

# Communication of the Linguistic Awareness of Ecuadorian Students, Through a Web System

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## ABSTRACT

The idea to defend of the present investigation is the design of a web system, for the learning of Ecuadorian students. What is proposed is to reduce the number of students who have difficulties to read and write, because the teacher is not able to provide attention to all his students, since there are several grades and several students at the same time. This tool, which was designed, is made so that the student knows how to recognize sounds, form sentences and express meanings of words. This contributes in a beneficial way to the teaching-learning process, it will focus on the word generator method created by Paulo Freire, which is used for adult literacy, and is also currently used in many educational institutions in Latin America. The present work is carried out due to the incidence of students, who have problems or difficulties in reading and writing, so this delays their level of learning. The development of a web system for the development of linguistic awareness will allow students to learn through the source word method, making use of an element that today is part of our day to day: technology. This adaptation to Paulo Freire's method allows the same procedure to be carried out from a computer, entering from the web. With this implementation, students will be able to recognize sounds, write words and form sentences correctly. This project is structurally organized. Initially, a theoretical framework will be reviewed, where we will have the relevant concepts of the research topic; then the methodology of the process, which details the type of research of the project; and then a proposal, where we respond by giving a solution to the problem. The interest in making an educational tool for a multigrade institution arises as a professional need to provide easy access to pedagogical tools that help in this teaching process, since there is a large percentage of this type of institution in different countries, especially in Latin America.

**Keywords:** Communication, Learning, Technologies

## INTRODUCTION

The multigrade rural school would seem like a problem from the past, however, today it is present in several countries around the world and Ecuador does not escape this reality. Well, throughout the Ecuadorian territory there are institutions where a teacher must be in charge of the pedagogical process of different grades in the same classroom. On many occasions, this reality becomes more complex, due to the conditions presented by the context in

which they are located, such as areas of high geographical dispersion and difficult access (Heras and Guayllas, 2020, p. 12).

Multi-grade schools are located in sectors that are difficult to access or far from urban areas. In this type of institution, a teacher is in charge of a group of students of different years and of different ages. The infrastructure of those institutions only consists of one classroom, which is why they are called one-teacher institutions.

These rural schools are a transfer from the urban school, with the same programs, organization and teacher training. They are called rural because of their location and were characterized by the scarcity of resources (García-Segura, 2017, p. 294).

### **SOURCE WORD METHOD**

The development of this project was motivated by the territorial pedagogical accompaniment plan, which allows training teachers on methods during the teaching-learning process: literacy for students at the basic and preparatory level. At these levels, teachers analytically study Communication books, and from them they use the “generative word method”, created to contribute to the development of students’ linguistic skills during classes (Suntaxi-Andrade, *et al.*, 2022).

A generator word is a literacy method to learn to read and write, where the teacher becomes a mediator to build the student’s knowledge. Literacy from experience is one of the works where Freire mentions that he was educated by his parents, who instructed him with words that he knew, creating knowledge from his personal experience.

Educators have as their first obligation to promote a process of critical literacy, so that the worker, the farmer, the woman, the children and the students in general, find their own word, so that they are not repeaters of traditional knowledge; It is an approach to problematization as a method, to find concrete solutions to reality, through praxis (Rivas, 2018, p. 75).

### **PAULO FREIRE’S METHOD**

This method managed to make many people literate, as a learning model for families in rural areas, where knowledge itself was built from a known word or an image.

More than building a method, in the sense of one more of the many didactic-methodological proposals that exist, what Freire does is collect and unite, in theory and in practice, his educational experiences, describe them, think about them, base them, complement them. and perfect them throughout his life. This author did not use to call his pedagogical exercise simply “method”, although on occasions he has used such a concept, but rather liberating praxis, liberation pedagogy, problematic education, question pedagogy or revolutionary education (Cristi & García, 2018, p. 15).

## **THE PEDAGOGY OF THE OPPRESSED**

In Freire's book "The Pedagogy of the Oppressed", it is stated that the codification of words in this method allows the literate to meet and rediscover himself in the same world with the other companions in his environment, building, sharing his knowledge and his criticisms of your everyday environment.

Encoding and decoding allows the literate to integrate into their existential context: they rediscover it in a world expressed by their behavior. Become aware of the word, coinciding with the intentions of others who understand the same world. The world is the meeting place of each one with himself and with others (Freire, 2005, p. 15).

## **DIGITAL TOOLS IN INFORMATION AND COMMUNICATION.**

Information technologies encompass a real world of communication, regardless of distance or situations from other places, with electronic means of dissemination, such as radio, television and conventional telephones (Molina *et al.*, 2020).

Digital tools for inclusive education imply resources created in order to promote quality training for all. However, all this will revolve around the figure of the teacher, who must seek the help of another cardinal element in the opening and development of the digital inclusion of people, the family (Marín-Díaz, 2018, p. 1).

Educational institutions are working on the creation and implementation of new strategies aimed at enriching the teaching-learning process. Technologies and educational web systems are changing, mainly the way of transmitting knowledge and the activities carried out by teachers in the classroom (Salas, 2016, p. 18).

## **NEW CHALLENGES IN EDUCATIONAL TECHNOLOGY**

The evolution of digital media has a significant influence, so in education the teaching-learning process has been improved, leaving the traditional education of educational institutions, there being a need to train or improve the profile of the teacher for the good use of these digital tools.

