

ISSN: 2661-6831 Vol. 8 No. 2, pp. 164 – 194, April - June 2024

www.exploradordigital.org

# Innovative methodological strategy for improving reading and writing in students of the Fourth Year of Basic General Education at CECIB Sergio Núñez

Innovative methodological strategy to improve reading and writing in Fourth Year Basic General Education students of the CECIB Sergio Núñez

1 https://orcid.org/0009-0000-9583-5972 Diego Armando Chancusig Tuso Master's Degree in Basic Education, Milagro University, Guayaquil, Ecuador. dchancusig@yahoo.es 2 Alexandra Maribel Flores Cuyachamin https://orcid.org/0009-0003-4733-4366 Bachelor of Education Sciences, Major in English, Technical University of Ambato, Ambato, Ecuador alexandram.flores@educacion.gob.ec 3 Luis Fernando Suntasig Ronquillo https://orcid.org/0009-0005-9959-480X Master's Degree in Basic Education, Bolivarian University of Ecuador, Guayaquil, Ecuador. luchito\_12fernando@hotmail.com 4 https://orcid.org/0009-0006-7119-5820 Wendy Judith Suntasig Calvopiña (iD) Master's Degree in Basic Education, Bolivarian University of Ecuador, Guayaquil, Ecuador. wendy.sun3001@gmail.com Scientific and Technological Research Article Sent: 10/02/2024 Revised: 03/21/2024 Accepted: 06/04/2024 Published: 06/28/2024 DOI:https://doi.org/10.33262/exploradordigital.v8i2.3128 Chancusig Tuso, DA, Flores Cuyachamin, AM, Suntasig Ronquillo, LF, & Suntasig Please Calvopiña, WJ (2024). Innovative methodological strategy for improving reading and quote: writing in fourth year students of General Basic Education at CECIB Sergio Núñez. Digital Explorer, 8(2), 164-194. https://doi.org/10.33262/exploradordigital.v8i2.3128 DIGITAL EXPLORER, and It is an electronic, quarterly journal, which will be published in electronic format, and has the mission of contributing to the training of competent professionals with a humanistic Eſ and critical vision who are capable of presenting their investigative and scientific results to the same extent that positive changes in society are promoted through their intervention.https://exploradordigital.org The journal is published by Editorial Ciencia Digital (a prestigious publisher registered with the Ecuadorian Ciencia Book Chamber with membership number 663).www.celibro.org.ec Digital This journal is licensed under a Creative Commons Attribution Non Commercial No Derivatives 4.0 cc)(i)(s)(0)International License. Copy of the license: http://creativecommons.org/licenses/by-nc-nd/4.0/,





# Palabras claves:

pedagogía, oralidad, lecto-escritura, innovadora, estrategia, aprendizaje, conocimiento.

#### Resumen

Introducción: La innovación en la lecto-escritura mejora el proceso del aprendizaje significativo en los estudiantes. Objetivo: Proponer una estrategia metodológica innovadora para el mejoramiento de la lecto-escritura en los estudiantes de Cuarto Año Educación General Básica (EGB). Metodología: La presente investigación se centra en el enfoque cuantitativo porque trabajamos con grupos humanos buscando el cambio y la transformación respondiendo al paradigma crítico- propositivo que posibilita la generación de aprendizajes constructivistas, además se proyecta de manera cuantitativa porque corresponde a un estudio integrado que plantea una propuesta en torno a los procesos de lectura y escritura, focalizados en el fortalecimiento de estas habilidades comunicativas el mismo que ha requerido adaptaciones de tipo escolar, familiar y social. Resultados: 1. Se logra identificar los problemas de lecto-escritura en los estudiantes de Cuarto Año EGB. 2. Se aporta a fundamentar teóricamente el uso de una estrategia metodológica innovadora para el mejoramiento de la lecto-escritura.3. Se contribuye a diseñar una estrategia metodológica innovadora para el mejoramiento de la lecto-escritura en los estudiantes de 5to Año EGB. Conclusiones: La presente investigación es atractiva, confiable e innovadora. Establece e identifica problemas de lecto escritura en los estudiantes, ya que al tratarse de una estrategia metodológica se basa en la teoría constructivista a través de la lectura y la escritura los estudiantes, los cuales serán capaces de construir su propio aprendizaje favoreciendo el rendimiento escolar de los estudiantes en la expresión oral y escrita, en tal virtud es importante el conocimiento y dominio de nuevas estrategias pedagógicas, ya que estas permiten desarrollar el interés y la motivación por el aprendizaje de nuevos conocimientos. Área de estudio general: Lengua y literatura. Área de estudio específica: Pedagogía de lengua y literatura. Tipo de artículo: artículo original.

