In the drafting process it is important to contextualize the contribution of the different theories that will support the scientific work, quoting the authors that influenced their realization; thus, the researchers **do not present the work of another person as if it was theirs**. Bibliographic references in the articles of *Revista Cátedra* should be ordered alphabetically. The author must include at the end of the manuscript only the reference of the work used in the investigation. The following is included as an example, but without a sense of exhaustive listing, several bibliographic references in APA format:

- **Example of a book with an author:**

Harrsch, C. (1993). El psicólogo ¿qué hace? México: Alhambra.

- **Example of a book with more than three authors:**

Alpiner, J. G., Amon, F., Gibson, J. C. y Sheehy, P. (1993). Háblame. México: Editorial Médica Panamericana.

- **Example of a manuscript presented in a journal with an author**

Ibáñez Brambila, B. (1984). Factores psicosociales y familiares del embarazo en adolescentes solteras. *Revista Mexicana de Psicología.* 1 (8), 72-78. (The above in this order: title of the journal in italics, Volume Number in italics, Journal number in italic, number of pages).

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- **Example of a manuscript presented in a journal with up to six authors:**

Ospina, MC., Alvarado, S.V., Fefferman, M., & Llanos, D. (2016). Introducción del dossier temático "Infancias y juventudes: violencias, conflictos, memorias y procesos de construcción de paz" [Introduction of the thematic dossier "Infancy and Youth: Violence, Conflicts, Memories and Peace Construction Processes"]. *Universitas,* 25(14), 91-95. https:/7doi.org/10.17163/uni.n25.%25x

- **Example of journal with more than six authors:**

Smith, S.W., Smith, S.L. Pieper, K.M., Yoo, JH., A.L., Downs, E., ... Bowden, B. (2006). Altruins on American Television: Examining the Amount of, and Context Surronding. Acts of Helping and Sharing. *Journal of Communication,* 56(4), 707-727. https://doi.org/10.1111/j.1460-2466.00316.x

- **Example of a thesis:**

Ramírez García, M. (2004). El uso de las TIC en los procesos de enseñanza-aprendizaje. Tesis de Maestría en Educación y Desarrollo Social, Universidad Central del Ecuador, Quito.

- **Example of a paper, conference, Congress or meeting:**

Odriozola Urbina, A. (1978, May). Impacto del enfoque centrado en la persona en el noroeste del país. Ponencia presentada en el homenaje Póstumo; Carl R. Rogers: Vida y Obra. Universidad de las Américas, Quito.

- **Example of Slides**

Lavanchy, S. (1993). Como el niño de o a 12 años conoce el mundo. [Slides]. Perú: Promav, 80 slides.

- **Example of a book consulted online**

Fundéu. (2015). Foreign names do not use italics. Recovered on June 25, 2018 from https://www.fundeu.es/recomendacion/nombres-propios-extranjeros-cursiva/

Note: It is recommended to use **Bitly** to shorten electronic addresses.

- **Long address:**

Addresses are often long and it is not convenient to use them in bibliographic references and social networks. According to SanFuentes, O. (2014), *Eight advantages of using Bitly* indicates that in services like Twitter or Facebook, it is only possible to publish a limited number of characters (Twitter 140, Facebook 90). That is, an address like the one on this page containing 400 characters could not be shared:

https://www.google.com.ec/search?q=Ospina%2C+MC.%2C+Alvarado%2C+S.V.%2C+Fefferman%2C+M.%2C+%26+Llanos%2C+D.+(2016).+Introducci%C3%B3n+del+dossier+tem%C3%A1tico+%E2%80%9CInfancia&rlz=1C5CHFA_enEC797EC798&oq=Ospina%2C+MC.%2C+Alvarado%2C+S.V.%2C+Fefferman%2C+M.%2C+%26+Llanos%2C+D.+(2016).+Introducci%C3%B3n+del+dossier+tem%C3%A1tico+%E2%80%9CInfancia&aqs=chrome..69i57.3372j0j4&sourceid=chrome&ie=UTF-8

When using Bitly, the previous address containing 378 characters could be reduced to 22: https://bit.ly/2NYCu4O whose main benefit would be to make a dynamic

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storage of query links and facilitate future investigations; In addition, statistics of other links that have similar research line would be displayed.

5. Writing tips of the manuscript

5.1 Title

The title is the first element that initiates the dialogue between the scientific article and the readers, so it should draw attention to being brief, exact and original. The title is the only thing that is often read; if a good title is achieved, it will also be able to access indexing services. At the discretion of the authors of this article, it is recommended to use the wording:

- Factors.
- Perception.
- Effects.
- Evaluaation.
- Innovation, etc

For example, if the title of an article were ***The Didactics of Literature***, it does not call the attention, nor does it show a proposal for a resolution, but if this title were written as ***Outstanding Innovations in the Didactics of Literature***, it does prove that it has been carried out an analysis, measurement, evaluation or study of a problem. An article should present a **problem** or a **solution**.

Detecting a problem and being the first to point it is crucial, because it connotes the study, the discussion, the interest in finding the solution; it implies the possibility of investigating, clarifying, making proposals, that is, it justifies the need to develop an investigative process.

Contributing to the solution of a problem also leads to the testing of theory, methods, strategies and designs; the answer or solution to a problem has an important value for the investigative process, because it is provided with new knowledge.

5.2 Abstract

In the drafting of the abstract it is important to consider some features such as precision, concretion and accuracy. After the title, the abstract is usually the first thing readers read, therefore, everything relevant to the manuscript must be written. *Revista Cátedra* requests as minimum extension 200 and maximum 250 words. The drafting of the summary must answer six questions:

1. What is the problema?
2. Why is the problem important?
3. What did others do that didn't work?
4. What is the proposed solution?
5. What are the main results?
6. What consequences or implications does the solution entail?

5.3 Introduction

The introduction in a scientific article is the author's description of the research problem. The drafting of the introduction addresses the aspects that the scientific article will contain in a concise manner, thus readers will have a panoramic view of the research work they will be approaching.

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Another way of understanding the aspects that will be drafted in the introduction would be to establish an analogy between the introduction with the action plan to develop an investigation, because in this segment are all the elements that shape the article, as well as the full summary of what will be covered in the research. The questions that need to be taken into account for writing it are:

1. What is the nature and scope of the problem investigated?
2. What are the difficulties, obstacles, research challenges?
3. What is the importance of the problem? (Extended version with respect to the summary)
4. What is the main idea of what is intended to be done?
5. Research questions?
6. What are the limits of the research?
7. What is the purpose of the article?
8. The introduction must end with a paragraph describing section by section the structure and content of the article.

Figure 1 illustrates the space to be devoted to the order that will follow the introduction. As can be seen the contextualization of the research or general aspects will go first, followed by more specific aspects concerning the problem of the investigation and will end with the most concrete of the scientific article, as it is the solution to the problem posed or proposed. Thus, in order to get an introduction that clearly explains the content of the research work, it is necessary to follow a structure that leads to the understanding of the writing.

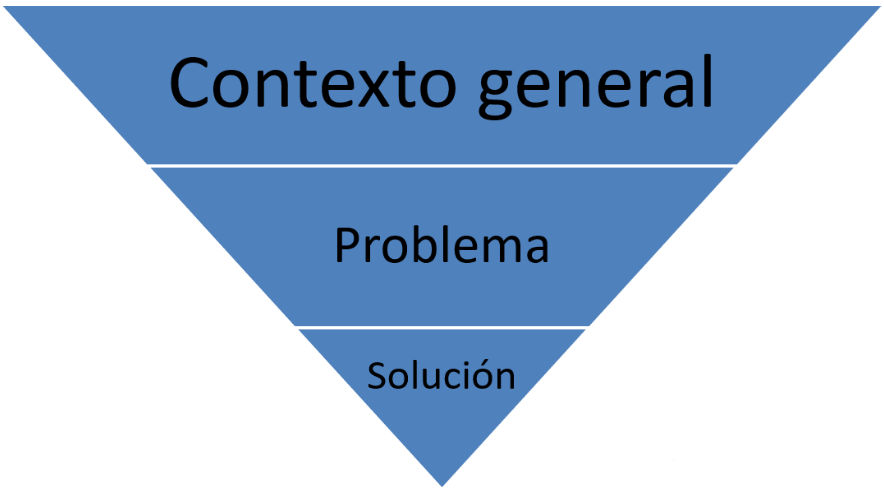

Figure 1. Structure of the introduction in a manuscript

5.4 Revision of the literature

It is imperative that the selected sources comply with the academic and appropriate rigor required for the elaboration of scientific articles, where the academic quality takes a main role. Bibliographic sources must have data certifying the authenticity of their claims, but not mere descriptions without sustenance, for this reason it is necessary that the selection of material is rigorous, especially when investigated in Websites. The data to be selected should be useful and must cover the knowledge demanded by the research to provide rigor.

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5.5 Primary sources

Primary or first-hand sources constitute a theoretical sustenance that has no more filter than that of its own author, that is, they are not summaries, interpretations or works derived from the original texts. The primary sources allow verifying the reliability and quality of the information that is transmitted.

The scientific text to be elaborated must show all originality, the data must be reliable, that is, objectives and valid to guarantee the veracity of the information. Therefore, primary sources should be accurate and objective in order to effectively share knowledge.

5.6 Updated sources

The selection of updated sources depends on the level of preparation of the person investigating. If the authors are in constant study they will know the most recent theories, topics or advances that arise around their diverse areas of knowledge and study. For this reason the permanent investigators are recommended constant updating and study.

Although it is true that there are theories that have reached a validity that goes beyond the time, it is recommended that the bibliographical sources do not exceed five years, in addition it must verify the year of last publication and corresponding updates.

6. Submission process

Revista Cátedra, has a four-monthly frequency, published in the period from January-April, May-August and September-December. It will be published the first month of each period. The author must consider the submission dates of the manuscript indicated on the journal's website and take into account the following:

- **The reception of manuscript** is permanent and should be sent through the Open Journal system (OJS), for which it is necessary the author to register[7].

The documents to be sent are:

- **Cover letter**, asking the publication of the manuscript in the journal[8].
- **Authorship letter**[9] of the authors of the manuscript in which they declare that the content is original and is not in review in any other journal, it ratifies the honesty and truthfulness of the work presented.

7. Assessment of the manuscript

Revista Cátedra the assessment template for each article[10]. The staff responds to editorial criteria and publishing standards. The reviewers must meet the qualitative and quantitative valuation criteria for each of the indicators proposed in the evaluation template; the decision to publish or reject the article is taken with objectivity, transparency, logic and expertise.

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[7] Submission of the article: https://revistadigital.uce.edu.ec/index.php/CATEDRA
[8] Cover letter: https://revista-catedra.facue.info/documentos/carta-presentación.docx
[9] Authorship letter: https://revista-catedra.facue.info/documentos/declaracion-autoria.docx
[10] Temple for each article: http://revista-catedra.facue.info/documentos/valoracion-articulo.docx

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Conclusions

The publication of a scientific article is a demanding process that demands a rigorous work of the whole team that is committed in this work. It is the duty of the researcher to propose innovative topics that present a high academic content with a high level of scientific support that endorse his/her proposal. As part of this work, *Revista Cátedra* assumes its commitment and dedicates this article to the presentation of the guidelines and requirements to be fulfilled by scientific articles as a preliminary step for its validation and publication in this space.

One of the objectives of Revista Cátedra is to create an open field for researchers, a space to build their professional perfection, their relationship with society and their commitment to the construction of good living. Depending on the lines of research that are based on the different careers of the Faculty of Philosophy, Letters and Education Sciences, proposals are presented for the construction of the theoretical basis that supports the articles.

In terms of the form, there are six points to consider ranging from the extension of the article, use of APA standards, the application of the Microsoft Word template, designed specifically for this purpose and meet the standards requested for high impact journals. The format to be followed to organize the content is the IMRAD, to which other vital elements are added within the structure of a scientific article, as topic, abstract, references, among others that are detailed in the corresponding section.

For the submission of the manuscript, it is necessary to meet certain formal requirements such as the submission of an application and a declaration of authorship; this step is preceded by the pairs reading for subsequent approval, publication and dissemination.

In this way, Revista Cátedra is presented as a high-impact publication space, open to national and international researchers; a space destined to investigate the Sciences of the Education in its different educational levels, is based on the theoretical bases of its different specialties that compose the Faculty of Philosophy, Letters and Education Sciences and is renewed according to "strengthening the capacities and potentialities of citizenship" of the Good Living National Plan.

Acknowledgment

This section of the article is optional.

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El Aprendizaje Híbrido y la educación digital del profesorado universitario

Blended Learning and digital education of university teaching staff

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Resumen

El aprendizaje híbrido o el aprendizaje mixto es una modalidad de aprendizaje integrador que utiliza de manera combinada componentes presenciales y virtuales. Esta modalidad puede contribuir a los sistemas de capacitación y formación digital del docente universitario a través del desarrollo de competencias digitales, con el fin de mejorar los procesos educativos universitarios. A partir de una revisión de diferentes fuentes bibliográficas relacionadas a experiencias y resultados de investigaciones del uso del aprendizaje híbrido para el desarrollo profesional en línea del profesorado universitario. Entre los resultados, se percibe que los procesos de capacitación en la modalidad en línea o virtual no han sido suficientes para responder a los desafíos de la educación superior en la era digital, y el aprendizaje híbrido o mixto se constituye como una alternativa de educación digital del docente en la educación superior. Luego se presentan los resultados de una investigación de un curso de formación en Tecnologías de la Información y Comunicación (TIC) aplicada a los procesos de enseñanza-aprendizaje para docentes universitarios. Se concluye que el aprendizaje híbrido es una modalidad efectiva para los cursos de educación digital del profesorado porque el componente presencial complementa el aprendizaje virtual; además, ante los problemas de conectividad y de acceso al internet la modalidad de aprendizaje mixto es una alternativa para la formación continua del profesorado.

Palabras clave

Aprendizaje híbrido, educación digital, educación en línea, profesorado, universidad.

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Abstract

Blended learning is an integrating education program that combines computer-based activities with regular classes. It contributes to the quality of higher education through the improvement of ICT training programs and the development of e-competences in higher education. There has been a literature review of different bibliographic sources related to b-learning and Teaching Professional Development. As a result of this review, it is perceived that e-learning training programs are not efficient enough to face the challenges of blended education, and Blended Learning could be an alternative for teacher online professional development. Then, research results of the incidence of an ICT training course for higher education professors are shown. It is concluded that blended learning is an effective modality for teachers' digital education courses because the face-to-face component complements virtual learning. In addition, due to problems of connectivity and access to internet, b-learning modality is an alternative for the continuing education of higher education professors.

Keywords

Blended learning, digital education, online education, professor, university.

1. Introduction

The challenges of educational quality in higher education has emerged questions about the incidence of online teacher training programs in the improvement of educational processes in the university classroom. As for the use of information and communication technologies (ICT) in the classroom, there is a digital division between the generations of teachers and the new generation of students. The training programs or systems in teaching technology for the training of professors have not proved to be effective in responding to the development of methodological and practical strategies with ICT both inside and outside the classroom. The university professor is in the midst of attention and controversy, recognizing a generalized perception of dissatisfaction with respect to the quality of educational processes, since the contents that are taught do not generate useful knowledge to understand the personal, social and professional life of individuals (Pe rez, 2010). Nowadays, professors face new challenges and contexts in the age of information and uncertainty, and perceive a generational estrangement between the professor and the student, affecting the contemporary educational processes, since this is a *knowmad* society constituted by new nomadic generations of knowledge (Cobo and Moravec, 2011; Moravec, 2013).

University professors are in a position of immersing in digital training to improve the educational process of the new generation of digital university. In fact, it is perceived that formal ICT training is not sufficient for the development of digital competencies in professors, and that it should be thought of a permanent digital training that recovers daily good practices and a continuous training with ICT (Lo pez, 2005; Valverde-Berrocoso, 2011; Valverde-Berrocoso, Garrido y Ferna ndez, 2010). Blended learning or B-learning is the learning facilitated through the efficient combination of different teaching methods and models and learning styles, and based on a transparent communication of all areas involved in the course (Heinze and Procter, 2004). Some authors consider this new trend towards mixed learning as a step backwards because they regain in-site components instead of using virtual education, and mention the failure of e-Learning (Bartolome , 2004). On the other hand, other experts see it as an innovative model that combines the best of each modality

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and improves the quality of the teaching-learning process at different organizational levels of an educational institution and offers several possibilities of making combinations for the training processes (Bonk and Graham, 2004; Graham 2004; Llorente and Cabero, 2008; Pen alosa, 2013).

It is considered that a digital training proposal of university professors of the current generation will contribute to the development of digital and informational competencies. In addition, the professor will be trained to use ICT as methodological strategies in the classroom that can contribute to improving the quality of the student's learning. For this reason, this paper will present a proposal for an innovative training course for university professors.

2. Literature revision

Different difficulties of virtual training programs or e-Learning for teacher training (Schnerkenberg, 2010) must be mentioned because the effectiveness of e-learning training and the need to seek other teacher training strategies (Volk and Keller, 2010) has been questioned. In addition, the interest for this literature review is focused on knowing what have been the advances in the research around the B-learning, blended learning or mixed learning, as an alternative for the digital training of university professors (Drysdale, et al., 2013; Gu zer and Caner, 2014).

The starting point of this literary review will be the work done by Halverson, Graham, Spring, Drysdale and Henrie (2014) who carried out an analysis on the topics of the most cited articles in the first decade of research on blended learning. With regard to the use of blended learning for the professional development, these authors claim that it has been a minority trend (3.5%) in research compared to other thematic trends in research about blended learning, such as research on instructional design, learning styles and results, exploration, comparison, technology and interaction, among others. Although this study was based on the research published in English, it is opted for the thematic trend of professional development as the most akin or approximate to what is understood in Spanish as training.

Blended learning is projected as a future modality for the improvement of the university educational Quality (Wold, 2013) and for the professional development of the professor (Owston et al., 2008). In a literature review from 1999 to 2012 on blended learning, Güzer and Caner indicate that this modality is perceived as useful, enjoyable, flexible and motivating for apprentices, although it has as a challenge to generate better learning environments through social interaction and collaborative work. The study mentions that blended learning has been implemented in recent years in different school settings, including training programs. In the future, studies on mixed or blended learning will focus on how to create effective or successful experiences on their implementation, and in turn, should consider the inclusion of mobile learning or M-learning that uses new devices such as tablets, smartphones, among others (Güzer and Caner, 2014).

The study on the trend analysis in dissertations and thesis on blended learning conducted by Drysdale et al. (2013) considers that one of the trends used of this modality is in the field of professional development. Although this analysis indicates that there is a low percentage of blended-learning studies directed to professional training (7%), the authors interpret that this result does not show the potential of professional development needs, and that upcoming research on blended learning should be about the professional needs of

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administrative and teaching staff in educational institutions (Bicen, Ozdamli and Uzunboylu, 2014; Drysdale et al., 2013), although research in this field has still been incipient in the first decade of research on blended learning (Halverson et al., 2014).

Within the institutional variables in education as critical factors in the success of blended learning, Valverde-Berrocoso mentions the ability to implement more flexible organizational structures in universities. Within this organizational structure should be considered professor training or support to professors (Valverde-Berrocoso, 2011). In this way, blended learning becomes an alternative modality for the improvement of the teaching-learning processes and it constitutes a tendency in the use of the ICT for the university teaching (Valverde-Berrocoso, López, Garrido and Díaz, 2004). This modality is considered ideal for the professional development of the students coursing training teaching (Fainholc, 2008).

Due to the generational gap on the use of technologies and the generation of knowledge, the need for a digital education of university professors can be raised. This formation should not only include the instrumental use of information technologies and communication through the training in office automation to the professor, but also through the development of digital competencies in which learning is generated, knowledge is managed and competencies are developed for the general scope. In this way, the professor will be capable of promoting science and technology in students in terms of the development of digital competitions (Regalado, 2013). From this perspective, some research results are raised about blended learning and its impact on the digital training of university professors.

As for digital professor training, it may be considered that ICT courses for university professor training are not enough to develop digital skills. The development of digital competencies or informational capacities Valverde-Berrocoso, 2011) are not only in function of the training, but also of the daily use of ICT (Valverde-Berrocoso et al., 2010) and of the incentives offered by the institution of higher education, such as awards for good practices in the use of ICT or expansion of virtual or online careers (Schnerkenberg, 2010). ICT-based training or certification programs should include Web Resources 2.0 for higher education, as well as tools for e-research and e-science for the university professor, as well as assess the importance of reflective learning methods for the acquisition of E-competencies (Volk and Keller, 2010).

The latest researches also coincide that higher education institutions have the challenge of increasing the number of professors who know how to teach online or use blended learning modalities to organize learning to through professor training strategies that are fast, effective and lead to immediate practical results (Gregory and Salmon, 2013). Although the university professor still has difficulty in incorporating technology in the classroom, it is perceived that there is an increase in the interest of articulating technology with the contents, the pedagogy and the knowledge (Rienties, Brouwer and Lygo-Baker, 2013). There are also studies on successful experiences in candidates for professor positions, in which the results in the elaboration of multimedia projects provided better results in groups that used blended learning modality to contact in person and online with their peers and trainers (Bicen et. al, 2014) or to create blended communities for the professional development of the professor (Matzat, 2013).