Educational technology takes a tour of the evolution of digital and multimedia media applied to education, from computer-assisted instruction to learning objects. In the same way, digital audio and video technologies are used, exploring some of its most relevant educational applications, and how the Internet has favored its growth and the teaching-learning process itself (Gutiérrez, 2016, p. 243).

Educational research can be done using technology. Where information and communication technologies are a broad field, in which the student can carry out their inquiries.

In research, technologies can be used as a means of learning. In communication, the use of technologies is assumed as a means, considering teaching within this classification; in the construction of knowledge, technologies

can be used as means for learning through the construction of knowledge; They are also used as means of learning through expression (Tapia, 2020, p. 18).

## **INTEGRATION OF TECHNOLOGY IN EDUCATION**

Integrating technology with education is something very common nowadays, since these tools facilitate the work of the teacher and help the structures of their pedagogical content. Therefore, adapting Freire's method with technology will allow the conferences to be carried out efficiently and effectively.

For Prendes Espinosa (2020), it is necessary to recognize without the risk of being mistaken those technologies permeate our daily lives, our social environment and our economic activity. Education, conditioning and determinant of social development, cannot escape this reality (p. 24).

In this context, it is evident that technologies have become a tool of indisputable value and effectiveness in the management of information for pedagogical purposes. Technologies have acquired a specific weight in the teaching-learning process, since an educational revolution is needed to implement more effective and real forms of teaching (Cascales *et al*, 2017, p. 203).

## **METHODOLOGY OF THE RESEARCH PROCESS**

The type of research was exploratory, descriptive, with a quantitative approach, since real data was obtained for decision making. Surveys and interviews addressed to teachers were carried out, counting those who use technological devices as a didactic tool (Molina, *et al.*, 2017). Thus, in this project two variables were considered: the web system with the Freire method and the development of linguistic awareness. The project was carried out in a basic general education school in the Republic of Ecuador, in the period 2022-2023.

This research project was based on a teaching method applied throughout Ecuador in public institutions, called the Freire method or also known as "generative word". In this way, the teacher begins the class with a familiar image of the environment. The child has to start creating their own knowledge by explaining the meaning of the image shown and discussing it with the other classmates.

This method was replicated in a web system called Web Multigrade, and developed for multigrade educational institutions, also called single-teacher or multi-teacher.

To develop the web system, a Xampp database server, source code in PHP language and the Laravel tool were used as an interface. Then it was published to a domain for its respective execution.

This project obtained favorable results, by implementing a web system with content from the well-known Freire method, also called the word generator method. The development of the web system with the content allowed the students to develop their knowledge of the language.

The information was collected through surveys of the teachers of said institution, verbal interviews with the rector of the school, and with parents of students who present reading and writing problems.

Thanks to this project it was possible to determine the level of knowledge that teachers and students have, regarding the management of websites, fulfilling the specific objective.

We diagnose how the process for the communication of linguistic awareness is currently presented, through surveys directed to the teachers of the School, thus fulfilling another specific objective.

Before the implementation of this web system, there were a certain number of students who were in higher grades and still had trouble reading and writing.

We propose methods for the use of the web system, making use of the technological devices that exist in the institution, such as computers and the Internet, applying the Freire method, and thus strengthen the development of linguistic awareness, in this way we contribute with another of the specific objectives.

Thanks to this project, the number of cases of students with reading and writing problems has been decreasing, since they have been developing the respective linguistic skills, using the system, because it has a large amount of information, which is also available in the Communication books of public institutions. Freire's method performed well when tried in the traditional way. Now, the application of a technological tool has significantly accelerated this process.

## **CONCLUSION**

The main objective of this proposal was to develop a web system that allows the development of linguistic awareness, making use of the Freire method. For this, the level of knowledge of teachers and students in the domain of web systems was determined. Starting with the director of the institution, a great mastery of this type of tools was evidenced, so it is concluded that there were no difficulties when implementing it.

The language and literature teaching process was carried out in a traditional way, since only storybooks and printed sheets were used, with images or letters to teach the class of the generating word; this was favorably received without using digital or technological tools. Now that it is being implemented in a web system, the result is much more favorable, so the student is hooked in the class, seeing that it is multimedia and interactive.

One of the strategies embodied for the classes is the use of the different educational programs that currently exist, even when evaluating, since when evaluation was discussed nobody liked it, but now that evaluations are dynamic, due to the use of these apps, not only encourages student participation, but also injects knowledge into each evaluative game.

## **RECOMMENDATIONS**

It is recommended that the teachers of the institution continue to investigate the wide variety of educational software that exists, such as khoot,

mentimeter, socrative, edpuzzle, etc. In this way, vary their classes using digital tools, and thus be even more innovative. during the teaching-learning process.

Students in upper grades who are not yet literate can be paired with children who are learning, so they can learn together using this system and collaborating with their peers.

When giving classes with the system, the teacher must control it, giving instructions on how to select an answer or how to select an image.

For younger children, do not allow them to interact alone, the teacher must always control the system.

It is recommended that this research project be implemented in rural institutions nationwide, where this system would be very useful, thus reducing the number of people with reading and writing difficulties.

This project was developed for the area of Communication, but it could be developed for different areas such as mathematics, social studies, etc.

## ACKNOWLEDGMENT

The authors thank the Universidad Estatal Península de Santa Elena and Universidad de Guayaquil; for the resources contributed, in the development of the project “Impact study of communication 4.0”.

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