**Keywords:**Pedagogy, orality, readingwriting, innovative, Abstract

**Introduction.**Innovation in reading and writing improves the process of meaningful learning in students. Objective: Propose



Tourism Development



an innovative methodological strategy to improve reading and strategy, learning, knowledge. writing in Fourth Year Basic General Education (EGB) students. Methodology: This research focuses on the quantitative approach because we work with human groups seeking change and transformation responding to the criticalpropositive paradigm that enables the generation of constructivist learning. It is also projected quantitatively because it corresponds to an integrated study that proposes a proposal around the reading and writing processes, focused on strengthening these communicative skills, which has required school, family, and social adaptations. Results: 1. It is possible to identify reading-writing problems in Fourth Year EGB students. 2. It provides a theoretical basis for the use of an innovative methodological strategy to improve reading and writing.3. It contributes to designing an innovative methodological strategy to improve reading and writing in 5th Year EGB students. Conclusions: The present research is attractive, dependable, and innovative. Establishes and identifies reading and writing problems in students, since being a methodological strategy it is based on constructivist theory through reading and writing, students will be able to build their own learning, favoring the school performance of students in oral and written expression, therefore the knowledge and mastery of new pedagogical strategies is important, since these allow them to develop interest and motivation in learning new knowledge.

#### Introduction

The purpose of this article is to check the reading comprehension levels of students in the teaching-learning process. The reading comprehension process is an effective learning tool, it enables a better interaction between the reader and the text, with different methods, strategies and to carry out the interaction of the different levels of comprehension "knowing what" procedural "knowing how to do" and attitudinal "knowing how to be". Students are encouraged to relate the text to their own lives and to construct meaning through interaction with the content, this could involve the realization of authentic projects that involve reading and writing in real situations (Ruiz, 2004).





According to the following research, it can be stated that the pedagogical ignorance of renewed reading and writing techniques leads to children not having significant learning, which is detrimental when reading and writing, causing fatigue in classes at the time of learning, therefore reading and writing are inseparable processes when the child reads, he deciphers the signs to perceive the acoustic images and little by little forms words, phrases and sentences to identify what is being read and ensure that what is intended to be communicated is being written. According to the Constructivist theory, through reading and writing, students will be able to build their own learning, favoring the academic performance of students in oral and written expression (García-Cerda et al., 2019).

Our society is facing a situation that tests not only the stability of our social structures, but also the competencies of the citizens who make up the society. Shared reading provides opportunities to discuss content, expand vocabulary, and understand how story structures work, and has explored how children develop their writing skills in classroom contexts. Her constructivist approach has focused on how teachers can support authenticity and voice in the development of students' writing, and her work has highlighted the importance of connecting reading to students' personal and cultural experiences (Villafranqui, 2020).

The digital age has led to significant changes in the way we access, consume, and share information and knowledge. Digital technologies have provided instant access to a wealth of content, which has expanded our learning opportunities and allowed us to connect with people around the world. However, along with these advantages, new challenges also arise in relation to literacy. In the digital age, you can publish content online, which means that we need to be more critical in assessing both the quality and veracity of the information we find (Pinchao, 2020).