One of the horizons for research on blended learning and digital teacher training is found in blended problem-based learning-blended PBL, which will allow future analyses to be carried out for the professional development of University professors (Donnelly, 2010). In

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turn, blended learning provides an excellent opportunity for them to learn at work, sharing and communicating with other colleagues, and improving classroom practices and learning from their students (Owston et. al, 2008).

The creation of innovative portfolios where formal and non-formal information on professor education is included, and where professors' learning communities are developed can be an alternative for the development of digital competencies. The professor portfolio is presented as a tool for reflection, the continuous improvement of teaching practices and the development of competencies (Seldin, 2011). In this way the development of the professor's digital competencies will not depend exclusively on formal training but also on non-formal and informal training.

3. Methodology

This research has a qualitative approach and the case study was used. The case study aims to study a certain phenomenon, situation or scope in its real and own context; in turn, it allows describing, analyzing and interpreting the complexity of the case. The case study is the examination of an action example, in which specific incidents and facts are studied; it also collects selective biographical and documented information (Walker, 1983).

The object of study is a course of professor training of an Ecuadorian university, so the contextualization of the case allows situating in the reality of the university professors in Ecuador. In turn, the complexity of the phenomenon study sets it in a holistic perspective that allows having different sources of data and permanence in the field or place of the study (Alvarez and San Fabia n, 2012).

The case study is carried out in three phases. The first phase is the contextualization of the digital training of university professors in Ecuador. In this first phase, an analysis of the situational context of higher education in Ecuador is carried out. The second phase consists of the case study of the digital training course for university professors. This second phase starts with an initial description, which raises the background of the digital training course and its context. In turn, the instructional design of the professor's digital education course is described. The following is an analysis and interpretation of the results of the course. The case study ends with a third phase. It establishes the final conclusions of the study.

Phases	Code	Assesment of the case study - description
Phase 1. Context of the digital formation of university professors	1	Legal context of Higher Education in Ecuador
	2	Institutional context of the University
Phase 2. Study case: course of digital formation for university professors	3	Initial Description
	4	Problem
	5	Analysis and interpretation of the results of the course for the professor training
	6	Analysis and interpretation of the results of the intitutional professor evaluation

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Phase 3. Conclusions	7	Conclusions

Table 1. Phase details and target of the study case

For the case study concerning the course of digital education for the university professors, the techniques of the documentation review and the learning products review were used. A representative sample of 23 university professors was used, these professors took the digital education course. As instruments, records of the documentary analysis of the evaluations and evidence of learning of the studied courses were used. This analysis was complemented by tabulation, graphing, analysis and interpretation of the results of the current study.

4. Results

From the records of the documentary analysis of the participants' evaluations of the digital education course, item 1 of the evaluation investigated whether the participant is able to use new concepts in his/her teaching after the course. 82.60% of participants fully agree on the ability to use new concepts after the course, while 17.40% agree, and no one chose the other options. It can be interpreted that a high percentage of the participants show a high degree of satisfaction because the course provided them new concepts to be applied in their teaching work.

Item 2 asked if the participant is able to use new ICT tools to facilitate learning once the course has been completed. The results showed that 73.9% of professors are fully in agreement, compared to 26.1% who agree. It is observed that there is a high percentage of professors who say that after the course they are able to use new ICT tools to facilitate learning. The fourth part of the course participants mention that they agree, proving that the course met the initial expectations of the participants.

Item 3 investigated whether the participant is capable of innovating didactic resources using ICTs once the course has been completed. 78.3% of professors are fully in agreement to be able to improve didactic resources in the classroom using ICT, while 21.7% agree. As a trend, it can be observed a large number of professors expressing a high degree of satisfaction, stating that the course has allowed them to innovate didactic resources with the use of ICTs, which confirms that the course fulfilled the objectives established.

Item 4 asked if the participant is able to improve his/her professional practice after the course. To this question 78.3% of professors are fully in agreement to be in the capacity to improve their professional teaching practice, while 21.7% say they agree. Therefore, it can be inferred that this course has helped all participants to improve their professional practice by incorporating the use of ICT in their teaching methodology.

Item 5 expresses whether the participant is able to reflect on the teacher-student relationship through the use of ICT. 73.9% of professors are fully in agreement to be able to reflect on the student-professor relationship through the use of ICT, while 26.1% agree, and no participant chose the other options. As a similar trend to the responses of previous items, it can be interpreted that the significant acceptance of the course by the participants managed to consider the professor-student relationship through the incorporation of ICT in

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the educational process. It can be interpreted that with the use of ICT is leaving aside a vertical relationship professor-student, in which the professor was the axis of the educational process, to move to a horizontal relationship in which the student becomes the center of learning.

Item 6 addressed whether the participant is able to reflect on his/her conception of education through the use of technology. 65.2% of professors are fully in agreement to be able to reflect on their conception of education through the use of technology, while 34.8% agree. As an interpretation of the outcome to this question, it can be said that the use of ICT considers the education in the professor, although its result does not denote the same enthusiasm of the previous answers. Probably the use of technology privileges the practical and not the theoretical aspect, so that participants, although they agreed, did not express the same degree of high satisfaction in that technologies lead to a reflection on education.

Item 7 mentions whether the participant is able to apply the didactic process (start, development and closure of a class) after the course, 69.6% of the teachers are fully in agreement to be in the ability to use the didactic process when the class is started, developed and closed; while 30.4% express they agree. It can be inferred that the course provided the methodological strategies necessary for the development of a class.

Item 8 asked on whether the participant is able to exchange methodological experiences with their colleagues after the course. To this answer, 78.3% of participants fully agree on being able to exchange methodological experiences with their colleagues. However, 17.4% express that they agree, 4.3% say they do not know, and no participant chooses the other options. Most participants mentioned that the course developed the ability to exchange experiences with peers and academic peers, although it is important to mention that a minimum percentage responded "I don't know" in this question, which infers a doubt from the participant. It can be interpreted that within a small group of participants, the development of this item during the training event was not clear.

Item 9 asked whether the participant is able to develop his/her teaching portfolio. To this question, 61% of the participants fully agree on being able to begin the elaboration process of the teaching portfolio. While 30.4% agree, 4.3% do not know and 4.3% disagree. The course contemplated the reflection of the teaching experience through a portfolio as a result of learning, and the participants perceived this item given their acceptance degree. However, it is striking that a minimum percentage of participants answered that they do not know and disagree, so it could be inferred that this result of learning would have to be reviewed in upcoming courses, as they would not perceive it as a thematic integrated in the course of methodological strategies with ICT.

Item 10 asked if the participant is able to assess collaborative work using ICT of students. As a result of this question, it can be said that 65.2% of participants are fully in agreement to be able to assess the collaborative work with ICT of students, and 34.8% say that they do agree. It can be interpreted that the high satisfaction degree that appears as a result to this item evidence that the course promoted the collaborative work with ICT among the participants.

Item 11 asked whether the participant is capable of driving meaningful learning in their students through the use of ICTs. To this question, 73.9% of the participants said they were

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completely in agreement, while 21.8% agreed, and 4.3% responded that they did not know. Like the above questions, the majority of participants consider that the course provided strategies to generate meaningful learning in the students, although it draws attention that a minimum percentage abstained from answering this question choosing the "I don't know" option. It can be interpreted that although there was a highly satisfactory result, the use of ICT in the classroom would still be perceived as an instrument and not as a methodological strategy of the educational process.

As for item 12, participants were asked if they are able to incentivize self-activities with ICT among their students. With regard to the analysis of the answers to this question, 78.3% of the participants fully agree and 21.7% disagree. It can be inferred that the course trained professors that the use of ICTs fosters the student's self-activities, not only synchronously, but asynchronously.

Below is a bank of short questions whose choices were satisfactory, unsatisfactory and not satisfactory. Item 13 refers to whether at the beginning of the course the objective was announced. 95.7% of the participants consider it satisfactory that at the beginning of the course their objective was announced. 4.3% consider it unsatisfactory. As for the organization of the course, there is an acceptance of the majority of participants of the course that indicates that the objectives were announced at the beginning of the class.

Item 14 asked whether the themes were consistent with the learning results of the course, 91.3% of the participants considered satisfactory, 8.7% think they were unsatisfactory. In this item the majority of participants agreed that the course themes harmonized with the learning results and their evidence, even though there is a minimum percentage of participants who disagree.

Item 15 asked whether the contents of the course were developed with logical order, 91.3% of the participants consider that the logical development of the contents was satisfactory, while the 8.7% believe that it was unsatisfactory. It can be inferred that the majority of participants agree that there was a logical and concatenated development of the contents of the course, although there is a minimum percentage of participants that indicate that the logical order of the subjects of the course was not satisfactory.

Item 16 asked if cooperative work was promoted in the course. 87% felt that it was satisfactory, while 13% believed it was unsatisfactory. It can be inferred that there is a degree of satisfaction about the group activities that fostered cooperative work, and that it allowed an interaction between the participants, although question ten showed a high degree of satisfaction in relation to the question sixteen.

Item 17 asked on whether the climate in which the course was developed allowed its participation. 78.3% stated that the climate of the course was satisfactory, while 21.7% said the climate was unsatisfactory. It can be interpreted that there was a significant percentage of participants in the course who perceived an unfavorable climate. It should be asked what is meant by unsatisfactory climate, and in this it can be inferred that there were problems in the facilitators-participants relations, and even among the participants themselves.

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Item	Description	Fully agree	Agree	Do not know	Disagree
1	The participant is able to use new concepts in his/her teaching work after the course	82.6%	17.4%	0%	0%
2	The participant is able to use new ICT tools to facilitate learning	73.9%	26.1%	0%	0%
3	The participant is able to innovate didactic resources using ICT	78.3%	21.7%	0%	0%
4	The participant is able to improve his/her teaching practice after the course	78.3%	21.7%	0%	0%
5	The participant is able to reflect on the professor-student relationship through ICT	73.9%	26.1%	0%	0%
6	The participant is able to reflect on his/her conception of education through the use of technology	65.2%	34.8%	0%	0%
7	The participant is able to apply the didactic process (start, development and closure of a class)	69.6%	30.4%	0%	0%
8	The participant is able to exchange methodological experiences with their colleagues after the course	78.3%	17.4%	4.3%	0%
9	The participant is able to develop his/her educational portfolio	61%	30.4%	4.3 %	4.3%

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10	The participant is able to evaluate collaborative work using ICT	65.2%	34.8%	0%	0%
11	The participant is able to promote meaningful learning through ICT	73.9%	21.8%	4.3%	0%
12	The participant is able to encourage self-activities with ICT	78.3%	21.7%	0%	0%
13	The point of view of the participants was respected	100%	0%	0%	0%
14	Trainers showed knowledge on the topics addressed	100%	0%	0%	0%
15	Participants were encouraged to participate	100%	0%	0%	0%

Table 2. Evaluations of the university professors on the training course in ICT

It can be perceived the satisfaction degree of the participants of the digital education course from these seventeen items. Item eighteen allowed participants to express the positive aspects they found in the course. Among them can be highlighted the willingness of the facilitators, the number of tools addressed in the course, the mastery of the topic by the facilitators. In addition, they considered it very useful to learn new theories and technologies. It is noted that the course was interesting and there was interest and dedication of the participants.

On the basis of these positive aspects, it is possible to highlight the experience, disposition and motivation in person on the part of the facilitators of the course, which allowed the course to develop in a good environment. It also highlights the design of course activities in the virtual classroom that allowed achieving collaborative and autonomous learning of participants through the practice during and after the course.

Item ten allowed participants to express the negative aspects they found in the course. The following are the negative aspects of the course:

- Lack of clarity in the explanation of the tasks.
- The peer knowledge level was uneven.
- Allow discussion without respect among peers.
- There were assistants who were not satisfied with the course.
- Lack of time.
- Many topics to cover.
- Time was somehow lost by the lack of participation of the participants.

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- Lack of coordination in the communication on the activities. Confusion in the instructions.
- The level of knowledge of the participants was heterogeneous: those who already knew were bored and those who did not know considered the course developed very quickly.
- Lack of opening of some participants on new pedagogical criteria.
- Some issues were taught quickly.
- Little time for practicing the activities.
- The evaluation of activities should be individual and not in public.
- Work evaluations should be more qualitative and non-quantitative.
- Trainers related to the technological area are required.
- Unpunctuality of the participants.

From these negative aspects, it can be inferred that there were no negative aspects of the course about the content and the methodology. It is perceived that the weakness of the course settled in its organization, evidenced in elements such as problems in the enrollment to the course, unpunctuality of the participants that affected the development of activities, problems with the virtual applications of the course and lack of time.

The last items in the questionnaire suggested the participants to mention the interesting aspects that they found in the course. The following points of interest are mentioned:

- The importance of classroom tutoring.
- Technological tools updated in the virtual classroom.
- ICT is a necessary tool for professors.
- Teamwork of the instructors.
- New ICT concepts.
- The collaborative dynamics of the course.
- Human and technological growth.

Conclusions and recommendations

It can be concluded that must be considered the models of professor training in ICT towards a continuous digital formation, synchronous and asynchronous, formal and non-formal, in-site and online, autonomous and collaborative of professors. This digital training should seek the development of e-competencies or digital competencies for the ICT practices of the university professor both inside and outside the classroom (Gregory and Salmon, 2013). The use of blended learning as an effective modality for the professional development of the professor is relevant for the promotion of digital competencies in order to improve the teaching strategies through the use of information technology and communication (Drysdale et al., 2013; Halverson et al., 2014; Owston et al., 2008; Wold, 2013).

Blended learning can be an alternative to integrating ICT into professional professor development not only as information and communication technologies, but also as technologies for knowledge and learning management (Gu zer and Caner, 2014). The use of information technology and education in higher education makes it possible to improve the learning of university students, considering that the new information and communication technologies are part of everyday life. Its forms of interrelation, knowledge management, thought development, and behaviors are mediated by the use of ICT). This implies the study

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and analysis of new modalities to achieve meaningful, strategic and relevant learning; moreover, the university professor has as a challenge to immerse himself/herself into new digital logic and look for alternative spaces and programs for their digital education and training (Valverde-Berrocoso et al., 2004; Pe rez, 2010).

Digital professor training is a challenge for the university professor in due to the vertiginous advancement of technology. For this reason, blended learning is considered as an alternative for the development of the professor's digital competencies, from the presence of a formal training course, to the synchronous and asynchronous use of digital tools that complement digital Training (Regalado, 2013). In turn, the use of blended learning can be a digital training alternative in countries where connectivity levels are still incipient or limited: face to face can complement the university professor's digital education.

Blended learning is a virtual educational modality option integrating traditional and innovative, virtual, formal and non-formal, synchronous and asynchronous components of different languages, teaching approaches and learning styles. Thus, the promotion of research on blended learning is a challenge for researchers in educational technology (Valverde and Balladares, 2017). Moreover, given the versatility of this modality by the blended and combination criteria it has, it is important that the forthcoming research and educational practices incorporate elements of mobile education (mobile learning or M-learning) from the mobile devices such as smartphones and tablets and their corresponding applications (apps), as well as the elements of the ubiquitous learning (U-learning) that breaks with the traditional patterns of space and time in education, and incorporates new technological tools such as interactive television, satellite television, or cloud Learning or C-learning, which is the learning that emphasizes communication, collaboration, the community and the connection taking advantage of the potential of the clouds.

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Impacto del uso de las TIC como herramientas para el aprendizaje de la matemática de los estudiantes de educación media

Impact of the use of ICT as tools for learning ***mathematics for high school students***

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Resumen

En la última década existe un gran debate sobre el impacto que tiene el uso de las Tecnologías de la Información y de la Comunicación (TIC) en el ámbito educativo. La tendencia mediática y el uso masivo de tecnologías (computadores, teléfonos inteligentes, tabletas, PDA, laptops, entre otros) con conexión a Internet, son tendencias que generan cambios en el modo de aprender y acceder al conocimiento en una sociedad digitalizada. El estudio presentado es un diseño de investigación no experimental descriptivo con un enfoque cuantitativo, con una muestra de 121 estudiantes y 29 profesores de área de matemáticas de nivel medio de las unidades educativas de las provincias de Pichincha, Guayas y el Oro; pretende aportar evidencias empíricas sobre el nivel impacto que tiene la integración de las TIC como herramientas para el aprendizaje de la matemática de los estudiantes de educación media. Los resultados muestran que el papel de la tecnología e Internet en el aprendizaje de la matemática pueden generar alguna motivación, no representan para los estudiantes y docentes un factor significativo ni de alto impacto en el

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aprendizaje de la matemática a largo plazo, no por su uso o acceso a ellas, sino por la falta de competencia para aplicarlas en su aprendizaje.

Palabras clave
Educación media, educación tecnológica, formación del profesorado, matemáticas, TIC

Abstract
In the last decade, the debate about the impact on the use of Information and communication technologies (ICT) in education has educational field has increased. The media trend and the massive use of technologies (computers, smartphones, tablets, PDAs, laptops, among others) with Internet connection are trends that generate changes for learning and accessing knowledge in a digital society. This study is a design of non-experimental descriptive research with a quantitative approach, with a student and teachers sample: 121 students and 29 teachers medium level mathematics from the educational institutions from Pichincha, Guayas and El Oro; which aims to provide empirical evidence about the level of impact of ICT integration, tools used for learning mathematics for middle school students. The results show that the role of technology and the Internet in the learning of mathematics can generate some motivation, they do not represent for the students and teachers a significant factor or high impact in the long-term learning of mathematics, not for its use or access to them, but for the lack of competence to apply them in their learning.

Keywords
High school, ICT, mathematics, teacher training, technology education

1. Introduction
This article aims to determine the integration impact of information and communication technologies (ICT) as tools for the learning of mathematics in middle-school students of Ecuador. In this sense, it is necessary to consider that all teaching has an educational target, education should provide the human beings not only conditions for their cognitive formation, development of their thought, of their capacities and abilities, but also for the formation of the different aspects of their personality.

This century characterizes by the accelerated scientific and technological development, in which our society is in a profound process of structural transformation in relation to the global economy, politics, culture and the environment; especially with the digital revolution of ICT becoming more and more specialized. In short, these facts are related to the diversity of worldviews, identities, knowledge and expressions in a complex and permanently changing universe; especially with the ways of teaching, learning, communicating and working.
The knowledge society is a society of people, not of technologies (Castaño, 2006), is characterized by the constant and accelerated change of the knowledge assisted by the rapid progress of the ICT that facilitate the creation, distribution and manipulation of the information, causing that the knowledge acquired during training can be quickly obsolete (Adell, 1997; Cano, 2007; González, 2009), in which Internet plays an essential role in the economic, social, political and cultural transformations of the society (Castells, 2010). A society in which the conditions for generating, processing and transmitting knowledge-

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based information have been substantially altered by the ICT-centric technological revolution, mainly in computers and digital networks (Romeu, 2011).

In this context, ICT evolution is impacting education. In this scenario, educational institutions of all levels have the commitment to re-establish new educational priorities, guiding the concept of education and its pedagogical approaches towards a holistic and integral vision of the educational work. This process involves the continuous and permanent training of teachers in integral competencies and capacities, key factors for their integration in the teaching of mathematics. Therefore, the new role of the teacher, and particularly those of mathematics, plays a leading role to achieve meaningful learning in the students.

2. Revission of the literature

The evolution of ICT has impacted the world of education; therefore, technology has provided a wide range of resources available to support the learning of mathematics (Revelo, Revuelta and González-Pérez, 2018). The presence of ICT inside and outside of the classroom has undergone huge changes in the current educational system. The challenges and demands by the educational institutions determine the relevance of some factors, to have a quality education intended to attend to the current complexity. Thus, the role to play for ICT in the educational process is relevant as they provide the possibility of easing and improving processes that directly affect learning, school organization or communication with the community, among others (González-Pérez and De Pablos, 2015). In this context, the implementation process of ICT in the educational field depends on the technological resources that the educational institutions have, and the access facilities to insert them into the pedagogical practice. Thus, it is important to have lifelong teacher training on the mastering of digital media, in the same way, on skills and related techniques to implement innovative pedagogical practices in the classroom with ICT (Revelo, 2017).

In this context, Ecuador has oriented its educational policies to improve the quality of education by the promulgation of the Organic Law of Higher Education (LOES, 2010) and the Organic Law of Intercultural Education (LOEI, 2011). These laws are in accordance with the constitutional principles established in the Supreme Charter (2008) and international human rights instruments regulating the principles of education at the levels of initial, basic and high school education. In this context, the new challenges of the Ecuadorian state seek to train professionals and academics with capacities and knowledge that respond to the needs of national development with a humanist, solidarity-based vision, committed to the national objectives and with the good living, based on plurality and respect.

On the other hand, Art. 350, of the Ecuadorian Constitution, states that:

> The Higher Education System aims at academic and professional training with scientific and humanist vision: scientific and technological research; the innovation, promotion, development and dissemination of knowledge and cultures: the construction of solutions to the country's problems, in relation to the objectives of the development (p. 162).