In order to try to provide a solution to the need raised, we sought to identify the impact of the application of workshops, in the critical reading of scientific articles, based on research on how digital literacy and online search skills can be integrated into the teaching of reading and writing from a constructivist perspective, their work focuses on how students can be taught to critically evaluate online information and build their understanding. We have explored how technologies can be used to facilitate the construction of knowledge in reading and writing. Constructivist theory has influenced approaches such as online learning, virtual environments and interactive applications. reading and writing, it is important to highlight that constructivism has influenced many areas of education, including literacy (Sanabria, 2019).

The digital divide remains a major barrier for many people. Although internet access has expanded considerably, disparities in connectivity and digital skills remain between regions and communities. This can limit access to online educational resources and impede literacy development in disadvantaged settings. Bridging this digital divide is





critical to ensuring that everyone has the opportunity to participate in the digital age for their own benefit. Another challenge stems from changes in our reading habits. Online reading is often characterized by a quick and superficial approach, where we tend to jump from one content to another without devoting the time and attention needed for deep understanding (Rugel et al., 2023).

School and its practices are usually developed in institutions, classrooms, playgrounds and play areas. Oral and body language are the main ways of accessing and constructing new knowledge, of socialization and of consolidating learning and coexistence practices. Learning to read and write in primary school children requires the connection between the students' prior knowledge, appropriate pedagogical mediation, a healthy socioemotional environment, socialization and communicative interaction, student participation, access to reading and writing material and the creation of motivations.(Murillo, 2022).

In this sense, writing teaching in education is linked to the process of inclusion and equity policies regarding non-traditional students; the fundamental premises of the Writing to Learn and Learning to Write approaches are explored: reading, writing, and communicating orally are key skills for the performance of all children. Reading, as a complex task, requires procedures, sequences of actions, and processes that must be intentionally directed and harmonized with cognitive skills, abilities, and actions to achieve the construction of meanings and understanding. Therefore, reading is by definition a strategic activity that affects comprehension (Figueroa et al., 2022).

#### Methodology

#### Approach

Our research focuses on the quantitative approach because we work with human groups seeking change and transformation by responding to the critical-propositional paradigm that enables the generation of constructivist learning, In addition, it is projected in a quantitative way because it corresponds to an integrated study that presents a proposal around the reading and writing processes, focused on strengthening these communicative skills, which has required adaptations of a school, family and social nature. (Salinas, 2021).

#### Scope

According to Ramos (2020), through the scopeWe can describe how the detected phenomenon occurs in a clear and concrete way so that the necessary reagents are taken when preparing the proposal. For our research, the scope is explanatory because it allows us to know the degree of difficulty of reading and writing in the learning of students, since it has a causal relationship; it does not only seek to describe or approach a problem.





#### Mode

This research, according to its modality, is applied, because it allows a scientific, serious and rigorous investigative process, and also seeks the application or use of acquired knowledge, since the use of knowledge and research results results in a rigorous, organized and systematic way of knowing reality. (Vargas, 2009).

# Type of study

According to Grajales (2000), non-experimental research observes phenomena or events as they occur in their natural context, and then analyzes them. For this reason, in the present research a type of non-experimental study was used, since it is based on categories, concepts, variables, events, communities or contexts that occur without the direct intervention of the researcher, that is, without the researcher altering the object of research.

# Research design

According to Moreno (2013), the research design process refers to the critical interpretation of the processes experienced and the need to understand the factors that hinder learning and the context, which has influenced the teaching practices of reading and writing in children. Therefore, the cross-sectional research design was selected because it collects data at a single moment in time, its purpose is to describe variables and analyze their incidence and interrelation at a given time.

#### Research method

In this research we will use the following methods: Analytical, synthetic, deductive and inductive.

#### Analytical method

According to Rodríguez & Pérez (2017), the analytical method conceives reading as a global and ideovisual act that is based on globally recognizing words or sentences. This type of method gives priority to psychological and educational factors; to the final result of a reading comprehension and writing that responds to the expression of thought.