In short, that would regulate and guarantee "the right to higher education, which tends to excellence..." (LOES, 2010, p. 5). In order to guarantee the development conditions and to

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achieve equity and coverage, it is a priority to invest in technological infrastructure, equipment and training in the use of ICT as pedagogical support tools for teachers (Angulo et al., 2013; Braslavsky, 2000). In this sense, the accelerated transformation that ICT have on vital habits, learning styles and ways of interaction imply different possibilities as unknown as infinite to which education should not only confront, but also give educational responses (Pérez, Castro and Fandos, 2016).

Consequently, the teacher's permanent training should be one of the main targets of the Ecuadorian State, especially now that the use of mobile technologies (smartphones, tablets, PDA, laptops, among others) by the students facilitate the implementation of more dynamic, flexible and open methodologies for the learning of mathematics. Therefore, the level of knowledge of these technological resources by the teacher provides an idea about their use to generate innovative changes within their educational practice to obtain meaningful learning in the students. Currently with the use of ICTs, the students improve their autonomy and responsibility to their own learning and contribute with their participation in the learning of the other fellow students when interacting in virtual environments of e-learning. In other words, the integration of ICT as educational innovation will contribute to the development of a digital culture through the creation of learning environments, being understood as "spaces organized for the purpose of learning; spaces that require certain components already identified: a pedagogical function (...), the appropriate technology (...) and the organizational aspects (...)" (Salinas, 2004, p. 2).

It is important to emphasize that the teacher training must be associated with the integration of ICT into the educational system, since they allow new possibilities of design and implementation of new teaching-learning methodologies as an integral part of the educational process, which seeks to enhance learning and make it more meaningful in students (Del Moral and Villalustre, 2010). In this sense, the use of ICT develops the digital competence that is part of the teaching competencies that characterize the professional profile of the professor (Carrera and Coiduras, 2012). Digital competition, being one of the basic competencies of the teacher in the 21st century, has caused the digital revolution to get to school classrooms at high speed, introducing improvements in the innovation processes in teaching and management, which has led to a change in the profile of the teacher and the student (Cabero, 2013; Cózar and Roblizo, 2014; Esteve and Gisbert, 2012; Silva et al., 2016).

As mentioned by some international institutions, the role and responsibility of the teacher is key to the use of ICTs to help students acquire and develop the necessary competencies for the 21st century (European Commission, 2006, 2012 and 2013; UNESCO, 2008 and 2011). They should be able to support the learning of their students in a digital world, able to use ICTs to improve and transform educational practices inside and outside the classroom by the use of ICT (Hall, Atkins and Fraser, 2014), what some researchers have called being competent to develop their digital competence as teachers.

3. Development of mathematical competence by using ICT

The rapid digital evolution of the increasingly specialized Web 2.0 that has transformed the Internet (Castells, 2008), as an instrument for the innovation of the teaching and learning processes, have generated new models of producing and sharing knowledge and information through the network (Mohammed and Ramírez, 2009; Tello Leal et al., 2010;

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Sangeeta, 2012). Therefore, the use of ICTs as a didactic resource allows the development of mathematical competence through real-time interaction between students and teachers, and peers in the

In order to contribute to the development of the digital competence of the math teacher, it is necessary to go beyond a simple generic definition of the competition. For this purpose, it is necessary to make contributions that have practical usefulness and transcend to the theoretical contributions. In this context, there are many ICT resources in mathematics that have been used by the teacher to improve the learning of mathematics, among them are: blogs, wikis, forums, chats, videos, social networks, etc (Basurto, 2015; López, 2011; López and Eduteka, 2003; Morón, 2013; SCOPEO, 2012).

ICT field of action	ICT/Specific Software	Digital teaching competence for the teaching of mathematics using ICT
Information management and informative literacy	Web browser (Mozilla, Internet Explorer, Google Chrome, etc.), Google, Google Drive, Dropbox, Wikipedia, Bing, wolframalpha, blogs, wikis, social networks, YouTube, Symbaloo, Delicious, Diigo, Scoop.it, Storify	• Use of browsers to search, locate and filter information, data and digital contents on specific mathematics topics. • Organize, evaluate and classify information and digital content available on the Web, for educational purposes that allow developing collaborative learning in mathematics. • Store and recover information and digital content to improve the teaching-learning process of mathematics.
Communication and collaboration	Forums, chat, blogs, wikis, social networks (Facebook, Twitter, Edmodo, Google), collaborative (Google Drive, Dropbox), multimedia content (YouTube, prezi, Slideshare, Scrtibd, Flickr), video conference, e-classroom,...	• Interaction by the management, use and application of digital communication. • Understand the proper use of different forms of communication with the digital media. • Share information and digital content with different digital media. • Citizen online participation, with the use of digital environments that promote collaborative work in mathematics. • Develop collaborative work with the use of digital channels in order to support the teaching-learning processes of mathematics.

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		• Use and manage learning activities in virtual communities and social networks in an ethical, legal and safe way, while instructing the students to have a responsible behavior in the network. Create, track and transmit your own digital identity as well as your students '.
Creating and publishing content	Blogs, wikis, social networks (Facebook, Twitter, Edmodo, Google), collaborative (Google Drive, Dropbox), multimedia content (YouTube, prezi, Slideshare, Scrtibd, Flickr), video conference, e-classrooms,... dynamic connections such GeoGebra, Cabri, Wimplot, Graph, augmented reality, wolframalpha, Mathway, fotomath... Advanced tools of Excel, free Cal Office, calculator, Derive, Wiris, WxMaxima, SPSS, communities full of mathematical resources like Descartes projects, Kahn Academy, Eduteka,...	• Application of WEB Tools 2.0 to create digital educational materials (text, presentations, images, videos, tables, conceptual maps) and share them in the network. • Create and manage spaces on the WEB 2.0 in which multimedia educational contents (images, infographics, sounds, animations, videos...) are published, information that would adapt to the learning of mathematics. • Create and manage math-specific content using: blogs, wikis, WebQuest, multimedia content (YouTube videos, Prezi, SCRIBD, Slideshare...), as educational innovation. • Know, manage and use a wide variety of manipulative dynamic connections, advanced tools, communities full of mathematical resources to adapt them to the teaching-learning needs of mathematics. • Integrate, combine, modify digital content found on the network by adjusting it to the needs and respecting the use of licenses. • Respect the legal regulations on copyright of the digital contents of the network, citing its sources. • Make changes to software, applications, configurations, programs, devices to use as educational innovation.

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		• Make modifications to the advanced digital media functions in relation to the needs of the teaching task. • Make modifications to the free software in order to improve it and adapt it to the needs of the teaching-learning process of mathematics.

Table 1. Development of mathematical competence by using ICT

3.1 Advantages and disadvantages of using ICTs in the learning of mathematics

ICTs allow students to create intuitive ideas and formal mathematical concepts, by providing an appropriate environment through interaction, visualization, interactivity; thus, facilitating learning by discovering students (López, 2010). In this context, ICTs as a didactic resource are promoting a new vision of knowledge and learning (Freire, 2007), transforming the role of the teacher into the teaching-learning process, inserting the student in the dynamics of creation and dissemination of knowledge through the network.

Alonso et al. (2010), Area-Moreira (2010), Area-Moreira and Ribeiro-Pessoa (2012), Bennett et al (2012), Buckingham (2009), Cela et al (2010), Colás and Casanova (2010), Cobo and Pardo (2007), Del Moral and Villalustre (2010), De la Torre (2006), Freire (2007), Kopcha (2012), Molina and Iglesias (2014), Pachler et al (2010), Revelo (2017), Revuelta and Pérez (2009), Romero (2008), Salinas, Benito and Lizana (2014), Santamaría (2005), Wong et al (2008), Yang (2012), Zuluaga, Pérez and Gómez (2012), and other authors have concluded that the integration of ICTs in the teaching of mathematics has multiple advantages in improving the quality of teaching, materialized in aspects such as access from remote areas, flexibility in time and space for the development of learning activities (Ferro, Martínez and Otero, 2009). ICTs also allows to search, interact, collect and process information to generate new knowledge.

	ICT in the teaching of mathematics
Types	• Blogs • Wikis • Social networks • Collaborative • Social bookmarks • Multimedia content • Other tools
Applications	• Encourage and develop written expression. • Encourage and develop spaces for discussion and exchange of information. • Reinforce classroom activities and exercises about the topics studied. • Create, search, edit, manage and publish content and information for educational purposes. • Motivate interactive participation between teachers and students.

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	• Establish integration spaces for all types of links, text, images, audio, video, presentations or animations and any other multimedia element. • Promote individual, collaborative and corporate work for participants. • Allow the construction and development of knowledge in a learning community. • Encourage and develop teacher training. • Promote and develop digital competencies in teachers and students.
Advantages	• Facilitate immediate access to the search and selection of the information available on the network from any location. • Allow to configure hypertext and multimedia content on any subject. • Allow to create, edit, manage, publish and share through the different digital communication channels (forums, chats, blogs, wikis, social networks, among others) content and information for educational purposes. • Facilitate relationships with social networks and other network applications. • Establish a rupture of space-temporal barriers in the teaching-learning activities. • Does not require great computer knowledge. • Facilitate communication and interaction between the different agents of the teaching-learning process and synchronous and asynchronously. • Promote different levels of individual or collective participation between teachers and students. • Allow a high degree of interdisciplinarity for education as it permits to break traditional teaching-learning schemes inside and outside the university classroom. • These are dynamic and encourage open and flexible training processes for the autonomous and collaborative learning of students from any place. • Allow students to think on their learning process. • Allow learning from the Feedback. • Increase the interest and motivation of students with difficulties in improving their learning process. • Facilitate the construction of knowledge in a learning community. • Encourage the development and training of teachers. • Allow to acquire digital competencies to be functional in the information and knowledge society • Encourage the participation of teachers and students in virtual communities and social networks, social and collaborative tools to promote reflection, creation, empowerment and self-development. • Immediate propagation of contents and information (RSS) that allow a better development of the network structure.

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Inconveniences	• Confidentiality of the information published on the network. • Information and content is public on the network. • A lot of content without scientific foundation or credibility sources. • Insecurity of data storage on the network. • Complete dependence on Internet access. • Changes in the conditions of the service: they can be free today but not tomorrow. • Intellectual Property Vulnerability – copyright on the content and digital information published on the network. • Ignorance and fear on the use and applications of the WEB 2.0 in educational processes by the participants. • Teaching is non-personalized. • Excess of information, which is difficult to process in its entirety

Table 2. Advantages and disadvantages on the use of ICT in the learning of mathematics

4. Objectives of the investigation

Considering the context where the research is taking place -institutions of middle education in Ecuador- the objectives are:

1. Determine the training level that teachers and students have in the use of ICT as tools for the mathematics learning.
2. Analyze the impact of ICT as tools for learning mathematics in middle school students.

To respond to the proposed objectives, the following research questions were raised:

1. Does the training level that teachers and students have in the use of ICT influence the learning of mathematics?
2. Does the integration of ICT impact in the learning of mathematics of elementary school students?

5. Materials and methods

A descriptive non-experimental research design was used with a quantitative approach that, being a formal, objective and systematic process, allowed obtaining quantifiable information about a phenomenon investigated numerically and using the statistics tests it was possible to describe, explain and test the questions posed (Bisquerra, 2004). For the data collection, a structured survey was designed as the only information-gathering instrument, in order to obtain the information related to the objectives raised. The survey presented two types of closed questions, in which the respondents were given the option of choosing Yes, No and multiple choice. The questionnaire was applied by students of the education careers of the UTE University distance education system and was the same for students and teachers of educational institutions in Pichincha, Guayas and El Oro.

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6. Population and sample

The population consisted on 458 people, out of which 423 are students of elementary school and 35 teachers of mathematics from educational institutions of Pichincha, Guayas and El Oro. For calculating the sample, the statistical formula for population sizes higher than 10 people was used, by which 150 sampling units were obtained, and were distributed as: 29 math teachers and 121 students, who were asked to respond voluntarily and anonymously the survey presented in a physical way and in order to guarantee the results and conclusions generated from the information collected in this research (see table 3).

Province	Population		Sample	
	Students	Professors	Students	Professors
Guayas	116	23	40	17
Pichincha	240	8	49	8
El Oro	67	4	32	4
Total	423	35	121	29

Table 3. Probabilistic strategy to select the sample

7. Planning and application of the field work

Phase I: At this phase the presentation of the research project divided into three qualification plans is determined. Once approved, it is proceeded to search and review the specific literature related to the research topic in some databases such as Education Resource Information Center (ERIC), Scientific Electronic Online Library (SciELO), Dialnet, Google Academic, Thesis in the Network (TDR), Online doctoral theses (TDX), Doctoral theses from 1976 (Theseus), Scopus (Multiplidisciplinar), Host Research databases (EBSCO), Digital Library of the OEI, Library of UEX, Eduteka, specialized journals, among others. This stage of research started on April 2016.

Phase II: It is determined by the definition of a non-experimental and qualitative research design, focused on a descriptive survey and the definition of the survey as a technique for collecting information that seeks to respond to objectives.

Phase III: The survey is designed, the population and sample are defined. The technique applied for the selection of the sample is probabilistic, therefore, to calculate the representative sample of the population the statistical formula was used. “Probabilistic samples are essential in transversal research designs, both descriptive and correlational–causal” (Hernández Sampieri et al., 2010, p. 177). Given the characteristics of the research, all the elements of the population have the same probability of being elected. Once the questionnaire was established, it was applied physically by students of the education careers of the distance education system of UTE University, and it was the same for students and teachers of educational institutions of Pichincha, Guayas and El Oro, prior authorization of the academic authorities and approval of students and professors selected at random for further analysis and interpretation. The approximate time to answer the questionnaire was 5 to 10 minutes, and the application was on October 2016.

Phase IV: The statistical analysis and interpretation of the data collected with the instrument developed for this research were performed by using the quantitative descriptive method

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of frequencies and percentages of each of the variables under study. The analysis was complemented by means of bivariate frequency distributions using contingency tables, the use of chi-square statistical tests and the contingency coefficient and a confidence level of 95% in order to determine the statistical relationship between the cross variables. The statistical program SPSS for Windows was used, version 22.0. Finally, the writing and presentation of the results started along with the discussion and conclusions of this research.

8. Results

To respond to the first research question: Does the training level that teachers and students have in the use of ICT influence the learning of mathematics?

The study sample are math teachers and students with medium level and studying at the educative institutions in Ecuador, out which 38.0% (n = 57) corresponds to Guayas, in equal percentage to Pichincha and 24.0% to El Oro (n = 36). The average profile of respondents are women 62.7% (n = 94), from which 81.9% are students and 18.1% are teachers, compared to 37.3% (n= 56) who are men, from which 78.6% are students and 21.4% are teachers. As for the academic level of teachers (n = 29), 17.2% (n = 5) have master's degrees; 55.2% (n = 16) have a bachelor's degree and 10.3% (n = 3) are graduated from high school, showing that the highest number of teachers are graduated in education. It can be observed that math teachers are interested to continue studying.

Regarding the age, most of the population studied belongs to the "Net generation" (Tapscott, 2010) or digital natives (Prensky, 2001), terms used to name the generation born after 1980, those people whose "learning preferences tend to teamwork, experiential activities, and the use of technology" (Cabra and Marciales, 2009). In table 4, it can be observed that 93.3% (n=140) of the sample analyzed in this research is less than 40 years, compared to 6.7% (n= 10) who is older than 40 years, showing that the largest number of students and teachers are digital natives and there is a not very significant number that could be considered as non-native digital, therefore, the integration of ICT to the learning of mathematics is a great challenge (Cabra and Marciales, 2009). Researchers such as Wodzicki et al. (2012), Bennett et al. (2008) and De la Hoz, Acevedo, and Torres (2015), infer that digital natives have developed skills that go hand-by-hand with the evolution of technology and the Internet; this means that there are differences between previous generations in the sense of facing other difficulties in implementing changes in their ways of learning by using ICTs.

Age	Students		Teachers	
	n	%	n	%
10 - 15 years old	50	33.3%	0	0.0%
16 - 20 years old	65	43.3%	0	0.0%
21 - 25 years old	5	3.3%	2	1.3%

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26 - 30 years old	0	0.0%	5	3.3%
31 - 35 years old	0	0.0%	5	3.3%
36 - 40 years old	0	0.0%	8	5.3%
More than 41 years old	0	0.0%	10	6.7%
Total	121	80.0%	29	20.0%

Table 4. Rank of ages of the studied sample (n=150)

For the treatment and analysis of quantitative information, the statistical program SPSS 22. was used. In order to determine the validity and reliability of the survey, the split plot technique and Cronbach's Alpha analysis were used, respectively. Items were grouped in the survey by dimensions, and once statistically debugged, the factor that includes items related to the impact level of the integration of ICT as tools for learning mathematics in students coursing elementary school showed a KMO index of 0.701 (> 0.5) and a Cronbach's Alpha of 0.694 (Alpha Std. = 0.679), which are acceptable values for this type of analysis. Teachers and students were asked to value on a Likert type scale from 1 to 5, in which 1 is the lowest score and 5 the maximum.

Table 5 indicates the answers about the items in the *training level* in *the use of ICT as tools for learning mathematics* based on their average assessment and standard deviation. The results show that the most relevant factor for teachers and students is that "they consider it necessary to receive ongoing training on the use and application of ICTs as tools for developing educational innovations and good educational practices (media = 3.39). On the contrary, the factor with the least impact is the one related to the fact that "the training level received in the educational institution about the use of ICT to innovate their educational practice in the learning of mathematics" is very little or scarce (mean= 1.54). In other words, 85.7% of the items are below an average of 3.0, which shows a clear negative trend in the training level in the use of ICTs as tools for learning mathematics. The dispersion of the scores of each item is not very large with respect to the average (global mean= 2.67), because the standard deviation is on a scale less than 1.

	II. Training level in the use of ICT as tools for learning mathematics	**Mean**	**Standard deviation**	**N**
1	Value the level of knowledge you have about the use of ICT for learning mathematics.	2.67	0.690	150
2	Do you know the technological resources that exist in your institution for the development of your educational practice.	2.77	0.670	150
3	Do you believe that the use of ICT in the classroom generates changes and innovations in the learning of mathematics.	2.97	0.634	150
4	Do you use the technological tools available in your educational institution such as computers, mobile devices, math software, Internet, etc., for the teaching and learning process.	2.91	0.780	150

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5	Is there enough support from your educational institution to incorporate technological tools as educational innovation.	2.43	0.789	150
6	Assess the training level received in your educational institution on the use of ICT to innovate your educational practice in the learning of mathematics	1.54	0.672	150
7	Do you consider necessary to receive ongoing training on the use and application of ICTs as tools for developing educational innovations and good teaching practices.	3.39	0.954	150
	Total global average	**2.82**		

*** 1 = very little; 2 = little; 3 = sufficient; 4 = enough; 5 = a lot**

Table 5. Training level in the use of ICTs as tools for learning mathematics (n = 150)

Finally, in order to answer the second question of this research, Does the integration of ICT impact in the learning of mathematics of elementary school students?

Table 6 summarizes the items related to the integration impact of ICTs as tools for learning mathematics, based on their average assessment and standard deviation. The results of the sample surveyed determined that the item (10) is the most relevant factor, since teachers and students consider that the integration of ICT will have a significant impact on the learning of mathematics (mean = 3.59), which can have a counterproductive effect in the beliefs that learning mathematics is more efficient if using ICTs. Likewise, items (17), (11) and (15) referring to the motivation for the time of use of technological resources (computer, tablets, software of mathematics, Internet, etc.) would be enough for the learning of mathematics; even though, the averages are above 3.0 it is not clearly seen in the sample studied that the use of technological resources have the expected impact to the learning of mathematics. On the other hand, item (8) whose mean = 2.39 (as the rest of the items below the average 3.0) and refers to the availability of technological resources for the development of educational practice in each of the institutions of the sample studied is is little, showing that it is a very negative factor in integrating ICT for the learning of mathematics in the educational institutions studied. On the other hand, the dispersion of the scores of each item is not very high with respect to the average (global mean = 2.91), because the standard deviation is on a scale less than 1.

III. Impact Level on the integration of ICT in the learning of mathematics		**Media**	**Standard deviation**	**N**
8	Does your institution provide technological resources for the development of your educational practice?	2.39	0.722	150
9	Is there Internet connection that facilitates your educational work in the classroom?	2.71	0.994	150
10	Do you consider that the use of ICT would improve the learning of mathematics?	3.59	0.991	150
11	Would you like to use technological resources such as computer, tablets, mathematics software,	3.29	0.945	150

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	Internet, etc., to improve the learning of mathematics?			
12	Do you think that if the math class used technological resources such as computers, mobile devices, math software, Internet, etc., learning would be more motivating?	2.67	0.953	150
13	Do you think that the use of social networks, blogs, wikis, multimedia content (videos YouTube, Prezi, Scribd, Slideshare,...), would contribute to a meaningful learning of mathematics?	2.88	0.996	150
14	Do you think that the use of social networks (Facebook, Twitter, Google Plus, etc.), blogs or pages designed by teachers would support the learning of mathematics outside the classroom?	2.75	0.926	150
15	Do you think that if you could use the computer longer your math learning would be easier?.	3.16	0.997	150
16	Using math software makes it easier to learn math rather than studying books.	2.58	0.869	150
17	The use of computer and Internet helps me to learn easily the knowledge of mathematics	3.38	0.981	150
18	The use of the computer can lessen my mathematical reasoning ability.	2.66	0.961	150
	Global Media	2.91		

*** 1 = very little; 2 = little; 3 = sufficient; 4 = enough; 5 = a lot**

Table 6. Integration impact of ICTs as learning tolos of mathematics (n = 150)

Discussion and conclusions

The results presented in this paper are part of a deeper investigation. These indicate that most of the teachers and students have negative opinions about the use of ICTs as tools that can contribute to the learning of mathematics. Hence, the need and importance for the training on the use and application of ICT as didactic tools to improve the quality of education, and to generate greater communication and interaction between teachers and students to propitiate collaborative learning. The training level in the use of ICT as tools for learning mathematics has an important possibility in the redefinition of pedagogical practice in education. However, ICT by having pedagogical application potentials, imply new challenges for the teacher who has students with developed skills and that go together with the evolution of the technology and the Internet.