# Synthetic method

Rodríguez & Pérez (2017) state that in this method, knowledge of letters or sounds must first be acquired. Considered as the simplest elements, they must be brought together in order to reach all possible combinations, that is, syllables and words, since this procedure is governed by the principle: From easy to difficult, admitting that, for the child as for the





adult, what is simple, easy, particular, is the letter or the sound, as opposed to the word or the phrase, considered as complex and difficult elements.

# Deductive method

In the article by Rodríguez & Pérez (2017), scientific methods of inquiry and knowledge construction, they argue that the deductive method is highly specialized for teaching reading, since it is based on the assumption that the semantic elements of the language (word, phrases and sentences) must be the starting point. In addition, when these elements have been recognized as a whole, attention is immediately directed to increasingly smaller elements.

#### Inductive method

Rodríguez & Pérez (2017) highlight the priority of using the inductive method, arguing that it is a reasoning process based on observation and experimentation to reach a general conclusion from specific cases, with the consideration of particular knowledge based on the research topic. Therefore, a comparative study of methods and strategies for the initiation of reading and writing was carried out.

#### **Operationalization of variables**

Bauce et al. (2018) state that the operationalization of variables is a logical process of disaggregating a variable from an abstract level to the most concrete level, the facts produced in reality and that represent indications of the concept. The operationalization process in the present research work is the following:

#### Conceptual definition of variables

According to Reguant & Martínez-Olmo (2014), It expresses that the variable is the one that is proposed to develop and explain the content of the concept; it is the definition of a book, magazine, website, etc. For our research, a concept of the independent variable (innovative methodological strategy) and the dependent variable (reading and writing) was consulted.

#### Dimensions

Arias (2021) states that the dimensions are the factors that are obtained and measured from the variables and are presented textually, taking into account the context of the research, as well as the conceptual definition of the variable, this is how for our research 4 dimensions were established for each study variable.

Indicators





Espinoza (2019) establishes that indicators are those values that allow us to clearly observe the variable, they arise from the dimensions and can be expressed in words, phrases or numbers, in addition, they allow us to describe the reality studied, understand it, explain and even predict events in probabilistic terms, in our research 5 indicators were defined per variable.

#### Items

Townsend (2021) states that items are important questions used in the questionnaire as collection instruments for gathering information on the observed phenomenon, and in our research there are 8 items (questions) for each variable.

Taking into account the theory and development outlined above, the following matrix is created.

# Table 1

Problem:	Reading and writing diffi	culties in fourth year studen	ts of basic general edu	ication.
Qualification:	Innovative methodologica General Education at CE	al strategy to improve readin CIB Sergio Núñez.	ng and writing in fourt	h-year students of Basic
VARIABLES	Conceptual definition	Dimensions	Indicators	items
	Innovative methodological strategies are a set of cognitive, affective and psychomotor procedures and resources that help	Procedures and resources	Student-centered learning.	<ul><li>2.C. Is learning student-centered?</li><li>3.C. How do you ensure that learning is student-centered?</li></ul>
Independent Variable: Innovative	teachers improve the teaching-learning process. These must be selected and applied		Learning phases.	3.E. Do the content and features used improve the learning phases?
al strategy. characteristics of the students in a structur way, allowing the development of comprehension skills generating significan	contents and particular characteristics of the students in a structured way, allowing the development of	Teaching-learning process.	Assessment.	evaluation of the procedures and resources used strengthen reading comprehension?
	generating significant learning (Arguello &			1. E. How do you carry out the evaluation process?