On the other hand, the incorporation of ICTs into the educational process means adaptation and innovation, since the development and evolution of technology is a key element in today's society, although it is not the solution to educational problems. In other words, ICTs cannot change the teaching-learning processes, but they can increase their effects in the educational process. In this sense, several researchers like Molina & Iglesias (2014), Salinas, Benito, & Lyzana (2014), Padilla, Moreno, & Hernández (2015), Rodríguez (2010), Rodríguez (2015), Sosa (2015), Revelo (2017), among others, in their studies state that the incorporation of ICTs does not guarantee the transformation of educational practices that is, these alone do not modify the teaching-learning processes, but the way teachers use them in each area of knowledge so that their students improve their learning.

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Although the results of this research are not conclusive, it is clear that the integration of ICTs as tools for learning mathematics goes beyond the simple use of these new tools, which will cause substantial changes in the teaching-learning process, in the teacher's performance, in the teaching methods, etc. In conclusion, it is necessary to develop a better understanding on the use of ICTs, so that innovations in the educational field are not absorbed by technology, but are guided by the pedagogical processes that generate meaningful learning among teachers and students.

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Tejiendo redes entre género, interculturalidad y biodiversidad

An infallible relationship among gender, interculturality and biodiversity

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Resumen
Este artículo invita, a mirar al género y la interculturalidad en la complejidad de sus interacciones que ocurren en unos contextos eco ambiental en el que las relaciones de poder de unos colectivos sobre otros -de hombres sobre mujeres o blancos sobre indígenas y afrodescendientes- con la biodiversidad implican, a su vez, interrelaciones con graves consecuencias en términos de equidad. El género y la interculturalidad tienen un desarrollo conceptual de mucha data; no obstante, su evolución, más bien, ha sido en paralelo con poca articulación entre los dos, con abordajes fragmentados y parciales. Las personas por su género y la pertenencia a una etnia han sido objeto de discriminación, inequidad y exclusión y muchas veces separadas de sus medios de vida. En tal sentido, el propósito de este estudio es abrir un espacio de diálogo y encuentro desde un enfoque interdisciplinar en aras de entender cómo se entrecruzan, se dinamizan y se potencian en el uso, acceso y participación de los beneficios de la biodiversidad las poblaciones que habitan estos territorios. La generación de estos nuevos puentes pone el acento en una ecología de saberes, en la que el estado, la academia y las comunidades locales le apuesten a un manejo sustentable de la biodiversidad. La metodología es de carácter cualitativa, por cuanto se hace la confrontación permanente, en un proceso de diálogo intercultural que busca un cambio que armonice la convivencia entre los grupos comunitarios y la naturaleza.

Palabras clave
Biodiversidad, diálogo de saberes, discriminación, equidad, género, interculturalidad, sustentabilidad.

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Abstract

This article looks at gender and interculturality in the complexity of their interactions that occur in the eco-environmental contexts in the power relations of some groups over others (e.g. men over women or whites over indigenous and afro-descendants) with biodiversity, implying interrelations with severe consequences in terms of equity. Therefore, gender and interculturality have a long-standing conceptual development; nevertheless, its evolution has been rather in parallel with little articulation between them, with fragmented and partial approaches. People have been discriminated by their gender and according to their ethnic group, they have also suffered inequity, exclusion, and they have been often separated from their livelihoods. In this regard, the purpose of this study is to create a space for dialogue and discussion from an interdisciplinary approach in order to understand how the populations that live in these territories interact, dynamize and improve in the use, access and participation of the benefits of biodiversity. Additionally, the construction of these new links creates the accent on ecology of knowledge, in which, the state, the academy and local communities bet on a sustainable management of biodiversity. The methodology used in this research is qualitative because of a permanent confrontation in a intercultural dialogue process that seeks a change that harmonizes the coexistence between community groups and environment.

Keywords

Biodiversity, dialogue of knowledge, discrimination, equity, gender, interculturality, sustainability.

1. Introduction

> More than fifty percent of the world's population lives, feels and thinks as a woman (FAO, 2011, p. 2)

Environmental problems, among them, those of biodiversity affect people differently, therefore, their approach is interdisciplinary and multidisciplinary, and from a gender and intercultural perspective, since, the consequences of the loss of biodiversity are shocking for both men and women and for the flora, fauna and the environment. A strategy for the conservation and restoration of biodiversity at the local, national and global levels can guarantee the individual collective rights of people, nationalities and nature, which means "new ways of doing, thinking and feeling social life and nature, consistent with the position of the human being as an ethical subject that demands emancipation, dignity, freedom and participation" (Jara, 2013, p. 13), much needed for the good living.

The need to know the specific realities of people and nationalities is fundamental in this process of relationship between gender, culture and environment, in which the differences are understood, showing how these differences mark inequalities, exclusions and discrimination in the use, management, control and benefits of biodiversity and environment services.

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Thus, in Latin America, according to FAO (2011) 53 million people suffer hunger and poverty as the sign of inequality; the processes of abandonment of the earth grow as a livelihood of food production and increase food dependence in a geometric way; despite the fact that "women are the main producers, those who learned to preserve seeds and knowledge about the transformation and development of agriculture" (Lovera, 2010, p. 2); women of different nationalities with their knowledge and practices in the use of the biodiversity are the one who most conserve and use them appropriately (Paulson, 2007).

Understanding this sociocultural and ecological context opens the possibility of a necessary linkage between the academy and the local communities, so that from the praxiology of the education it connects with the reality built in concrete facts of interrelation of local communities and biodiversity.

This document begins with the theoretical foundation of the concepts of gender and interculturality in order to have a clear understanding of their constituent elements and their analysis categories; then, it continues with a description of the state of the art of these topics, in which the emphasis is placed on Ecuador; it ends with conclusions in which the link between the theory and the social praxis are established, information that appears as an effort of practical hermeneutic of investigation action of the social, cultural, economic and ecological reality

2. Gender and interculturality in biodiversity

From an analysis of gender and interculturality in biodiverse contexts it is recognized the existence of dialectical relations that are established between different cultures that share imaginary ideological and material realities, making necessary to ask how and why they work in that way and what implications they have for the environmental management and social systems (Rodríguez and Iturmendi, 2013); meanwhile, there is much to learn from ancient cultures that have persisted for centuries through worldviews and practices that guarantee the access of all women and all men, and that promote the sustainability of resources in equality and justice.

2.1. Gender relations mark power relations

People engaged in social sciences and development specialists use two different terms to refer to biological differences and those socially constructed, these are sex and gender. Although both relate to the differences between women and men, notions of gender and sex have different connotations. Sex refers to the biological characteristics that, among others, are common to all societies and cultures. Gender, is related to the traits shaped throughout history of social relations (GIZ, 2013).

Benería (1987), defines gender as:

> The set of beliefs, personal traits, attitudes, feelings, values, behaviors, activities that differentiate men and women through a social construction process that has several characteristics. First, it is a historical process that develops at different levels such as the state, the labor market, the schools, the media, the law, the family and through interpersonal relations. Secondly, this process implies the hierarchy of these traits and activities in such a way that the ones that are defined as masculine are attributed more value. (p. 46).

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Throughout history, these social structures have been assigned by the sexual division of labor, roles and different responsibilities from women and men to their lives, families and the community, making each gender to have different knowledge, control and access to natural resources, as well as different opportunities to participate in decision-making about their use and benefits of the goods and services that biodiversity provides.

This reality marks different forms of gender relations, “which are based on the way in which a culture and a particular society understand what it means to be a man or a woman” (Sasvari, Aguilar, Castañeda and Salazar, 2010, p. 41). These relationships permeate all the dimensions of everyday life and are marked by power relations. In this sense, the idea is to achieve empowerment, especially for women, since they have been the ones who have mostly suffered exclusion, discrimination and inequality.

The empowerment of women is known as the process by which people acquire power and control over their own lives, which includes, awareness, development of self-esteem and better opportunities and options (Sasvari, Aguilar, Castañeda and Salazar, 2010). In other words, empowerment is the process through which power, space and above all the word are gained; therefore, women's empowerment does not imply an exercise of domination or an abuse of power, but a capacity for affirming, of being able to act and to promote each and every one of the qualities, not only individual, but also collective of women to affirm the self-confidence, capacity and autonomy to manage and handle their own lives.

Autonomy is thought as an emancipatory strategy that allows to change the power relations and to bet on the equity in the recognition of the plurality and the diversity through an agency, that would allow women to develop in the spaces and dimensions in which they act, create, appropriate and manage a life of opportunities, in fairness and equality.

2.2. Women and their relationship with biodiversity

The predominant orientation of the gender approach in the environmental field favors the instrumentalization of women in terms of sustainable development rather than their empowerment. The approach is being used as a technology, while the gender discourse that questions the validity of hierarchical power relations between men and women has been diluted (Cuvi, 2011, p. 13). This is reaffirmed in the analysis of the last years in relation to gender and environment that are characterized by their little scientific production, their disarticulation between the production of knowledge and their “lack of filters” to evaluate and criticize them.

It is necessary to recognize the work of women, who are discoverers of agriculture, the value of their contributions in the original medicine, the secrets of the Earth and the preservation methods. The unequal distribution of power and management of land ownership is historically favorable to men. The management and production are based on gender inequalities, over the time, women have lived their relationship with the Earth, as a “help” task and not as a meaningful contribution, which is to feed the others (UNESCO, 2009).

The links between women's lives, their roles and relationships of women and men are explored as well as the gender systems at the cultural, legal, political, economic and historical phenomena. This methodological step involves growing interdisciplinarity. In this

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regard, Paulson (2007) states that the categories and instruments of sociology were readily adapted to the study of the roles and identities of women and men; however, working with gender systems requires adding political, agricultural, philosophical, legal, educational, anthropological and more considerations that account for the complexity of their interrelationships.

The importance is to recognize the need to understand the relationships between human groups and natural systems in order to make those relationships more balanced and more sustainable. This is the reason avant-garde research and projects are being done with analytical perspective, in order to connect ethnographic, ecological and agricultural local research with institutional and historical studies and political and economic analyses. The idea is to look for results that not only provide a systematic understanding of the relationships between men and women and the use of resources, but also serve to generate conservation and development projects, as well as influencing on national policies and international influences on the flow of resources, capital, people, technologies, ideas and ideologies (Paulson, 2007).

From this analysis, Paulson (2007) says that it is necessary to specify the use of language in the context of a theoretical conceptual argument. Therefore, it suggests making a dialectical leap to:

> Instead of preserving nature,
> strengthen the ecosystem's generating capacities.
> Instead of protecting the woman,
> empower women's transformative actions.
> Instead of preserving culture,
> revitalize cultural creativity.
> instead of documenting social realities,
> conduct research to help transform realities (p. 8).

Gender and environmental issues in the region is found in the literature generated in Europe and the United States, which have contributed to the construction in this field of knowledge from various disciplines (psychology, anthropology, geography, economics) and from culturally different realities. Many of these texts propose relevant conceptual and methodological proposals that help to understand the multiple and complex interactions that occur between the social and the environmental aspects, and formulate research questions that allow progress in understanding the social and cultural dimensions of environmental change to envision actions aimed at more equitable and fair societies (Vázquez García and Velázquez Gutiérrez, 2004, p. 12).

A good example of this is the book “Looks to the future. Towards the construction of sustainable societies with gender equity” (Faúndez and Weinstein, 2012), which constitutes a compulsory reference point for teachers, students, researchers and investigators interested in the issues of gender and environment.

In Ecuador there are few professionals from non-governmental organizations, environmental NGOs and/or technical teams that are using the gender approach marginally. They use this approach primarily to enhance the work of rural women in the conservation of natural resources in the projects they carry out, and to a lesser extent for these women to know their rights and collectively organize against their subordination. Thus, the

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predominant orientation of the gender approach in the environmental field favors the instrumentalization of women in terms of sustainable development rather than their empowerment to exercise their rights. The approach is being used as one more technology, while the gender discourse that questions the validity of hierarchical power relationships between men and women has been diluted (Paulson, 2007, Cuvi and Poats, 2012).

In the research carried out by Varea (2006) on “The powers of Yachacs and Kichwas midwives in the Ecuadorian Amazon”, the unequal gender relations between the Yachacs (men) and the midwives (women) are exposed, relations that mark power, status and recognition. The author, in her study, says that it is distinguished between the daily use of plants such as cassava and the ceremonial use of plants such as ayahuasca, which are performed by women and men of the community, respectively.

Women and men had a subjective relationship with the environment. The midwives of that community (Puyo Pungo) assisted daily illnesses, while the yachas cured the magical and imagined diseases. While the midwives work in everyday spaces, the Yachacs practice their work in ceremonial spaces. So they have acquired less symbolic meaning than they have throughout their lives. They have preserved their knowledge by controlling the body of the women of the community, through inheritance and their power relationship with other women. Yachacs and midwives do not maintain complementarity relationships on a level of equality, because their knowledge is more valued than theirs (Varea, 2006, p. 89).

In this research in the Amazon with the Kichwa population, it is evident the sexual division of the work and the roles that the genders assume in the reproduction and production of the daily life that responds to patriarchal conceptions, where the image of the man acquires superiority compared to that of women.

Despite the fact that female midwives retain their knowledge through transmissions from one to the other, they cure less valued diseases related to the reproductive environment of communities, from every day and private spaces. “They are excluded from the ceremonial world, but are responsible for the care of childbirth, pregnancy, sexual and reproductive women health and children diseases” (Varea, 2006, p. 102).

2.3. Interculturality and ecology of knowledge

Social exclusion is a process that leads to deprivation for the exercise of capacities (Sen, 2000). So being excluded can be a deprivation. In other words, the perspective of social exclusion represents a multidimensional and processual model for understanding the various factors that contribute to the generation of poverty and social inequality. It identifies with a group, an ethnicity, a gender, the condition of human mobility, being in a certain age group can be considered as visible factors of rapid recognition for exclusion based on stereotypes and imagination.

The conceptions and worldviews present in almost all ancestral people establish intimate associations between “land, territory and nature”. The notion of the nature and universe of indigenous people refers to a cultural and spiritual sense of belonging and identity, where it is obvious to appeal to the right of a healthy and balanced environment. The systemic gaze, the integrated approach, the intimate relationship of the human being with the nature that ancestral people have contrast with the utilitarian perspective, the separation of things,

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dualism, the difficulty of integrating people, who characterize the Western view (CODAE, CODENPE and CODEPMOC, 2013, p. 16).

The systems of life and the self-determination of nationalities and people in the framework of plurinationality is a possibility to strengthen their sustainable and inclusive practices and forms of production, which enable the reconstruction of alternatives socio-natural worlds to the modernization that excludes and contaminates; productive economic systems that obey particular non-cumulative logics, fundamentally endogenous, understood as a growing territorial capacity to preserve ecosystems and generate good living. "Self-determination leads to self-management, expressed in the faculty of people to empower and manage their own affairs; i.e., develop capacities that allow to govern and administer themselves freely in their statute" (CODAE, CODENPE and CODEPMOC, 2013, p.16).

In Ecuador, the word intercultural emerged at the beginning of the constitution of 2008 (Art. 1). Ecuador is defined as a "constitutional state of Rights,..., intercultural, plurinational and Secular"), as well as in some laws, public policies and plans, for example, the Organic Law on citizen participation, national Plan of good living 2013-2017.
Cuvi and Poats (2011), declare that:

> Interculturality promotes the horizontal dialogue between cultures, a respectful relationship without hierarchies. This implies inhibiting our criteria and critiques, our biases and concentrating on understanding other cultural practices that are different from ours. It is a matter of absorbing the ethnocentrism, that is, the tendency to interpret other cultures from the principles of the culture of the one who interprets. Thus, the key words of the intercultural concept are: respect for diversity, interaction, dialogue, horizontality. This concept is generally built in relation to and opposition to multiculturalism (p. 9).

Interculturality is a continuous discovery, a perpetual marvel, the recognition that the other is not a void to fill but a fullness to discover. There can be no intercultural competence without cultural competence that allows recognizing from where we speak, our biases, what makes our viewpoint different from the viewpoint of the other. The intercultural encounter has much to do with the overcoming of their own resistances, recognizing our ethnocentrism or even racism, and initiating the discovery of the possibility of radically different existential decisions (UNESCO, 2009).

2.4. Gender and interculturality: a necessary relationship

Political ecology was born precisely from the intersection between political economy and cultural ecology; it treats power relations between human groups and their biophysical environments. Its originality and relevance to understand the interculturality in the social management of forest ecosystems is that its approach brings together the social and physical sciences to analyze the social relations of production and questions of access and control about resources. In this way, it is possible to understand the forms of deterioration and environmental degradation to propose environmentally sustainable alternatives (Paulson, 2009, p. 17).

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Interculturality and cultural diversity are two concepts closely associated with a third, the concept of gender. The importance of gender relations and sexuality in the cultural construction of identity and difference is analyzed by Yuval-Davis (2004), who argues that gender relations are at the center of the cultural constructions of the identities. Through traditional power relationships between men and women, in which the masculine is the dominant, it is possible to maintain certain static meanings of nature and culture that are detrimental to women, as they move away from the spaces of power where important decisions about community life are made.

In addressing the issue of indigenous people and peasants, it is noted that they have been almost excluded from the environmental issue, although historically, both the use and management of natural resources have been in the hands of indigenous women and men, afro-descendants and Montubios. Paradoxically, environmental unsustainability affects indigenous women primarily for their roles and attributes in terms of the uses and services that biodiversity provides, while their productive livelihoods are threatened, so "they have a close link with biodiversity and its importance for the cultural and biological reproduction of women, their families and their people" (Pazmino, 2005, p. 73).

In this regard, Solis (2012) says that women are not only victims, but are also active subjects in environmental care and in the construction of a culture of relationships in equality with nature. Thus, the important role of women in the management of biodiversity and biological resources should be recognized, and their participation in the decision-making should be assured at all levels of resource management.

When observing and valuing the contribution of women, some examples of this reality worldwide are obtained:

In a third of the world's households, women are the only source of income, in poor families with two adults, more than half of the disposable income comes from women's income. In addition, women use a comparatively higher proportion of their earnings to the satisfaction of basic needs. Women produce 80% of food in Africa, 60% in Asia and 40% in America. Being the primary managers to provide their families with food, water, fuels, medicines, fiber, animal feed, and other products; women know the importance of the existence of natural and diverse ecosystems (Solis, 2013, p. 45).

From this point of view, if the problems of the women (impoverishment, marginalization, lack of resources, education, political participation,...) or to the inequalities between men and women in the families and communities (imbalance of power, access, control, decision, representation, training...) want to be answered, then It is necessary to take into account and impact not only on women and men of different nationalities and people, but also structural aspects of complex systems and relationships (Paulson, 2007); i.e., the construction of public policies that evidence the needs and interests of different men and women; capacity-building processes of institutional teams to acquire gender and intercultural competence, monitoring and evaluation to account for the effective participation in the use, access and control of the biodiversity benefits in a differentiated way by gender and ethnicity.

The academy has a fundamental role in the approach of these topics, both from epistemology and praxis, because, this way of understanding the complex connections of the transversal axes of gender and interculturality with the biodiversity constitutes an

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opportunity for a work articulated between the community and the university. But, on the basis of the ecology of knowledge that warns the existence of a great amount of know-how throughout the world and part of the budget that "the different know-how can coexist", is what Boaventura de Sousa Santos (2014) calls "the inexhaustible epistemological diversity of the world".

3. Methodology

This work has a qualitative approach, to the extent that the person conducting the study is attracted by a wide interpretative, postmodern, feminist and critical sensibility (Hernández, 2010). This qualitative research used in social studies is effective, because the researcher uses the subjectivity, that is, his/her sensibility and rationality when revealing the implications that the reading implies for the comprehension and interpretation of socio-cultural and gender representations with biodiversity.

The bibliographical modality of this work is because the gender and intercultural approach and biodiversity require a documentary approach, i.e. the data collection phase is carried out in places such as libraries, specialized study centers, since these spaces allow a direct approach to primary and secondary sources.

The universe of qualitative research is a living, dynamic, heterogeneous space that reflects on itself. Meanwhile the sample is a portion of that universe, which in this case, is the approach of gender, interculturality and biodiversity that recovers some arguments and positioning towards the topic in an interdisciplinary construct of complex and integral relationships.

Discussion and conclusions

Some reflections on gender and intercultural issues and their inexorable relationship with biodiversity arise from theoretical approaches, constitutional mandates and the ecology of knowledge.

Up to date, there are few debates and reflections on the underlying causes of environmental degradation and biodiversity from a gender and intercultural perspective. The diagnoses null the forms of relationship between men and women with biodiversity. This suggests the need to improve the collection of information on the use, knowledge, access to and control over the gender resources that incorporate new collection and analysis variables.

Gender relations are not produced isolated, but are part of other sociocultural systems that receive the influence of other sectors such as economics, the environment and politics, as well as the class, ethnicity, language, nationality, age of people that make up the human group. The discrimination, exclusion and inequality of women, as well as the men and women of different towns and nationalities in Ecuador, have their origin in the patriarchal and colonial structures that still remain. In the inequality system, membership is given by subordinated integration, while in the exclusion system belonging occurs by exclusion.

The need to change the perception that women are not only victims of the environmental degradation, but that they are active in the preservation of biodiversity, in the use of their ancestral knowledge, in the seed selection, among others; as well as in the construction of a culture of relationships that promote equality, justice and inclusion.

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There is a proposal from the constitutional mandate and the planning of the State that expresses the need for new conceptual and methodological frameworks that incorporates gender and intercultural approaches that realize the multiple relationships between people of towns and nationalities and their natural environment, in a broader context that connects local ethnographic, ecological and agricultural research with institutional, historical and global political and economic analyses.

Studies on gender, interculturality and environment in Ecuador evidence the prevalence of principles of neutrality and objectivity in the university curricula and scientific research. These principles prevent teaching from being aware of the androcentric character of the science they practice, and of the interrelation between gender relations and the rest of social relations.

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Cartografía del ser, sentido y significado de la mujer en el pensamiento filosófico de las edades antigua y medieval

Cartography of the being, sense and meaning of women in the philosophical thought of ancient and medieval times

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Resumen

El propósito de este trabajo es contribuir con herramientas teórico-conceptuales que permitan la comprensión del ser, sentido y significado de la mujer en la historia de la filosofía antigua y medieval, reflexiones que permitan comprender el protagonismo de la mujer en la sociedad actual. Se propone una serie de alternativas que conducen a la superación del pensamiento unidireccional y del carácter patriarcal que subsiste en algunos sectores y ámbitos sociales construidos desde una filosofía elaborada desde los hombres, concepciones que han configurado y consolidado una estructura social determinada que amplía la brecha entre hombres y mujeres, otorgándole más poder a los primeros. El manuscrito refleja los cambios experimentados por la mujer de todos los tiempos en los cuales una constante histórica ha sido la búsqueda de libertad, igualdad social y política de acuerdo a las circunstancias y al contexto que le correspondió vivir. Se trata de un trabajo de revisión bibliográfica, mismo que en su construcción utilizó la deducción como método de investigación que posibilitó la estructuración de ideas singulares y la comprensión de la realidad concreta. Así mismo, se acudió al auxilio de los métodos fenomenológico-hermenéutico que contribuyeron para la profundización del tema objeto de la investigación, propiciaron el análisis y la interpretación de la información procesada en este documento.

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Palabras clave
Concepción filosófica, filosofía, protagonismo de la mujer, reivindicación, sociedad patriarcal.

Abstract
The purpose of this paper is to contribute with theoretical-conceptual tools that allow the understanding of the being, sense and meaning of women in the history of ancient and medieval philosophy, reflections that allow understanding the role of women in today's society. A series of alternatives are proposed that lead to the overcoming of the unidirectional thought and the patriarchal character that remain in some sectors and areas of the current society and that has been constructed in a philosophy elaborated by men conceptions that have formed and consolidated a social structure that extends the gap between men and women, granting more power to men. The manuscript reflects the changes experienced by women during the times, in which a historical constant has been the search for freedom, social and political equality of agreement to the circumstances and to the context lived. This manuscript is a bibliographical review that used the deduction as method of investigation, making possible the structure of particular ideas and the comprehension of the reality. Likewise, phenomenological-hermeneutically methods were used to the deepening of the topic object of the investigation, propitiating the analysis and the interpretation of the information.

Keywords
Philosophical conception, philosophy, woman leadership, claim, patriarchal society

1. Introduction
The present manuscript points out some examples of philosophers who throughout history have referred to the woman. It is necessary to emphasize that the historical conceptions emitted in this document are strictly derived from the mentality of men and the context that they lived.

Historically, women have been considered inferior to men. It is observed that the role of women and mothers has been denigrated in patriarchal societies in which the values of power, strength, social success in their different manifestations (material or prestige) have predominated. It is only from the end of the nineteenth century, when the voice of the woman started being heard and gradually begins to be valued.

The objective of this work is to contribute with theoretical-conceptual tools for the comprehension of the being, sense and meaning of the woman in the history of the ancient and medieval philosophy, tools that allow to rethink and transform the way of conceiving women and their role in society.

The main problem that guides the construction of the document is that the philosophical conceptions about women, emerged from the mentality of men throughout history, have silenced their thinking, have hidden their true role and have displaced them from the main intellectual scenarios.

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The idea to defend is that the various philosophical conceptions should contribute to a proper redefinition, the understanding of the meaning and significance of women in today's society.

The dynamism of society allows to make new reviews, deconstructions and reformulations of the different philosophical conceptions that govern the life of the human being; in this sense, it is important to establish a brief panorama on what would be the guidelines or mechanisms to redefine the conception of women according to their role and context, and if the feminist thought developed in the twentieth century is accepted, then it can be said that women and their thinking have been silenced and invisible through history.

However, there are exceptions from those like Plato and Stuart Mill who defend women. Plato, in “The Republic” and “In the law”, argues that women should be educated in the same way as men. For its part, in the nineteenth century, Stuart Mill, in his work “The servitude of women”, expressly defends equality between the genders and becomes one of the first defenders of the right for women to vote.

Nevertheless, in the philosophical tradition is often found those who do not conceal that in philosophy there has been no neutrality with regard to the genders, such is the case of Aristotle who by using the term Anthropos only referred to the man in a generic sense, hence it cannot be applied to women; on the other hand, in the eighteenth century, Kant, when speaking of 'rational beings', does so referring to man contexts, thereby excluding women from the realm of rationality. The above are commonly used linguistic examples to exclude or underestimate women.

In the historical process, there is evidence of a tendency of philosophical thought that seeks to relate the concept of “man-male” and the notion of “masculine” with rationality and culture, with the scope of the public, whereas the concept of “woman” and the idea of “feminine” is related to emotion and nature, in other words, the concept of women is confined to the sphere of private relations. Thus, as Morgan (1993) argues, women have been considered incapable of participating in public affairs and in the political life of society, as supported by Rousseau and Hegel in modernity.

Because of the latter, it is deduced the topicality and importance of the subject of this work, which presents the changes experienced by women during the time, in which a historical constant has been the search for their freedom, their social equality and politics according to the circumstances, customs, culture and the context lived.

But regardless the social, political and intellectual restrictions imposed the role of women in society has always been important. Her family sensibility, her role as mother and wife, the quality of education, the formation of children, etc., are substantial. The events of the twentieth century redirected the history of women. Femininity is no longer limited to sensitivity, passivity and motherhood, it is necessary to discover and express the creative and transformative capacity of women. Equal rights, salaries, education and work changed the way of thinking, being and acting of women who fought for their vindication.

Women have been the axis of society through the ages and their presence throughout history has been constant. However, until now there are some lags of machismo, discrimination, exploitation, violence, exclusion, etc., seen many times as the protagonist of ordinary facts, but not found in the great adventures of history. The social conditions that

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exist in each age and the role assigned to women have been decisive. By living in function of the other, of the masculine, of the man, the woman did not have an own project of life, and has always acted in the shade of man, and has been for a long time to the service of the patriarchy becoming a kind of appendix of the protagonist subject, active and agent of the historical transformation ("The man") (Diaz Loving, 1996).

The work is structured in three parts: the first part examines the conceptions of women from ancient philosophy; in the second part, the conceptions of women in medieval philosophy are analyzed; and in the third part, the historical passage from the negative to the positive in the action of women is presented in today's society. Each of the aforementioned aspects is developed.

1.1 Being, sense and meaning of women in the ancient times

It is necessary to refer to the ancient Greece and the prevailing context at the time. Historically, is found that in Greece the woman was considered under the same social conditions as slaves, and it is explicitly stated in the dialogues of the Republic, Phaedrus, Plato's Symposium and in the Politics of Aristotle.

At that time, being a woman implied inferiority, age minority and prohibition to take on roles in society, restrictions on political office, accepting the denial of civil rights. This makes it possible to infer that the woman was relegated to the domestic work, to the care of the children and elderly people, including those working at home and the care of the husband. As Diaz Loving (1996) said, the few cases in which women could influence political affairs were through men as evidenced in the case of Aspasia (councilor of Pericles, governor of Athens), it is said that the political decision-making depended on Aspasia's criterion, however, she had no right to participate in political elections.

On the other hand, Plato (2011) argued that "there is no occupation in a state that is exclusive to men, therefore, women have the right to exercise in any of the tasks of the State, including that of the Government" (p. 56). In this quotation a possibility for the woman to intervene in some tasks of the society is envisioned; this philosopher considered that although women may be weaker in the physical exercise of some task, It is not for this reason that they should be banned from the social classes of the guardians or the rulers, what matters is that they fulfil the necessary requirements for the exercise of these responsibilities in the same terms as those demanded by men. According to Plato (2011) "As there are men who are fit for war and others who are unfit for it, there are women who are fit for war and others suitable for production" (p. 475), Aspects that obey the natural division of people but not a division between genders. Hence, following Plato direction, the stated that if a man and a woman have the same soul nature, then women would have the same capacity as men to perform in a state position. These platonic ideas are justified because of their claim to build a perfect society conceptually thought in the Republic.

Platonic ideas constituted a novelty in Greece, a society in which women did not play an important political role, it is the first time that someone places women and men in the same category, an aspect expressed in book V of the Republic, when Plato states: "There is no occupation between those concerning the Government of the State of the woman by being a woman or the man by being a man" (Plato, 2011, pp. 455-456).

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Recognizing the same nature for men and women, Plato was against the prevailing ideas in that context, however, for the philosopher it was logical for women and men to have equal opportunities to access an egalitarian education, although this was reduced to a mere utopia similar to the ideals in society; centuries later it was established in the principles of what would later be the rights of women in terms of receiving a full education and the right to be inserted in the public work area from which they were excluded for many centuries. Despite the assertion, it should not be forgotten that for Plato the education of women was necessary to equate man who was always considered as a superior being.

From Tommasi (2002) perspective, Plato occupies an important place in the discussion of the difference between genders, since women do not disappear from the Platonic discourse, although their indirect, oblique presence, like that of Diótima in the symposium, is a sign of an appropriation that at the same time is the exclusion of the feminine. Despite the recognition to the wisdom of Diótima, in this philosopher as in all the Greek culture, is present the conviction that the woman is strange to the logos and that partially and inappropriately participates of the rationality (Tommasi, 2002). The woman is considered as something necessary for the reproduction and for the conservation of the species. Updated aspect in the societies in which, despite the conquests of women of recent times in the various fields, women are still seen as beings necessary to perpetuate the species; it has ceased to be the property of man, husband, male, to become a kind of state property, she is in charge of procreating men and women of the new society, an aspect that remains nowadays.

In certain passages of the symposium and of Phaedrus is observed that in the Platonic thought is strengthened the idea of predominance of t man on woman, the male is subject and object of love, and there are even passages in which “the man-philosopher appropriates the feminine capacity of procreation and, at the same time, excludes women from the highest form of generation, that of the Spirit” (Ungo-Montenegro, 2000, p. 205).

The Greek man endorses the most specific characteristic of the feminine, the capacity to become mothers; it considers a distinction between the love among males who allow fecundating and to give birth in the level of the logos, speeches and immortal ideas and the children born by women, who according to the philosopher are destined to perish. In Plato's discourse, women appear to be enviable for whom it is necessary to appropriate the real feminine capacity to procreate, in Plato's words it is translated into the male mimesis of motherhood, an aspect evident in Theaetetus in which he represents a young mathematician, whose *psyqué* is in full gestation and Socrates helps to give birth. In spite of everything, in Plato the women do not disappear from their discourse, it is Diótima, a woman who possesses the wisdom on the things of love, who plays the role of Socrates’s professor (Tommasi, 2002).

Socrates, in creating the Maieutics as an art of creating ideas through an interrogation process, thought in women, in his mother and then in his wife Xanthippe. This is also evidence on his partnership with the tradition where male thinking is imposed by continuing to think and considering woman as an interlocutor, disciple, and subordinate but never as female authority. However, the figure of Diótima is a woman who knows how to teach women and men, and Socrates is a man capable of being in the presence of a female authority and learning from it. This is also found in Plato's Symposium, in addition to the activity of this male philosopher to appropriate the maternal generating capacity; from Socrates and Plato, a hierarchy is constituted where the generation in its highest sense

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always has as subject the man, the male, and in the lowest, the woman; thus in Plato quoted by Rodríguez (1994):

> ... recognizing the subject of the discourse as sexed in the masculine, and as a debtor of the female generating capacity in their decisive metaphors regarding gestation and motherhood. He is indignant that such poorly educated beings are the ones who educate men (p. 266).

For that reason, Plato (2011) wants women to be educated the same way as men and decides to review the myths that mother are destined to teach their children, and says, "most of the information taught today should be rejected" (p. 87). In this regard, the figure of the guardian woman of the Republic should be taken into account. Plato attributed the woman a mission similar to that of man, thus affirming the irrelevance of the biological difference with regard to the capacity of the woman to develop a role in the communitarian structures. Hence, according to Menéndez (2006), “Plato proposes to neutralize the conception of the woman, without discriminating her, but integrating her partially in the public structures, and submitting her to a direct collective control” (p. 75).

On the other hand, the woman in the thought of Aristotle, acquires another connotation as will be seen below. As is common knowledge, the polis is the place of development, growth and perfection of man, because he is mainly a social political animal as Aristotle mentions in his policy.

Agreeing with the references raised in the analysis of Femenías (1988), it is found that for Aristotle, the organization of the State is by nature, prior to each particular individual. According to Aristotle, only in the polis, the man acquires the word that the rationality implies, and constitutes it in a moral being capable of choosing the good. The actions of man have a sense, a purpose and ends (Aristotle, 2010b). The ends are structured in such a way that they converge in a last human end, the most worthy good is the happiness. The human individual and the polis are proposed ends, the achievement of their own happiness (Aristotle, 2010a), the good of all. These are some of Aristotle's passages that envision the conception of a machista society by excellence (Femenías, 1988).

In politics and ethics to Nicomachus, Aristotle finds the woman as the organic model of the state that entails part/all relationships and an order that implies a hierarchy or natural stratification and necessary to achieve the ends that the polis proposes. But, if the last goal of the Polis is to reach the happiness of all its members, it is necessary to revise who are the individuals that cannot reach it.

It should not be forgotten that for Aristotle (2010B), “each individual or part relates to the State from his own activity and, as part of it, contributes to his ultimate goal, the achievement of the good of the Polis” (p. 1094). It is also necessary to remember that the references of Aristotle on the woman are stipulated in the passages on the house-home *oikía*, which includes both the free man and his family (wife and children), and the slaves, constituting what could be called an extended family as opposed to the nuclear family or reduced as mentioned by Femenías (1988).

In the beginning of the ethics with Nicomachus, Aristotle (2010a) expresses that “the good is that to which all the things are committed to” (p. 357), with this he explains that everything has a *telos* that dominates; the end appears as the cause by which something is

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done about the ends of a particular man and the ends of the community, which is constituted by nature to pursue its own purpose, the good of all or the majority, as established by Femenías (1988). This is reaffirmed in the politics, because it holds that every community is constituted in views of what is deemed to be some good. The man (in the universal sense), has as a goal to support himself, to achieve the best for him and improve. To obtain such achievements man relates with other men, and in this association with their fellows he reaches the exclusive human ends that bind him to the divine, making him worthy of the love of the gods. In this sense, according to Femenías (1988) the ultimate end of the state in Aristotle is reached with the participation of all its members in correspondence with the functions that concern them. A state organized in this way would reach its natural limits and the perfection of its form.

Hence, the background of these claims is given by the atomized situation of the Confederate Greek Polis, in which each one is closely related to the other members. For Feminías (1988), it is evident that this conception of state is organicist; the model to which the State is constituted is similar to the structure of the animal organism. An organism understood as a whole formed by parts that fulfil different functions and each one contributes to the survival of the organism as a whole. The happiness of all or the majority, the good life, the achievement of the maximum goal of the Polis (the whole), is above the happiness of one or some (part/s) of its inhabitants.

To gain balance, the state as a body must ensure that the members contribute to the common good by fulfilling satisfactorily its specific function for the general welfare. However, the objectives that Aristotle proposes for the polis present some drawbacks inherent to the organic model. Good/happiness refers to the majority of the citizens of the polis, thereby relegating the foreigners, serfs, slaves, children and all the women of the polis whatever their social position or age. The state that Aristotle conceives is the continuation of a natural order; it implies differences and hierarchies like those that are imposed in the social aspect.

Moreover, there are affirmations in Aristotle's politics like those that follow: "... The male is by nature superior and the female is inferior; one governs and the other is governed; this principle of necessity extends to all humanity" (p. 1161). With this statement, Aristotle reveals the subordinate role of women. The philosopher clearly states that the relationship between man and woman is superiority-inferiority, even if this is not enough to delimit two different species.

In Aristotle's metaphysics, passages like the following are found: both genders are members of the same species, in the same way that pairs and odds are numbers. In this sense it could be deduced that the pairs (or the odds) are superior with respect to the other numbers (their complementary class), or that males and females are not hierarchically related, but that they complement at each other without involving superiority of one on the inferiority of the other, Guariglia (1973). However, Aristotle (2010b) insists that in order to exert the power, the male is better endowed than the female, except for unnatural cases; he considers that the male is always superior with respect to the female.

These assertions show that a natural superiority must follow a functional superiority (politic-social), this is explained because Aristotle adopted a series of connotations of the Greek-barbaric type, master-slave, man-woman, woman-child among others, to refer to the dominating-dominated relationship, aspect that Guariglia (1973) shows clearly. In terms of

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Aristotle (2010B) it is a relationship of governor-governed, in which they benefit mutually, even though there can be no justice in the legal level or friendship in the ethical level (p. 1246). In the same ethic to Nicomachus is found that Aristotle (2010A) argues that the relationship of friendship or justice is feasible between both men and humans, and that involve them in a particular social role. Something similar is presented in the Politics, at the level of the polis regarding the way of governing, Aristotle (2010B) establishes that "the polis is a political grouping where governs a government of peers; the inheritance, (house, Kingdom) is organized according to a clear system of differences where there is a mandate but no laws" (p. 1252). This passage clearly illustrates the difference between the patriarchy and the civil organization of the polis.

Aristotle's words regarding the situation of male superiority on women seems to describe a socio-historical fact, a situation that is repeated in ancient society. Aristotle, according to Guariglia (1973) grants universal validity to the society and to the socio-historical moment lived, for that reason he instituted the hierarchical structure of his society as valid by nature for all time and place. This allows to infer that the strong hierarchy of the society, the patriarchal character of the Greek family and the organic conception of the State lead Aristotle to consider it as something necessary within the hierarchical order determined by the structure of the nature and with immutable characteristic.

As Guariglia (1973) points out about the master-slave relationship, Aristotle infers from it given a natural condition; the contingent depends on what is necessary; within the family, both the master-slave relationship and the husband-wife relationship are parts of the organization. Nevertheless, governors and governed have the same interests and each one contributes to the attainment of the ends of the *oikía*, as proposed by the head of the family, i.e, his functions converge in the common good (Aristotle, 2010b). This common good is proposed and recognized by the male head of the family and the woman –due to her inability to command- must obey. This confirms the need for guardianship by the father or husband, who legally governs his public and private life.

Aristotle (2010B, pp. 1258; 1359; 1260; 1277) points out the feminine virtues by nature: inability to command, consequently, submission and passivity, bodily weakness, *arete* for domestic chores, subordinate bravery, moderation and modesty. To this list of qualities must be added her thoughtless emotion, which governs her life overshadowing the deliberative faculty. This list according to Guariglia (1973) obeys the role assigned to the woman by the Greek society and to which she was obliged to comply, and the exceptional cases that were disobeyed were classified as unnatural. Likewise, Guariglia (1973) shows that in the Aristotelian terminology of value, *arete* is determined by the exclusive function of the use value; it also points out that the *Eidos*, the required form to natural entities and to humans (its example is that of the slave) is determined by the one who uses it, which generally "is who has the superior knowledge of the form against the inferior knowledge of the producer, reduced to matter" (p. 66). The producer is relegated to the role of a human tool, an animated instrument subjected to the function of supplying the needs of others, in this sense, Guariglia (1973), referring to Aristotle, states that: "... in the same way as nature, in order to achieve a perfect all organic allocates each part to a single function, it is not a slave but insofar as it must fulfil a subordinate and limited function" (p. 97).