#### Operationalization matrix of variables





# Table 1

# Operationalization matrix of variables (continued)

VARIABLES	Conceptual definition	Dimensions	Indicators	items
		Contents and features.	Types of reading.	5.C. Do different types of reading develop reading comprehension skills in 5th year EGB students? 4.C. Do the
		Comprehension skills.	Reading and writing skills.	<ul> <li>a.c. bothe</li> <li>methodological</li> <li>strategies develop</li> <li>reading and writing</li> <li>skills?</li> <li>6.C. What innovative</li> <li>methodological</li> <li>strategy do you use</li> <li>to develop reading</li> <li>and writing skills in</li> <li>students?</li> </ul>
VARIABLES	Conceptual definition	Dimensions	Indicators	Items
	Reading and writing are the union of two processes related to reading and writing.	Processes related to reading and writing.	Reading and writing-oriented learning.	<ul> <li>7. C. Is learning oriented towards reading and writing?</li> <li>8. C. How do you ensure that learning is oriented towards reading and writing?</li> <li>9. C. Does the innovative</li> </ul>
Dependent Variable: Reading and writing.	Reading and writing are complex skills that children face from Early Childhood Education and that will accompany them throughout their lives. They also involve processes such as encoding and decoding, strokes, comprehension, interpretation, composition and writing of texts. Mastering each of these processes is a guarantee of success in studies and in life (Montealegre & Forero, 2006).	Complex skills.	Innovative methodological strategy to improve skills.	methodological strategy improve skills? 10. C. How does the innovative methodological strategy improve skills? 11. C. Does reading comprehension
		Understanding, interpretation.	Development of student critical thinking.	develop critical thinking in the student? 12. C. How does reading comprehension develop critical thinking in 5th year EGB students? 13. C. Does
		Composition and writing of texts.	Paraphrase and explain your ideas.	paraphrasing strengthen the composition and writing of texts?





# Table 1

# Operationalization matrix of variables (continued)

VARIABLES	Conceptual definition	Dimensions	Indicators	Items
			Assessment	13. E. Does assessment of the ongoing reading and writing process improve reading comprehension?

# **Population**

According to Lopez (2004), the population is a complete set of individuals or objects that share similar characteristics, it can include a nation or a group of people with common characteristics. It includes the entire well-defined group about any research to be carried out. Therefore, it should be noted that the institutional population is made up of 45 teachers who will verify if they are adequately applying the methodological strategies in the reading and writing process in the students of the Fourth Year of EGB, parallel "B". Similarly, the institution has five parallels of Fourth Year EGB, with a total of 190 students, the sample being the Fourth Year EGB parallel "B" with 38 students, to whom the survey will be applied.

#### Table 2

#### Population and sample

	Population	Sample
Teachers	45	15
Students	190	38
TOTAL	235	53

#### Sample

Westreicher (2021) maintains that the sample is a portion or part of the population that reflects the same characteristics. In this case, the sample carried out within the population of the educational institution was carried out on 15 teachers by applying a questionnaire, to check if they are correctly using innovative strategies in the teaching-learning process of reading and writing with Fourth Year EGB students.

# Inclusion and exclusion criteria

- Students enrolled in the Fourth Year of EGB.
- Limited collaboration from parents.
- Traditionalist teachers.





- Lack of implementation of innovative strategies by teachers.
- Inappropriate use of technologies by students.

#### Techniques and instruments for collecting information

#### Technique: the survey

According to Casas et al. (2003), the survey technique is a popular research method because it allows for obtaining and preparing data quickly and effectively. In addition, the information is obtained by indirectly observing the facts through the statements of those surveyed and its results can be applied to entire communities using appropriate sampling techniques. Based on the above, for our research, the survey will be applied to EGB teachers, which will allow measuring specific variables and establishing relationships between them, by including multiple choice and closed questions, since by using a structured questionnaire and following a clear procedure for administration, consistency in data collection can be guaranteed.

# Instrument: Questionnaire

García et al. (2016), states in their work "Design of Questionnaires for the collection of information: methodology and limitations", that the questionnaire is an essential data collection tool that consists of a set of structured questions that can address different aspects related to the research topic, such as opinions, attitudes, behaviors, knowledge, demographic characteristics, among others, designed to obtain specific information from the study participants, therefore, the present research will use two questionnaires, the first addressed to EGB teachers online (Google Forms), and the second addressed to Fourth Year EGB students in person.

#### Data analysis technique

For Castillo et al. (2016), understanding the teachers' perspective through a questionnaire is valuable for collecting information by teachers, and this is why our research is based on the design of a questionnaire directed to EGB teachers, which is detailed below:

#### Questionnaire design

According to Leyva et al. (2018), Google Forms allows you to create surveys or questionnaires directly in your web or mobile browser. In addition, the results are observed instantly, at the time they are sent, and organized in graphs for easy consultation. Therefore, for the present research, a questionnaire was designed with closed and multiple-choice questions, specific on the teaching of reading and writing. The questions are clear and focused on key aspects, such as teaching strategies, challenges encountered, and professional development needs. It was developed on the Google Forms Digital





Platform and consists of 10 questions for EGB teachers and 10 questions for Fourth Year EGB students.

#### Table 3

#### Questionnaire for primary school teachers 2023-2024

		ASSESSM	ENT
THE TEACHER	COMPLETELY AGREE	OK NEUTRAL	I DISAGREE A LITTLE I TOTALLY DISAGREE

1. Does your student usually read in class?

2. Do you know if your student regularly reads books or texts?

3. After reading, is the student able to write what he or she understood?

4. Do students have difficulty pronouncing difficult words?

5. Are the materials you use for reading eye-catching?

6. Do you use different strategies for reading in class?

7. As a teacher, do you frequently write to students in the classroom to assimilate the reading?

8. Do you do motivational activities with your students before starting class?

9. Do your students have difficulty writing new words?

10.Does the student like to do writing exercises without being forced?





# Table 4

#### Questionnaire for students in the fourth year of EGB "B"

	ASSESSMENT
THE STUDENT	COMPLETELY AGREE OK NEUTRAL I DISAGREE A LITTLE I TOTALLY DISAGREE

1. As a student, do you usually read in class?

2. As a student, do you regularly read books or texts?

3. After reading, are you able to write what you understood?

4. Do you have difficulty pronouncing difficult words?

5. Are the materials your teacher uses for reading eyecatching?

6. Does your teacher apply different activities fun to read in class?

7. Do you frequently write in class to assimilate reading?

8. Does your teacher carry out motivational activities before starting class?

9. As a student, do you find it difficult to write new words?

10. As a student, do you like to do writing exercises without being forced?

#### Selection of teachers and students

Westreicher (2021) states the importance of sampling in a population, for this reason in the present research the survey will be carried out on 15 Basic General Education teachers and 38 Fourth Year "B" students.





#### Statistical information processing

Data processing can be carried out by applying a matrix that can be developed manually or through a systematized program, in the same way a qualitative or quantitative analysis can be carried out.

# Survey applied to primary school teachers

The information collected through research instruments, such as the survey applied to teachers and students of the Educational Unit, which are reflected in the different frequency tables.

Variable	F	Fa	fr	FRA
Completely agree	4	4	0.267	0.267
OK	6	10	0.400	0.667
Neutral	1	11	0.067	0.733
I disagree a little	3	14	0.200	0.933
I totally disagree	1	15	0.067	1,000
Total	15	•	1,000	•

#### Table 5

#### Students with reading habits in the classroom

The results obtained in Table 5 show the opinion of the subjects surveyed, which showed that 40% of teachers stated that they agree with the reading habits in the classroom, 27% completely agreed, 20% slightly disagreed, 7% totally disagreed, and 6% were neutral.

The data mentioned above allow us to deduce that the students of the Educational Unit do not have reading habits in the classroom because 33% of those surveyed indicate that they sometimes read in class and in their free time. Therefore, it is important to implement a reading habit in school children based on the stimulation of cognitive skills and critical thinking in students since reading, by providing us with knowledge and perspective, gives us the freedom to make informed decisions and plays an essential role in our ability to choose wisely in life (Munita, 2016). 67% of teachers say they have clear ideas regarding the reading habit.