If considering this approach to women's understanding, the situation is more complex; her areté is typical of domestic chores, an aspect that makes her a care instrument of the *oikía* in general and the male in particular. As for the reproduction of the species, while the man

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contributes to the form, the woman does the same with the matter. The woman is the complementary kind of the species; in addition, reproduction, in terms of gestation, is biologically conditional and is limited to fulfilling only natural functions, adding the care, the care of children, adult males and the house in general. These last activities are fulfilled even when nothing biological determines it. Her situation of subordination is not given by the natural order, as Aristotle thought (2010b), but by a social order, based on the need for a type of organization of the society: her *eidos* governs it, by force, the male, whose mandate in the family does not obey the law but his will: the government of the *oikía* is not a government of equals, but from the different function, each member of the oikía contributes to the common good; this implies a strong stratification that is daily ratified by social pressure, a situation that Aristotle names as a natural order. The purpose of this relationship is to care for the quality of life of the free man, for the case of the slaves and for the case of women, of all the adult males and the children. It recognizes the category of being-for-another as the self-mode of the woman's being, with the consequent loss of consciousness of being-for-her-own that implies, as Guariglia recognizes (1973) the institution of slavery: "... the condition of the honest living is the existence of a genus of men [slaves] subject to the heavy burden of producing the necessary instruments for the lives of others, making themselves into instruments, in means, in animated property" (p. 102).

This makes it noticeable that half of the species is subordinated to the benefit of the other half, on a social, legal and economic level. Women are forced from the social system to resign their public rights and autonomy in benefit of the "private security" provided by the state of the "minor" that must hold for life.

Guariglia (1973) says that the Aristotelian analysis presented in politics and ethics to Nicomachus is a kind of renunciation of the utopia of a philosophical-political scheme that represents the culmination of the Greek society, as it is required by nature. The Aristotelian proposal seeks a concrete, human and inseparable good of the specific historical and social forms to which it is linked. The satisfaction of these needs marks the ultimate purpose of the polis and their *raison d'être*. Similarly, Sandel (2000) analyzing Aristotelian thought considers that meeting Oikía needs is the ultimate goal and the *raison d'être* of the function of all the members that make it up. The social order must form the natural order. According to Aristotle, slaves and women collaborate at the end/good of the polis from their own instrumental situation.

Every family is part of the city; as those relationships belong to the family (relations man-woman, woman-child, etc.), and as the virtue of the part should look at the whole, it is necessary that the education of the children and the women is created and thought by looking at the political Constitution, as established in the analysis of Sandel (2000).
Education of women is subordinated to the objectives of the organicist polis, so that their virtue depends on the filiation with the social structure that determines it. Aristotle (2010) in the Politics says: "It is evident that no virtue of character is congenital by nature" (p. 1260) but is due to its possibility of updating. However, this ethical rule does not seem to govern in the case of the woman, who possesses virtues of the character that are within her by nature.

Aristotle, analyzed by Camps (1999), "ignores for women the questions of an educational, social and habitable nature that takes into account explicitly for the formation of the man's character (male) in terms of his concrete possibility of perfection" (p. 56). It is clear that the good of the poli only fits the males of the species, to which women must serve as a functional

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contribution for the achievement of perfection of those. The woman is denied happiness, has no freedom or deliberative ability to achieve it; she does not meet the requirements necessary to be part of the men's group.

Frankena (1968) says that the male is the only who tends to perfection in the species and, in addition, only those who are free; "the stratification of society seems to be solved from two axes: free men-slave men; male-female" (p. 218). The first pair responds to a purely instrumental use value producing goods for the free man, whose inoperability is recognized by Aristotle, the second pair (male-female) has the biological responsibility of reproduction. The woman gestates the infant, cares for him/her during the first years of his/her life, care without which the gestation would have been useless for the end of the species: to perpetuate itself. Household chores have a typical situation; its production is a way of conservation, so its replacement by a non-animated tool is more difficult. According to Guariglia (1973), Aristotle ignores that "in certain circumstances human beings, men and women, are unable to satisfactorily develop their ethical qualities" (p. 100). The strong Greek social stratification leads Aristotle (2010b) to accept the "recognized by the majority"as necessary by nature. It is seen that the liberal tradition, despite its supposed foundation of individual rights and human equality, "is more Aristotelian than is generally recognized, and prevails nowadays" (Vallespin, 2012 p. 86).

In general, Aristotle when referring to the origins of society, he concludes that these rely on the union of the genders for the reproduction of what constitutes the family and where each gender has specific functions determined by their own nature. The woman is a reproductive being and the man a possessor and administrator. Aristotle (2010b) considered that the origin of all the problems of the society is due to the prolonged absence of men because, according to this philosopher, women did not have enough experience to take these challenges due to their lack of learning. This is how women have historically been subordinated to men and judged because of their lack of experience and preparation in many areas that were traditionally performed only by men.

In the Aristotelian vision, the virtue of women was linked to the silence, submission, obedience, and it was the man who assigned her *status quo* and by not providing her a voice, he denied her an opportunity to create her own speech, to be recognized as valuable and consequently, lacks identity, citizenship and was not subject to law.

1.2 Being, sense and meaning of women in the Middle age

At this time, some reflections about the woman are found made by Saint Thomas Aquinas, however, before referring to his contributions, it is important to characterize briefly the context. During this period, women were marginalized from social life and excluded from the world of culture. Lay women did not have enough instruction unlike the educated women who were inside the convents and monasteries, represented in the librarians, clerks and educators, who wrote works on their mystical experiences as well as some scientific treatises. In this orientation, it is worth mentioning Hildegard of Bingen (1098-1179), who wrote important information on astronomy, botany and medicine, as well as prophetic books, based on her visions.

Thomas Aquinas, considered that male and female distinctly manifest human rationality. The female-mother, material and incorporated reason, identifies with nature and resembles the raw matter. The male-man resembles the form, encloses the fullness of being and tries

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to be a pure and disembodied reason separated from nature, and necessary to complete the woman. According to the thought analysis of Thomas Aquinas made by Pérez (2008), axiologically:

> …woman is the indecent, dirty, morally, is the instrument to make the male fall into evil, while the male is the good, the appetizing, because it was created before the woman to signify its superiority in dignity and government (p. 35).

As stated by Pérez (2008), in Aquinas' conception is posed a kind of "ontological imperfection of the female and the woman" (p. 41) since in the underlying nature, the matter is similar to the mother and precisely with the form, cause of the things that are produced naturally: just as the mother is the cause of the generation, so is the matter (p. 44). Thomas Aquinas follows the approaches formulated by Aristotle in Physics, in which he compares the raw material with the mother by the passive and receiving function that she plays, by producing the natural substances in union of the form. Thomas Aquinas interpreted by Pérez (2008) reconfirms when he says:

> ... as the mother is the cause of the generation, so is the matter. The likeness of matter and the mother goes back to the very origins of the Greek culture; in fact, they have the same etymological root (P. 47).

From the foregoing, it is deduced what Pérez correctly raises (2008) that mother and matter have been linked to the production of natural beings and, consequently, to nature and the *physis*. Likewise, matter and form constitute the first or natural substance; it is a non-being that can be a being in power to receive forms; an imperfect being and with so little ontological consistency that it cannot exist without form. The form is the universalizing element of the substance by which it belongs to a species and is an act. The matter, without the form, is reduced to a non-being, this leads to Saint Thomas Aquinas to say that the form is the good, the appetizing, then the matter is born to wish by nature the form that is the good and, with it, to receive the being, constituting a first or individual substance. The mother plays the role of matter, and the man is the form, contributes to the formal element, engenders the human being and with the feminine material element, constitutes the new human individual or human substance.

The mother-woman, like the matter, is an ontologically imperfect being, which is born to desire the male by nature, that is her form and that provides her the fullness of the being. According to Tomás de Aquino, the female is somewhat deficient and occasional. The living species exists fully in the man, in the male, and the man-male, with its active potency, tries and seeks to create another male-male similar in perfection specific to him. The female is somewhat deficient and unwanted, and is begotten female, due to the weakness of the active potency of the male, to some indisposition of the matter or to some type of external transmutation. Because of her ontological deficiency, the woman had to be created from the rib of the man to indicate her ontological dependence to the man and his greater dignity. The imperfection and the ontological dependence of the female with respect to the male and the woman with respect to the male is consecrated in the biblical fact that the woman was created by God from the rib of the male. Man in his fullness of being and with his greatest dignity will be superior, by his likeness to God, which is the beginning of the whole universe and the beginning of all the human species.

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Thomas Aquinas in the words of Garcia (1985) states that if the female desires the male and the indecent desires the good, it does not mean that the indecency desires the good that is its opposite but only according to accident. The female relates to the indecent or clumsy and the masculine to the good. Likewise, Julián Marias (2011) argues that the desire of the matter by the form, of the feminine by the masculine and of the indecent by the good is only accidental because "who wants is an individual substance, which is the only thing that exists in itself" (p. 255). Meanwhile, Pérez (2008) argued that if man or male represents the fullness of the specific being and the female the imperfectness of the being, the masculine is the good and the feminine is awkward or indecent, but not bad. For García (1985) Thomas Aquinas asserts that the form is something divine because "the substantial form is the cause of all being in act" (p. 217).

Similarly to the other scholars, Pérez (2008) considers that in Thomas Aquinas is also present the subordination of the woman-mother to the male and should not try to dominate the male because it was not formed from the head and should not be despised by the male or be treated as a servant who is based on the utility of the master because it was not formed from the feet. This subordination is a natural subordination that is linked to the idea that the wisest should govern.

The woman was born to help the man in the procreation of children and even in that task the woman, by reason of her own nature, cannot play the role of active power. The scope of women's performance is the individual private, the domestic, should be devoted to the production of knowledge and political action within the polis. Her task is to collaborate in the tasks of the father, then to serve the husband and finally, to take care of the son because, without the male, the woman, enclosed in her imperfection of single, does not have for the Greeks capacity to integrate into the universal scope of the polis; confined in her solitude, she will spend her life in the position of never acquiring the social fullness of the citizen.

On the other hand, the body of the woman encloses a tempting connotation that for the medieval is sinful, so it was necessary to avoid looking at her attentively so as not to fall into the temptation with the thought and with the desire, therefore, "it is not the same rationality the one of the main agent and the instrument. The main agent has to be more dignified, fact that is not required for the instrumental agent" (Pérez, 2008, p. 41).

In this sense, Thomas Aquina distinguishes the rationality of the main agent and the rationality of the instrumental agent. The rationality of the main agent has to be more dignified than that of the instrumental agent, between masculine mind or rationality and feminine mind or rationality that is imperfect and less dignified. Man-Male is the one who truly engenders a new human being, and the woman is only the material cause and the place where the new human being finds the appropriate food for his development in his first nine months of life.

For Pérez (2008), in Thomas Aquina, the feminine reason, immersed in the sensitive and corporeal matter, is identified with nature and life, and responds to her calls and demands. The female reason embodied in each woman means the continual temptation to the masculine reason of the man, to make him come down from the pure and formal realm of his rationality and join her in the world of daily life with her mixture of pleasure and anguish. It is through the feminine reason, instrumental reason, embodied in the body of the woman, that the man reason feels the attraction by the vice, by the evil and the sin.

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In Thomas Aquinas there is evidence of a continuity of traditional thought already exhibited in the works of Hesiod, in Plato and in Aristotle, these approaches will be sequenced of the Christian tradition from Paul of Tarsus and with the contributions of Tertullian and the fathers of the church, such as Jerome and Augustine of Hippo, who emphasize the relationship of women with moral evil and sin; the female body is a symbol of temptation and sin, there is the impulse to sin in her. This is deepened when the church officially declares the religious inferiority of women by denying her access to the intelligible and powerful world of the clerical class.

1.3 The historical passage from the negative to the positive

Despite the fact that in Plato is clear the idea that man is a superior and rational being, whereas the woman is a being object of reason that must prepare for the man because even the reproduction was to be given between people of the same social class in order to have perfect children, after the ideal of the construction of the perfect society, it follows that Plato recognized the same nature for men and women, thereby providing the opportunity to consider some rights for women: access to a full education, aspect currently improved in almost all regions of the planet; more possibilities of insertion in the work environment. The transition from the negative to the positive lived by women can be stated as follows:

- From the Aristotelian conception of considering women as a reproductive being, passive and submissive to the service of their administrator, there is a leap towards the age of administration, management, leadership and knowledge in various functions through a long learning process.
- The silence and submission as fundamental virtues of women open a path to action and to the construction of their own identity and their own discourse as subject of obligations, but also of rights.
- From the activities contingent on the house: cooking, cleaning, weaving/sewing the family's clothes, taking care of the children, having the house in order, meeting some agricultural tasks controlled by men and at best, being a counselor for the finances of the family time, appears a new conception of women as a being who has come to develop their own autonomy, to make their own decisions and to exert power in the various public and private spheres at social and cultural level.
- The physical, psychological and moral weakness attributed to women in the ancient times and in the Middle Ages resulted in a whole set of prohibitions that nullified women as an autonomous, dignified and thoughtful subject, denials that were supported by the church and by the man as guarantor and executor of the rules to maintain the social order, this changed and originated a multiplicity of pedagogical, religious, juridical, sporting, cultural actions starring by women in the spirit of transforming the individual and collective history.
- From the Middle Ages, which physiologically considered women to be inferior, less intelligent and less able to biologically speak, from the nineteenth century.is the valuation of women as a capable and intelligent being, with the same intellectual abilities as men.

Conclusions

The analysis of the situation of women throughout the history of philosophy seen from men brings with it a set of interesting aspects that describe each of the stages that women lived at the time.

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The vision of the philosophers referred to in this work represents the fundamental milestones that allow understanding the dynamics lived by the woman; it is projected to rethink the various problems; it is proposed to break with the paradigms that have hindered the full development of women.

Over the time, women have been misunderstood and distorted in their developmental capacities in the social and cultural spheres of the society.

Only in recent times proposals have been generated that vindicate the role of women, and at the same time guarantee their rights as a human beings.

Women and men are equal as humans who share a rationality that makes us different from other beings in the world, humans have awareness, will and feelings, however, we are different in terms of physical strength and motherhood that is exclusive to women.

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El lado oscuro en la educación: papel del símbolo en la formación de valores, espiritualidad e ideología

The dark side of education: its role in the formation of values, spirituality and ideology

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Resumen

Los procesos educativos tradicionales han centrado su atención en la adquisición de contenidos por parte de los estudiantes. Ámbitos formativos de carácter universal como la ideología, los valores y la espiritualidad son considerados como supuestos deseables en los sistemas educativos, no obstante, no es posible dejar de reflexionar sobre su importancia y trascendencia en la formación de los seres humanos en la actualidad, más aún, en el marco de la crisis de la racionalidad moderna y la emergencia de nuevas alternativas educativas que respondan a, los complejos contextos actuales. Un espacio de incidencia de estos factores lo constituye, en el ámbito de las ciencias de la educación, el denominado '*currículum*' oculto y, uno de los espacios por los cuales es posible la adquisición, formación y desarrollo de estos ámbitos educativos lo constituye el símbolo.

A partir de una reflexión en torno a estos de estos factores, de sus características generales y de su presencia en el contexto educativo ecuatoriano, se estudiará la importancia del *currículum* oculto, en general y, del símbolo como un ámbito de la racionalidad humana que evidencia un carácter universal en relación con el desarrollo de la humanidad,

Este trabajo, a la vez que expositivo tiene un carácter hermenéutico, herramienta necesaria para la comprensión del símbolo como factor educativo, el mismo que se despliega a través del desarrollo discursivo de la propuesta.

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Palabras clave
Currículum, cultura, espiritualidad, ideología, lado oscuro, símbolo, valores.

Abstract
Traditional educational processes have focused on the acquisition of contents by the students. Universal formative areas such as ideology, values and spirituality are considered as desirable assumptions in educational systems; however, it is not possible to stop reflecting on their importance and transcendence in the formation of human beings nowadays, joined to the crisis of modern rationality and the emergence of new educational alternatives that respond to the complex current contexts. An incidence space of these factors is constituted by the so-called "hidden curriculum", and one of the spaces by which it is possible to acquire, train and develop these educational fields is the symbol.

From a reflection on these factors, their general characteristics and their presence in the Ecuadorian educational context, the importance of the hidden curriculum will be studied as well as the symbol, as an area of human rationality that evidences a universal trait in relation to the development of humanity.

This research is expository and hermeneutic, being a necessary tool for the comprehension of the symbol as an educational factor, which presents in the discursive development of the proposal.

Keywords
Curriculum, culture, spirituality, ideology, dark side, symbol, values.

1. Introduction
Thinking about education from a different perspective involves eliminating some ideas that have sustained the usual pedagogical task. One of these theoretical foundations has been the regular formal education, which, thanks to the western modernity of analytical-deductive nature, is under a crisis. It is necessary to think of new referents and educational spaces that respond not exclusively to a scientist vision -biased and dichotomized- but to a more complex and integrative vision that would motivate and orient the individual to an authentic integral formation.

The formation of the affective and emotional dimensions of the human being has been subordinated to desirable pedagogical assumptions that have been omitted, forgotten, ignored in the daily education. Spaces like the axiological, the ideological and the spiritual respond to the universality of the human being: they surpass the temporality and all geographical space, and are ignored in the formal curricula. These areas need to be reconsidered in the human formation. The symbol constitutes a space of possible reflection that since it is present in all the times and cultures allow reflecting in another education possible.

2. The dark side: its presence in the social aspect
In the face of traditional education that is focused on the transmission of content, there is another "hidden" area, not perceptible and yet present in the daily life of human lives. Dimensions such as emotions, affections, feelings, dreams, although they are a substantial

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part of the human nature, these have been forgotten, hidden and even ignored from the regular educational system.

The public imaginary accustomed to speak of the “dark side” brings to the memory the saga of the *Star Wars*. A series originating in George Lucas, which belonging to the field of science fiction collects elements of human nature with universal character. Thus, for example, the teachings of the millenary wisdom, the warlike conflicts between the various groups, the way of being, relating and proceeding against the adversaries to the friends and to their own conscience. Thus, the dark side becomes a “common place” in the series and invites to reflect on its transcendence and importance both in the tape and in the daily life of human nature.

The series, at various times, presents expressions of this type, as well as: “fear is the way to the dark side”, “fear leads to anger, anger leads to hatred, hatred leads to suffering. I see much fear in you”, “fear, anger, aggression, they are the dark side. If someday they govern your life, they will always dominate your destiny” “the strength of a Jedi flows from the force. But beware of the dark side: wrath, fear, aggression; they are from the force of the dark side. They join easily in combat. If you once take the path of the dark side, it will forever dominate your destiny. It will consume you, just as it did with Obi-Wan's Apprentice” and “fear of loss is a path to the dark side”. These, among others, are some of the moments when “dark side” appears. Terms such as “strength”, “fear”, “domain”, “care”, and “aggression” are characteristics of this dimension, which exemplified in the series of the seventh art, make evident aspects of human nature of universal characteristics.

But, what is it and what does this “dark side” relate to? This was an aspect of the force. People who used it got their power from emotions called negatives, such as anger, suffering, hatred and violence. This was also aligned with the search for supreme power: the desire to increase their capacities and their dominance over the environment. In the film *Sith* they shared this dark side and, therefore, fought the heroes, i.e., the Jedi order. For the *Sith* philosophy, this (the force) does not deny free will, but –on the contrary– encourages it by empowering those who used it, although, paradoxically, these are increasingly paranoid and are slaves of their passions.

On the contrary, from the perspective of the Jedi order, the force propelled them to the “luminous” side and directed them towards positive aspects such as heroism, bravery, selflessness and solidarity. From this vision, it was the cohesive and benevolent element for the galaxy, whose closeness made of them “mere tools in the hands of the force”.

In the understanding of the producers of the film, the dark side of the force feeds on the emotions of those who use it, therefore these can be positive or negative. The positive (euphoria, passion, joy) and the negative (frustration, anger, fear, and sadism) are part of human nature, and they emerge daily in the life of human beings and, in a particular or more characteristic way, in the “limit situations” (death, loneliness, moments of triumph, etc.). The human profile of those who have leaned on the dark side evidences traits of cynicism and pathologies tending to aggression.
In the case of the *Sith*, their nature is aimed at the desire for personal improvement as “positive” emotion, and anger and frustration as “negative” emotions. They consider that their contact to the “dark side” is much more complete than that of their enemies, as they recognize the natural and inevitable role of emotions as a catalyst for the powers of the force, while the Jedi try to place themselves apart from them, progressing in a much slower and unsatisfactory way. But like the Jedi, they explicitly discourage love and positive

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emotions: they consider them conducive to mercy, self-sacrifice, and the cessation of ambitions, things that are contrary to their way of being (http://es.starwars.wikia.com, s.f., p. 2).

From these reflections, it is intended to analyze on some forgotten and subordinated aspects of formal education, aspects called "hidden curriculum". Among the most significant elements are the formation of values, spirituality and ideology. These three elements, each one from its own sphere (ethical-axiological, religious-spiritual and political-social) have been a constituent part of human nature since its origins, but due to the rational formation of analytical empirical character that has characterized education in the West, these have been forgotten or relegated. Their learning has been proposed in a superficial, theoretical and have been proposed as an "extracurricular" or elective activity in the training of students.

3. The values in the school formation

The discipline that studies the values as part of the philosophy is the axiology, and its presence in the philosophical reflection is rather recent: it dates from the middle of the nineteenth century. One of the most recognized authors in the study of values, Risieri Frondizi (2010), said

> Values do not exist for themselves, at least in this world: they need a depository to rest. Therefore, they appear as mere qualities of these depositories: beauty of a painting, elegance of a dress, utility of a tool (p. 16).

After an analysis of these examples, it is important to mention the role that the value has on the object: while it is different from it, it characterizes it. According to Frondizi (2010), "the values belong to the objects that Husserl calls 'non-independent', i.e., that they are not substantial. This property... is a fundamental note of values" (p. 17). By not having this independence, its formation is not generated by the will; the human being does not consciously motivate its formation. So it is not possible to say "today I will work and develop this value" or "I want to have this or that amount of this other value". In the formation process of the moral conscience, it is the reason that chooses, freely, what to select. The chosen object will become valuable to the subject. Frondizi calls values as "parasitic", because their existence depends on their proximity or bond with real objects.

Traditionally, the philosophical reflection of the values[11] has studied the values and their relation with the real objects. The first "are", as they have to be and, in a different way, the values "worth" and, they do it according to the relation that they keep with the objects of which they depend or that they relate to. For Frondizi (2010), "the value of an object will be given by a hierarchy, importance or sense that a human group, according to its needs and characteristics, has granted to a certain object" (p. 45). For example, a person is valuable, a society is hardworking, a friend is faithful, etc.

[11] Axiology is a phylosophical discipline that studies the values.

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Values can be ordered hierarchically, higher values can be proposed and, according to Max Scheler's proposal, this would depend on two fundamental criteria: its polarity and its hierarchy[12].

For Frondizi, (2010) hierarchical ordering of values should not be confused with their classification. The first would comply with criteria of social valuation and its relation with the object; the classification would depend on the convention of a certain human group. Generally, humans prefer higher values than inferior values, varying their choice according to the needs and requirements. The acceptance of a certain value will vary according to the conditions and characteristics of the individual or the community.

4. The values in the curriculum

By characterizing the values because they are not independent and, because they show a parasitic behavior (these do not present without a real object); their presence in the training processes exposed in the different curricula is not subject to verification or testing.

For example, in the curricular reform of Elementary School (cfr. Ministry of Education and Culture, consensual proposal of the curricular reform for basic education, 1996) in Ecuador, the formation in values and the interculturality (among others) were considered "transversal axes" of the curriculum, and by not being mandatory almost no educational project showed the work in this educative dimension.

Another example is observed in the reform of the unified General Baccalaureate, in which the study of the values was limited to a unit (ethics and aesthetics) of the subject "development of the philosophical thought". At present, it is also not incorporated in the substitute subject (philosophy). Therefore, the formation in values is in the "assumptions" that the school institution transmits and offers to the students.

Additionally, while the educational proposals that promote a "competency-based curriculum" emphasize the development of knowledge and skills, "training in values", as it is not verifiable in a given period and being contingent on a subject real, is among the desirable assumptions in education taught by the school institution. The path presented in the hegemonic education systems does not take into account the values in the formative process nor guarantee their fulfillment.

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[12] For Scheler, polarity establishes criteria from the positive to the negative, and hierarchy causes a value scale, which if it is ordered from lower to higher would be:

1. Taste values: sweet - bitter.
2. Essential values: health - sick
3. Spiritual values, which are divided in:
    - Stetical: beautidul - ugly
    - Law: Fain – unfair..
    - Intelectual: true - false.
4. Religious values: saint - sinner.

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5. Ideology in the school formation

Gallegos (s.f.) supports in Laclau when trying to provide a definition of ideology:

> Ideology is not only a system of ideas, without order or logic, on the contrary, is what provides an identity to the individual as a subject, but it is also a sort of behavior. Individuals do not form identities, there are no isolated individuals, it is a social subject that confers that identity to the extent that the questioning of a certain ideology is appropriate by this individual (p. 1).

There is no reason think of a human being without ideology. This is a dimension that constitutes and characterizes the human being and defines it as a social being. Like the values, their training is not done automatically or alien to a particular community or human conglomerate; on the contrary, it is evidenced and developed in an individual when it participates in a certain social group.

Gallegos (s.f.), after analyzing the contributions of Laclau and Althusser, and when discussing the ideology states that "its function is the formation of the individual through the questioning" (p. 1). Another important aspect of their approach is that there is no ideology as an abstraction, but there are ideologies instead.

From the perspective of this author, there are different types of ideologies, for example, political, religious, class, family, discriminatory, gender, which can present variants such as, for example, in the case of political ideology, which can be right, left, center; a religious ideology can be evidenced as catholic, muslim, jewish.

Certain ideologies will allow the human being to relate or assert in a group. This affirmation and relationship will build identity, both individual and collective.

Gallegos (s.f.) states that identity is not manifested in the ideological, but is created at this level, therefore,

> If we assume that identity is manifested in the ideological aspect, we would be assuming that the objective defines our ideas, that the material conditions of existence determine us, and that is only half of the truth, falling an exclusively empiricist position (p. 2).

The identity proposed by a certain ideology emerges, for example, in the diversity of genres, ethnicities, religious practices or political tendencies in different social levels or human groups. In addition, there may be change of ideology without affecting the membership of one or the other group: there may be poor catholics or African-American groups practicing the Islam. Their identity will make them distinctive, but in no way identify them in an absolute and unchanging way.

Although the ideology and the material conditions show the identity of a human group, it will be the latter two that determine it more specifically. For Gallegos (s.f.), "There are many elements in the shaping of that identity, since the material conditions and ideologies are also multiple" (p. 3). The author calls culture the union of these elements. And he defines culture as "a series of identities determined by ideologies, which in turn provide an interpretation and vision of the world, as well as objects, uses and customs, becoming

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symbols everything that is practiced by a human conglomerate" (Gallegos, s.f., p. 4). One of the elements that will make up culture as an essentially human manifestation is ideology.

The elaboration, manifestation and consolidation of the symbols is also a way for the construction of the ideology. Their acceptance and recognition require a collective space, by fostering the identity of a group. They are representative of the cases, for example, of the symbols used by different religious ideological groups, as well as those used by Nazism, Soviet Socialism and Francoism, among others.

6. Ideology and education: the Ecuadorian case

A topic widely analyzed in Ecuador is liberalism – conservatism, especially during the nineteenth and twentieth centuries, with its representatives: the former Presidents Gabriel García Moreno and Eloy Alfaro Delgado, respectively. They are also distinctive intellectuals such as Juan León Mera and Juan Montalvo, as well as a long line of actors who contributed to this struggle. Among the scholars can be mentioned Osvaldo Hurtado (1997), who in his work *The political power in Ecuador* makes a detailed analysis of this phenomenon.

The two political currents influenced the Ecuadorian education profoundly. The first trend, conservationism, promoted the development of education, but particularly, of confessional. European religious orders and congregations originated in Ecuador due to the Catholic Church, which by having the advances achieved in education, had a remarkable boost to education.

Education driven by liberalism in Ecuador brought with it modernizing contributions, such as those proposed by the European "new School", especially with the contributions of French pedagogues, who promoted public education and the renewal of education. It led to secular education through the creation of educational centers and pedagogical institutes (e.g. Colegios Mejía, Manuela Cañizares, Juan Montalvo Pedagogical Institute.

The two currents influenced the educational work of the country, favoring its development. However, it is necessary to recognize that their intentionality was due to political interests of the governments in turn and not to the educational demands of the environment; therefore, although its presence is valued and recognized, its influence nowadays is partial.

The ideological formation of a student, although it may be related to the family, school and even the recreational aspect of the student, is not due to a formal or voluntarily curricular proposal. It is assumed as a dimension of what is called hidden curriculum

7. Spirituality in the school formation

Although this has been one of the dimensions of more universality in the history of mankind –like Christian, Buddhist, Islamic (Sufi), Shinto, Ancestral spirituality, etc. – western modernity has reduced this area to religious centers and communities that practice it related to these forms of spirituality.

Piedmont (2012) defines spirituality as "an innate motivation that orients and guides human behavior in the effort to build a broader sense of personal meaning in a scatological context" (quoted by Sandrín, 2017, p. 345). The traits of innatism, sense construction, personal meaning and scatological context are elements that invite to reflection and particular analysis.

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The innate character that characterizes the spirituality is accompanied by the universal. In the journey of human history, individuals and communities have sought ways to meet with transcendent realities in the search for meaning.

Spirituality has an area that shows the permanence of traditional religions and the flourishing of new manifestation forms, and the presence of “the sacred” that seek to offer alternatives of meaning to the human existence.

Finally, one of the characteristics of spirituality is the scatological context, the search for temporal space transcendence, the confidence in a promise and the expectation of its fulfillment are part of this way of manifesting and remaining in the nature of the human being of this dimension.

Among the spaces in which spirituality has manifested more clearly are religion and art (cfr. Mélich, 1996), having universal and transversal nature in the history of humanity and in the different civilizations. Although religion has traditionally been thought as a unique pathway to spirituality, it is necessary to recognize other paths and spaces in which this reality is manifested; therefore, Sandrín states “while spirituality represents a universal construct, religiosity can be understood as a set of systems, beliefs, practices and values explicitly patterned and immersed in certain social traditions or institutional frameworks” (Miller & Thoresen, quoted by Sandrin, 2017, p. 345). Thus, while there are now many forms of religion and various religious manifestations, the spiritual quest, and the yearning that this reality provokes in the human being is a common factor in all of humanity. The various civilizations and cultures have expressed this dimension in a particular and specific way, taking into account that it has been a reality present in humanity and in the most diverse moments of history.

The universality of human spiritual manifestations has also caused abuses, misinterpretations and deviations. Castillo (2003) warns of this reality when stating:

> Speaking of "spirituality" produces different reactions. There are people who consider that spirituality is the noblest and most important thing that the human being can and must face in life. On the contrary, for others, spirituality is not interesting and it is even suspicious and unacceptable. Raising the issue of spirituality is to present debatable topics, because in dealing with spirituality, enthusiasts and opponents are found. The enthusiasts are the ones who see in the spirituality the remedy of all evils. Opponents are the ones who do not even stand what that word suggests. Because there are those who think that spirituality is the same as evasion of the world and history, renunciation and mortification of all that we like, resigned acceptance of the sorrows and miseries that carries with it the fact of living "in this valley of tears", and all that with a good dose of "spirituality" (p. 4).

This risk of “spiritualism” that this author mentions is even more evident in this context, in which a return to a spiritual search by different human groups is observed in different religious fundamentalism in certain groups of individuals as in the search of experiences through oriental practices, such as feng shui, reiki, zen Meditation, among others.

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8. Spirituality and education: some reflections about the Ecuadorian case

In general, the experience of this reality has been present in the educational institutions, according to the agreement of the *Modus Vivendi* between the Ecuadorian state and the Catholic Church, to Religious orders and congregations characterized by diverse spirituality. Thus, the Catholic Church has had hegemony in confessional education in Ecuador and the presence of orders such as the Franciscans, Dominicans, Jesuits, Mercedarians and congregations such as the Salesians, Lasallians, and the order of Sacred Heart, etc., have led to an educational practice characterized by its particular spirituality.

But, contrary to the fact that the experience of spirituality with religion has been identified, secular education promoted by the State has ignored the presence of this reality in the integral formation of children and young people. In the case of the formative practice of some non-confessional institutions, there are some experiences, such as participation in sacraments or religious liturgies, zen meditation practices, among others. Obviously, the presence in the curriculum is null, limiting the study of religion and art as part of the story.

9. Hidden curriculum

The presence of fields such as values, ideology and spirituality escape the obvious curriculum, and are part of what has been called "hidden curriculum" from different pedagogical perspectives.

For Acevedo (2010):

> It can be defined as the set of norms, customs, beliefs, languages and symbols that are manifested in the structure and functioning of an institution. ... It is everything that can be seen and heard, but is transmitted and received unconsciously, at least without a recognized intentionality. It is what Stenhouse calls what is not publicly recognized, what can be found in contradiction or that reinforces the intentions of the official curriculum. The hidden curriculum is not consciously developed, either in matters of gender or in any other aspects, but it develops and, therefore, it must be taken into account... it exists so strongly that it many times it exceeds the explicit curriculum (p. 1).

This set of norms, customs, beliefs, languages and symbols that manifest in the structure and functioning of an institution are carried out in the daily practice of the school, without reflecting intentionality, determining a form of being that is characteristic of the institution. The entire educational system, in one way or another, is affected by the hidden curriculum, not just a part of it. The early years of childhood, the school education process and even higher education reflect this curriculum in their daily practice. The different factors manifested in the daily educational task find their objectivity in the community recognition of languages, symbols and norms that, while promoting socialization, foster the formation of identity and particular ideology, the experience of values and a characteristic spirituality.

The value and scope of this curriculum, expressed in the aforementioned factors, will determine, continuously and renewed each time – without losing the essence – the identity of the institution, its particular way of being, which is not achieved the explicit curriculum, unless very rare cases.

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Unlike the official curriculum, formal or explicit, hidden curriculum does not originate in the norms in force in the educative system; it is the result of certain institutional practices that, without being regulated, can become more effective in acquiring knowledge, behaviors, attitudes and values. In this way, through the social links and the scenarios to which it is related, it can promote and motivate better learning moments.

The daily bond between teachers and students constitutes an effective means of ideological transmission, in which a party assumes the power that confers its status, while the other is placed in a situation of submission. In this educational relationship, a series of rituals that characterize the pedagogical task (punctuality, active participation, disposition, etc.) appear and can constitute the hidden curriculum, through which the teacher reaffirms his/her power and control on the process, while the student can be limited to a development in the learning process, characterized by the ease and the least effort. According to Murillo, "the degree of equilibrium that can be established in these relationships will depend on the ability of the student to learn the hidden curriculum, from which the expectations associated with their role are transmitted and that may contradict the objectives of the explicit curriculum" (2012, p. 3). This would be a more real, integral and participatory role for the professor, transcending instructional spaces.

It will be the mastery of the teacher and the educational institution that determine the balance between the different latent factors in the hidden curriculum, in such a way that this harmony promotes the desired human development and the integral formation. Thus, this would be a non-explicit path in which values, ideology and spirituality develop in a social and communitarian way, but also in an individual way.

One of the elements or harmonizing agents of this process is found in the symbol, whose study and analysis corresponds to hermeneutics.

9.1 The symbol: a space for reflection and formation of values, ideology and spirituality

A symbol (from the Latin: simbŏlum, and the Greek σύμβολον) is the perceptible representation of an idea, with traits associated by a socially accepted convention. It is a sign without likeness or contiguity that has a conventional link between its signifier and its denoted, in addition to an intentional class for its designate. It can be a term, a name or an image that is known in everyday life, although it possesses specific connotations in addition to its current meaning. The different social groups often have symbols that represent them; there are symbols referring to different associations such as: cultural, artistic, religious, political, commercial, sports, among others.

It is characterized by being a system of indirect knowledge in which the meaning and the signifier try to annul that division between the deep and the manifest reality (Durand, 1993, p. 18). The symbol presents an evident "face" or show up as another "hidden", unknown; the first one obeys the conventions and requires a basic and common understanding. The second motivates a deeper understanding and reflection by those who know it.
The symbolic thought, contrary to the scientist, does not come from the reduction of the multiple to the one, but by the explosion towards the multiplicity in order to perceive better, in a second moment, the unity of the multiple. The symbol is a language originates like all language, from a set of signs, i.e. signifiers that evoke an image and refer to something. Its significance is given by over-added levels of meaning. The different languages correspond to different ways of constructing reality, to different perceptions and rationalities, and the

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symbol stands out among the different forms of communication. This has an original disposition, is an ontologically outstanding expression that points to the gradations of reality that are considered paramount.

Culture, through its different expressions –many of them symbolic-, overflows meanings, which are transmitted through the educational process consciously or explicitly, but, as it has been analyzed, also in unconsciously or implied. For Giménez (2005), one of the languages used is the symbol; therefore, the educational processes can be understood as hermeneutic formation processes or of preparation for the decoding of symbols.

Scholars from the different branches of the social sciences made approaches to the understanding of the symbol. Authors such as Jung, Eliae, Levi-Strauss, Cassirer, Bouchot and Melich, among others, have approximated an integral understanding of the symbol.

Although the action of educating carries with it the two visions that its etymology proposes: the educator and the *educere*, that is, to give information, knowledge, and to provoke the awakening, to arouse the learning, the encounter with the truth, in the two expressions the human being integrates, assimilates, meets a culture, either to assimilate its identity and values, or to change it, to transform it. In these two cases, the symbol is a vehicle (lat. *Vehiculum*: means of transportation) conducive to the manifestation of this relationship. Educate, from this perspective, is the process and art of forming hermeneutics, decoders, individuals who in contact with reality seek to re-signify it, performing an interpretative reading in which will influence the multiple intentionality of linguistics. Here, the context in which it was written, the motivations of the author and also of the reader willintervene.

Alvarez Colin (2013), in his work *Analogue hermeneutics, symbol and human action* quotes Paul Ricoeur (1967) who states that in the context of a culture, "the true symbols are the main part of all hermeneutics, which is directed towards the emergence of new meanings and oriented towards archaic ghosts" (p. 119). This is perhaps the greatest advantage of the symbol: being a living "archive", inside each culture as well as cultural, social, educational keys that allow to access, save memory, recover the identity from the original moments, in which these find the reasons and the essence of a culture.

The school responds to the culture in which it develops. It shows the symbolic elements needed to address education as a way of understanding the student's context in meaningful structures such as the institution and symbolic systems within the school environment. Joan-Carles Mélich (1996) affirms that "education, then, as a social and cultural action, is always a symbolic action" (p. 133). In other words, human existence requires meaning and the symbol is perhaps the most suitable vehicle for developing this educational-cultural task. Considering the possibility of a symbolic education as an alternative to a school that often appears to be separated from the culture of the community or society from which it participates, is an authentic possibility of opening up to multiculturalism and meeting with the other, as well as a possibility to form a different, more transcendent and integrative dimension.

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Conclusions

The reflection on educational innovation normally debates the same topics. The contributions, criticisms and proposed advances do not meet their objective: to transform education in the interests of development and the common good.

It is urgent for the formation of teachers to propose new spaces for the reflection on the educational work to the benefit of the transformation of the human beings and the society. A space of transformation is the symbol, which, thanks to its universal character is a transversal element that is always present in the educational processes and susceptible to provoke new and different pedagogical encounters. Teacher training must transcend the formal, rational and explicit scenario to promote a much more humane and comprehensive growth.

The ethical training required by teachers, and determined by the encounter with a different *ethos*, finds in the symbol a vehicle for transmitting the culture, spirituality, values and ideology.

In a society that claims for a horizon of meaning and which every day shows in the television and images the tragedy and the human nonsense, it is necessary to propose alternative spaces so that the areas proposed in this article are conducive to the human being of the 21st century. Perhaps by returning to the original, archaic efforts of human civilization, new forms of integral human development will be reached.

In one of the episodes of the "Star Wars" the professor Yoda says: "...my ally is the force, and a powerful ally is... life creates it, makes it grow, penetrates and surrounds us... we are luminous beings! Not this raw matter!" Yoda. STAR WARS, episode V, the Empire Counterattack). The educational system must be a space for the creation and transmission of the culture, of human fulfillment. When the news that talk about the educational and social work is more encouraging and free the human being from the fears, falsehoods, superficiality and individualism that overwhelm every day, education will make sense and will really be forming human beings for a better society. It is crucial to face that "dark side" in educational contexts; it is essential that emotions, values, ideology and spirituality are part of the integral formation of the human being, surpassing the fragmentation of the knowledge that characterizes the today's world. Access to the symbol and hermeneutics as paths of knowledge are an alternative.

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Tabú y eufemismo: las formas del habla en la sociedad quiteña actual

Taboo and euphemism: the forms of speech in modern Quito society

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Resumen

Las palabras además de cambiar en su forma externa también lo hacen en su significado, el tabú y el eufemismo son dos conceptos que forman parte de ese cambio semántico que se presenta en el acto comunicativo. Ese cambio obedece a factores procedentes de una sensibilidad social en determinada época y circunstancia. Su uso es común en todos los medios sociales, así se evita llamar a las cosas por su nombre.

El presente artículo tiene por objetivo describir algunos eufemismos usados en la ciudad de Quito. Se demuestra a través de una investigación descriptiva si tales formas están vigentes o han cambiado en los últimos años. Además, se determinará los factores que definen su uso.

Mediante un estudio gramático y pragmático se realizará la descripción sociológica de la población, los enunciados que estos profieren para contrastar con variables sociales seleccionadas. Se detallarán también las diversas circunstancias y espacios en los que los eufemismos concurren en la comunicación y cómo éstos se presentan como una herencia de la colonización. Su análisis permitirá comprender y valorar la cultura heredada.

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Palabras clave

Eufemismo, Quito, significado, tabú.

Abstract

Words, in addition to changing their external form, also change their meaning, taboo and euphemism are two concepts that are part of that change of meaning that occurs in the communication act. That change obeys to factors coming from a social sensibility in certain times and circumstance. Its use is common on all social media, in order to avoid naming things.

The objective of this article is to describe some euphemisms used in Quito. The aim is to demonstrate through a descriptive research if such forms have been in use for a long time or if they have changed in the last years. Besides, the different factors that define their use are determined.

Grammar and pragmatics help to analyze the sociolinguistic study of the population, as well as the discourse used to contrast the selected social variables. Additionally, the different circumstances and spaces in which euphemisms are used are detailed as well as the way these present as a colonization heritage. This analysis will allow understanding and valuing the inherited culture.

Keywords

Euphemism, meaning, Quito, taboo.

1. Introduction

The use and value of euphemisms in the speech of Quito is described in this manuscript. A descriptive analysis will be carried out with a labelling of the words considered taboo and their replacement by other forms that in semantics constitute a study on the different changes of meaning that undergo lexical constructions in certain contexts. First, an analysis of the pragmatic phenomenon is carried out in order to understand the intentionality and attitude of the Quiteño speaker in various contexts, as well as the explanation and the value that is given to the use of different forms, in order to collect and to give them the acquired sense to elaborate a lexicographical work.

Secondly, a brief description of the historical evolution process in the use of the Spanish language in Quito is included, with the purpose of being able to understand the treatment of the taboo in this context. In addition, the idea is to explain the use mechanism of the euphemistic forms to locate verbal forms, nominal, phrases and more elements of the norm, and to match them with the new constructions that have arisen and have become part of the daily lexicon. Examples of taboo and euphemism used in daily speech in Quito are detailed.

Thirdly, the different areas in which the euphemisms have emerged from a sociological point of view have been explained to rescue the identity, to collect the uses in a list of Quito euphemisms, and also to set guidelines to continue with deeper research that leads to understanding the reason of the different uses of lexical constructions in the Quito Society. “In spite of the repeated alerts of some researchers on the importance of the taboo study from the sociolinguistic point of view, the bibliography on the subject remains being almost nulled¨ (Calvo, 2011, p. 11). Indeed, it is difficult to achieve an empowerment and then a social analysis in an environment other than its own.

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The relationship between language, society and culture is close and necessary when elaborating a study; the analysis based on the sociolinguistic approach will determine the context in which the communicative interaction occurs. The objective is to understand how society is formed on the basis of linguistic experiences.

1.1 Argumentation

In social relations and interrelations, communication plays an essential role. This process is concretized differently, among which oral communication through verbal codes creates the transmission of messages according to individual and collective needs.

Since communication is a cultural element, it uses multiple ways to refer to contextual elements directly and indirectly; in some cases, the practice to deal with content that denotes allusions and inappropriate insinuations is observed; terms that sound unpleasant but are necessary because these grant cultural identity. In this regards, Brown (2015) states:

> Superficially perhaps this seems as an advancement for humanity, but if we examine the role of the taboo in the structure of a society we realize that it is a necessary cultural stabilizer, an integral element of all cultures, not only those that we call "primitives" (Brown, 2015, p. 10).

The author refers to a cultural stabilizer, i.e., it is a linguistic phenomenon necessary to identify and locate the culture of people or a nation. It may be thought that the use of certain euphemisms constitutes a delay; however, the identity, the folklore of a certain social group is rescued. Our ways of speaking reveal our idiosyncrasy, our worldview of the world.

In the Ecuadorian society, euphemisms are used to replace terms considered taboo, which are seen as unacceptable and denote an immoral behavior. This categorization depends on the social hierarchy. Domínguez (2014) says:

> For anthropology, the taboo is related to objects and actions that have an essential meaning in a certain social hierarchy. Hence, the importance of the leaders and religious objects or the prohibitions imposed on totemic animals that are an integral part of the symbolic structure of society. (Domínguez, 2014, p. 45).

Indeed, symbolism of a society is based on the degree of social hierarchy of a particular group; therefore, the more diverse the socio-economic and cultural level, the more different the range of turns and expressions that each group will use. The social fact cannot separate from language.

Our idiosyncrasy, the product of a tragic cultural inheritance derived from colonization, keeps a subordinate language, which is doubtfully and fearful of negative reactions of the speaker. This leads to the use of terms called moderate or less strong in order to have a sort of diplomatic attitude in the discourse, not to hurt people's susceptibility, not to make requests that sound to imposition. The words taboos are replaced by the euphemisms in the media, in work environments, in the treatment of diseases, familiar environments, also in the political field to persuade, to convince and also to cover acts.

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1.2 Definition

The degree of sequence and reciprocity that arises in the substitution process of one to another is clearly established in the taboo and euphemism; then, the lexical substitutions from determining aspects are analyzed, such as the cultural context, speakers, discourse, type of register and communicative intention in the speech acts. That is the reason there is duality in language.

Certainly, this dualistic phenomenon has on its structures social, pragmatic, and logical aspects. The mechanism of the euphemism cannot be studied only as a linguistic fact but as a complex cultural and sensitive phenomenon to extralinguistic changes that requires an interdisciplinary approach.

In accordance with the previous text, it is possible to confirm the importance of conducting an analysis from the process of using the levels and records of the language in which the speakers are located. Its cultural, spatial and physical context will vary in relation to the criteria, perceptions, ideologies and other agents.

According to the semantics, euphemisms replace taboo words, these are words that are socially not accepted and sound unpleasant in the communicative process. Euphemisms that substitute taboo words will not cause any problem or uncomfortable moment among the listener, since the purpose of the language is the social coexistence.

Regarding euphemisms, it is said that this is a daily strategy of the language which can be socially compromising. That is, the fact of transmitting implicit messages can lead to misunderstandings and generate difficulties. In this sense, euphemisms affect good communication, in some cases offending the listeners and in others distorting consciously and unconsciously what they want to communicate, which is mediated by interests and the motivations of the speaker.

2. Origin of the Ecuador euphemism

Our cultural heritage is the product of a brutal colonization where a group of invaders that have subjugated for years ancestral ethnicities, without allowing them to express themselves freely in different aspects. The slave to address his boss could not call him by the name but instead should have said "master" or “Amito” and not because he felt some affection, but by fear of being punished.

The colonizers forced our natives to learn the Spanish language, however, the Spaniards did not know the language of our natives; so these could insult the Spaniards in kichwa, and those euphemisms remained and were transmitted from generation to generation.

The subordinate language appears from this cultural subjugation inheritance, and transforms into euphemisms as a tool of social coexistence and is evident in statements like: *no sea malito*, *mande, regáleme un poquito, esto no más*, and are maintained repeatedly in Quito. The intention is to express cordiality, consideration, respect, as it was the way to treat the master.

Another way is the use of the derivative morpheme suffix ito-ita, at the time of asking for a favor, *“espéreme un minutito”*. “*Ya le sirvo la comidita*”, “*Cuántos platitos le sirvo”, “deme una manito”, “quiero el amarillito”, “en la tardecita”, “aquisito no más”, “un favorcito”,* in these examples there is a certain intentionality and an eagerness to disguise their feelings, their emotional state and above all these pursue an end which is persuading. There is the need to

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replace a strong term with a soft one, since at the beginning they assume a sense of submission to obtain a sort of subordination and servitude.

3. Why using euphemisms?

The euphemisms are linguistic tools of social use that is generalized. For example, in the political discourse, the term "disappeared" is used to cover murders of people who opposed a regime of dictatorships or oppressive governments. Hence, talking about murder is talking about the truth which is not convenient for many.

"The budget cut", "the fall in the price of oil", "the worst earthquake in recent years" disguise and hide the real crisis in which the country is. "Accreditation of the University" is a perfect label and a source of concern for professors, who in their attempt to achieve it have time in the classroom to generate formats, reports, evidence. They are crammed with imposed activities, knowing that the goal is to divert and evade perhaps a difficult reality.

The students who for the sake of their rights forget their duties and disrespect the rules of academic coexistence are called "hyper", "special case" and should not be called them undisciplined to avoid hurting their susceptibility or lower their esteem and avoid possible suicide.

"Sex workers" get more consideration today because they are no longer called prostitutes. And black have claimed their rights because they are people of color. As if the idea of discrimination was not implicit in the same fact of not calling black, as well as white and mestizo.

And for the workers not to feel exploited nor violated in their rights, they will not be told that are fired, but that there will be a readjustment at work, a budget cut or that a reengineering labor will be made. The construction workers will say I have a "*chauchita*" which means extra work. And they will express in a subordinate and pleading way: "*dará trabajito*", "*dé trabajito*", to apply for a job.

In the field of medicine, euphemisms are used to make less painful and bearable certain disease. The name of the disability or the disease is not mentioned, instead the terms *long disease, blind, disabled*, *special abilities* are used because it is believed that pronouncing them in their original form is somehow excluding or discriminatory, which in the case of medicine, generates confusion and an absence of total and real knowledge to be able to act in case of emergency.

> If we try to carry out an analysis of military discourse and, specifically of Ecuadorian military discourse, we soon realize that one of the structuring features of this discourse is the recourse to the euphemism and to the use of words to a greater or lesser extent, mostly due to the position that the army occupies in some sectors of society as an institution close to war, fighting, bloodshed or death (Hernandez, 2001, p.8).

There are many euphemisms in the military field because of the complexity of this activity and the feeling of pain that it can cause in their relatives if they receive bad news by the loss of one of the companions.

In Rambo: First Blood (1982), Delmar Barry's wife (former Vietnam fighter) uses a characteristic euphemism, "-Delmar left – And what time will he come back? He died in

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summer". In this type of film, known and appreciated worldwide, euphemisms are heard, and need to be used because the topic is death in order to attenuate the pain caused.

Euphemistic terms are used in the family nucleus because parents generate taboo topics related to sexuality. Gay is said instead of homosexual; it is said "the stork" brought the baby to the fact of giving birth; other denominations are given to reproductive organs such as penis and vagina, *pollito and pollita,* respectively; sexual relations by intimate relationships, "la regla" instead of menstruation.

In the Quito speech, pleasant, friendly and even affectionate terms and expressions are used, as a reflection of the cultural and ancestral heritage. The Andean culture always keep a friendly relationship, reason for which diminutives, gerunds, quichuismos, idioms are employed, always with intentionality of harmonious and pleasant coexistence. However, there is also intentionality such as persuasion and conviction in the speech of Quito; in the psychological and affective aspect the intention is not to injure susceptibility; and in other cases the idea is to hide the truth. Iván Sandoval Carrión (2014) from El Universo newspaper, affirms:

> A universal example is the extended use of the term "Afro descendant" instead of "black." Their employment is inadequate, because "afro descendants" are all human beings, if we grant credence to Leakey's investigations, who found the oldest traces of hominids and Homo sapiens on the plains of what is now called Kenya and Tanzania. In addition, the word does not specify whether these are descendants of the people that are in the north or south of the Sahara, and that differ considerably among themselves in their languages and other cultural traits, in addition to the color of their skin. In our case, would it not be more "correct" to ask the Ecuadorians who inhabit the province of Esmeraldas and north of Imbabura how they prefer to be called? Maybe they are proud to be considered black. (p. 11).

When the political discourse makes reference to "el negro de mi patria", the word black is not a taboo, it is not unpleasant, and maybe the intention is to cause affability and gain acceptance in the group. When reference is made to "Negro" of emeralds, whose qualities of strong man, wrestler and cheerful have always characterized him, it is cause of pride in the ethnic diversity; however, in the political discourse with the intention to persuade to obtain votes, the word black is used because is a symbol of pride, and this is where the cultural, contextual and intentional aspect prevail.

However, it is not only in the economic and political sphere where the terms considered taboo are being replaced by euphemisms, it also happens in the cultural and social sphere, in which to be accepted in the group they are forced to use multiple forms of expression. Such is the case of the military environment that was detailed in the preceding paragraph.

4. Some taboo words with their corresponding euphemisms in the speech of Quito

The following examples are normally heard in the speech of Quito, in different working and common contexts. I need some time instead of "I want to end this relationship"; you deserve someone better than me for "I don't want to be with you"; social rehabilitation center for "prison", deprived of liberty by "prisoner", "imprisoned"; severe labor dispute for "dismissal"; to consummate marriage by "sexual act"; economic slowdown by "crisis"; divert

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funds by "embezzlement"; voluntary termination of pregnancy by "abortion"; not to graceful by "ugly"; improper relationships for "adultery"; military pronouncement by "coup d'etat"; elderly for "old age", sleep the eternal dream by "dying"; a little overweight for "fat"; is not technology-friendly by "doesn't know how to use technology".

4.1 Cases of euphemisms: combination of the verb "give" plus a gerund

It is very common to hear the following terms in Quito with the intention of not imposing or ordering at the time of soliciting or asking for something, the verb is not frequently used in imperative, it is not said "trae la caertera" but "dame trayendo la cartera", a "dame" will never stand alone, because there is a need to accompany it with a gerund to soften it.

4.2 Other forms of euphemisms

In order not to denote imposition, it is not said "haz esto o aquello", but instead the structure of the verb *dar* + GER is used: "dame hacienda".

The following terms were found in the book "Quiteñísmos" (Allan Garcia, 2016, p. 21):

Dame viendo a María (=look for Mary)
Darás viendo a María
Deme viendo a María
Dame cuidando a la guagua. (=Take care of it)
Dame dando (= give something for me)
Dame dando el libro que está sobre la mesa.
Dame hablando (=Intercede for me)
Dame hablando con la profesora para que me reciba la tarea.
Dame dando una mano (=help me)

Another type of euphemism consists on substituting one verb for another, in order to deal with subtlety or to soften the discourse.

Mi mamá le habló porque llegó tarde del colegio ("talk" instead of "scolding")
And when people do not accept that they want to leave they say "me van llevando"

Me van llevando a la fiesta.
Me van llevando a la reunión.

If we compared our euphemisms with those used in the Colombian language, it is observed that this prototype of euphemisms does not occur, since the Incas did not arrive there, i.e., they did not live a large subjugation process of the Spaniards. There was no resistance of the Incas during the Spanish conquest, so in the Colombian speech the petitions are direct, the Colombian will say "bring the documents", the Ecuadorian will say "dame trayendo los documentos". Therefore, the marked submission attitude in the Quito population is seen in the use of euphemisms.
In Ecuador, the word ass is taboo and is replaced by buttocks; in Spain is a completely normal word. Hence it is even used as a verbal derivative in "going backwards". The euphemism "rabito" is often incomprehensible for a Spaniard when he/she first hears it.

Are euphemisms in the speech of our society really used to avoid an unpleasant moment? Is there a purpose to cause aesthetic delight in the ear? Or do we cover the truth, manipulate and make use of the characteristics of the language's appealing function to influence the listener? We disguise the truth; we divert the true intentions of the one who makes use of this semantic phenomenon. We have rooted the feeling of submission, of oppression and we do not want to repeat history, reason for which we seek a lexicon substitution.

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The lack of academic instruction is a problem when interpreting a message objectively. It is easy to be prey on deceit and manipulation, as it expresses a nice speech in which the truth is not presented, because that message, laden with euphemisms, offers a different view to the real.

The euphemism is created by the speaker. There are several characteristic factors to create a euphemism, like worldview of the world, culture, social position. The understanding of the euphemism depends on the context of the communicative act, and above all, that both the speaker and the listener share certain social uses and convictions. Therefore, information that for a social, religious and political group has a pejorative or unpleasant meaning, may be different for another group.

> Euphemisms are not exotic and strange creatures from distant lands, nor are they private property of literature or national politics; they are part of our daily living. As a rhetorical figure, the euphemism is not inconsequential. It is a figure with intentionality and a distraction from that intentionality. Like the magician who hides the "secret" of his act (Morales, 2005, p. 16).

In the pragmatic field, when the aim is to stand the use of language in relation to the users and the circumstances of communication, the attitude of the speaker is another determining factor in the use of euphemisms, if the person wishes to persuade, or offer affability or discretion; or eliminate that sense of oppression and resignation.

It mainly depends on the culture, the circumstances and the social group in which the speaker is to determine if a word is taboo, euphemism or dysphemisms. The taboo is a social phenomenon that is in the daily action, and is immersed in a social group in which it is necessary to intervene and to express criteria on certain subject, taking care that the discourse is accepted in the group and is looking for the term that is best associated and that wants to be expressed.

However, there are doubts about if a term is a taboo, because it could be a taboo for someone and for others it may not be, what for one person is a euphemism for another is not, the fact of issuing an ideological pronouncement, religious and sexual in a group leads to the use of euphemisms. Now the interesting thing is that these euphemisms could be taboo for another group and thus generate a heterogeneous chain of changes and lexical substitutions.

Euphemism carries out several relevant social functions that differ from metaphors (Domínguez, 2004, p. 38). Its main function is obviously to be able to name an unpleasant object or the nasty effects of an object. But, in addition to this main function, the euphemism conveys other minor functions, as it is also used to be polite or respectful, my wife or my husband for “mi mujer” or “mi marido”, respectively.

It is also used to dignify a profession or trade: bartender for “waiter”; chef for “head of the Kitchen”; cabin crew member, flight attendant for “stewardess”; technical engineer for “perito”, etc. Some of the euphemisms quoted are loans, especially when the words taken as loans come from languages that are considered to be prestigious, more educated, refined or elegant.

To dignify a person who suffers from sickness, disability or a painful situation, it is said “padecer/sufrir el síndrome de Down” instead of “Mongólico”; “tercera edad o mayores” for “old”; and so on. The sentences “dormirse en el Señor” or “exhalar el espíritu” are used

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instead of saying “die”. “Países surgentes” is used to be politically correct, and “Tercer mundo” for “poor countries”.

According to the foregoing, it is inferred that euphemisms are used in the Quito speech for a more comprehensible communication, with a lexicon that demonstrates the idiosyncrasy, identity and culture. On the other hand, the professional life is also compromised with these terms, professions become more prestigious if they adopt certain denominations that demonstrate a language of status, as the use of English words.

Many times the use of euphemisms generates a displacement of meaning and loss of reality perception, this by the eagerness to look good before others, not to injure susceptibility in others, to dignify the person, in short, to fulfill socially. But we also incurred in moving away from the true message that the speaker wants to convey.

5. Euphemisms at work

In the Ecuadorian society, specifically in the labor area, many euphemisms are used to have a polite attitude somewhat diplomatic in the discourse. Phrases like “*El horario no es tan amigable*”, “*reajuste laboral”, “reingeniería laboral”,* among others, are the euphemisms that replace the terms: “*no me agrada ese horario*”, “*estás despedido*”. The questions that arise are: are these terms used to replace them because they are derogatory or because they hide the truth? What are the reasons to use euphemisms? What is the intention of the speaker?

Why not calling things by their name? In the Quito idiosyncrasy and in the work environment, the one who dares to say directly: “*llegaste tarde, sin embargo, firmaste como si lo hubieras hecho a la hora de ingreso”, “no colaboraste con las actividades de hoy*”; “el trabajo no está bien hecho”, is considered a rude person, inconsiderate, with bad feelings and inflexible.

There is not enough maturity and awareness to accept a call of direct attention; they even feel victims of the person who says these statements other ways there be a boss or not , this information goes through the person who pass the information directly or not, using it in demeanor to the person who express the information without using euphemisms.

The language seeks for social coexistence and in this sense each of its functions must be effectively employed, among them, the function of reporting correctly, disinhibiting of prejudices and discarding that submission culture, transforming into a culture of constant work and direct and optimistic attitudes. At work, success will be achieved to the extent that the message gets in a proper way. For this reason the message must be strictly issued without any replacements. In different circumstances the speaker is obliged to use lexical substitutes for various reasons. Interpersonal relationships are affected to the extent that they are used.

At the moment when certain terms of the message are changed by being unpleasant, the true intentionality of that message is being diverted. Hence, the complexity of using euphemistic terms but not literally or from their morphology or syntax, but rather from their semantics.

Conclusion

The language is a social act, it is constantly changing and evolves as the society grows and advances, and with it all that refers to the relations and interrelations, time, globalization, the advance of the technology, fashion, the language of power, marketing and technology

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are factors that make new terms and new conceptions of the world to be adopted over the years. In addition, we are part of a process of cultural diversity and social inclusion, where the linguistic variety progresses and treasures our identity.

Social coexistence is essential, where there is a desire not to be rejected, or poorly seen in the group. The individual, above all, is social and needs to be positioned in the group to which he/she belongs, the work environment, family environment, fun areas, among others environments of an individual who interact in society.

The change of meaning in language has social, cultural and psychological causes, among others, and euphemisms originate from the need to be accepted in the group, by the need to be kind, not to hurt, to transmit a timely and conciliatory message, to persuade and to convince. The Ecuadorian society, especially in Quito, has adopted many euphemistic terms to replace the taboo words, the same that are left behind, becoming new euphemisms.

Finally it is necessary to analyze on the imagination of the speaker, which is indefinite and infinite from a socio-cultural vision, therefore, it is not possible to determine that the specific use of taboo words and their corresponding euphemisms belong to a group. The sociological, psychological, and culturally inherited factors provoke a form of reaction and a certain use of the language.

Euphemism is a social linguistic phenomenon that is concretized in a time and in a context of the speaker and the listener, it evolves and changes as society changes and evolves; and it becomes taboo and it is appropriate to find a new euphemism for it. It does not depend on the linguistic sign itself, but on the apprehension sense that each individual adopts.

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