# Table 6

Variable	F	Fa	fr	FRA
Completely agree	3	3	0.200	0.200
OK	5	8	0.333	0.533
Neutral	0	8	0.000	0.533
I disagree a little	5	13	0.333	0.867
I totally disagree	2	15	0.133	1,000
Total	15	-	1,000	

#### Reading texts in the classroom

The results obtained in Table 6 show the opinion of the subjects surveyed, which showed that 34% agree with reading texts in the classroom, 33% slightly disagree, 20% completely agree, 13% totally disagree, and 0% are neutral.

The data mentioned above allow us to deduce that a high number of students do not read texts frequently, since 46% of those surveyed state that they only read class texts, that is, according to the different subjects taught, therefore, they do not give significant importance to the development of the reading process. This is a consequence of the lack of control and monitoring by parents and teachers, despite the fact that the practice of reading is considered a communication routine that favors the development of mental and social skills of those who cultivate it since reading provides the ability to fluently acquire new knowledge (Figueroa et al., 2022). 54% mention that reading texts in the classroom is important.

#### Table 7

#### Reading comprehension in students

Variable	F	Fa	fr	FRA
Completely agree	2	2	0.133	0.133
OK	4	6	0.267	0.400
Neutral	1	7	0.067	0.467
I disagree a little	6	13	0.400	0.867
I totally disagree	2	15	0.133	1,000
Total	15		1,000	•

The results obtained in Table 7 show the opinion of the subjects surveyed, which showed that 40% expressed a little disagreement with reading comprehension in students, 27% agreed, 13% completely agreed, 13% totally disagreed, and 7% were neutral.





The data mentioned above allow us to infer that a low level of reading comprehension prevails in the students of the Educational Unit because 53% of the students cannot interpret or make a written summary after reading a text, this is because the students do not develop a critical or reflective reading, which generates future problems of reading comprehension since all writings must fulfill a communicative function, it is not a mechanical activity, it is not only necessary to know the signs of the language and combine them, writing must be taught as a communication resource to capture the thoughts of Chacha-Supe & Rosero-Morales (2020). 47% state that the development of reading comprehension is important.

Table	8
-------	---

Variable	F	Fa	fr	FRA
Completely agree	1	1	0.067	0.067
OK	4	5	0.267	0.333
Neutral	1	6	0.067	0.400
I disagree a little	8	14	0.533	0.933
I totally disagree	1	15	0.067	1,000
Total	15		1,000	

# Difficulty in pronouncing difficult words

The results obtained in Table 8 show the opinion of the subjects surveyed, which showed that 53% expressed a little disagreement with the pronunciation of difficult words, 27% agreed, 7% totally disagreed, 6% completely agreed, and 7% were neutral.

The data mentioned above allow us to deduce that 60% of students have difficulties when pronouncing difficult words, this is due to the lack of reading practice, which influences their daily vocabulary because the lack of reading skills in a child can have a negative impact on their academic performance, due to their lack of interest in schoolwork, the limitation of their vocabulary, the difficulty in understanding and analyzing texts (Figueroa et al., 2022). Therefore, 40% state that they do not have difficulties when pronouncing difficult words.





# Table 9

Variable	F	Fa	fr	FRA
Completely agree	2	2	0.133	0.133
OK	9	11	0.600	0.733
Neutral	0	11	0.000	0.733
I disagree a little	4	15	0.267	1,000
I totally disagree	0	15	0.000	1,000
Total	15		1,000	

#### Innovative resources for reading

The results obtained in Table 9 show the opinion of the subjects surveyed, which showed that 60% agree with the use of innovative resources for reading, 27% slightly disagree, 13% completely agree, 0% disagree and 0% are neutral.

The data mentioned above allow us to deduce that a large number of teachers in the Educational Unit apply innovative resources for reading because 73% of respondents state that teachers must know and become familiar with innovative theories and methodologies of reading and writing to apply them in the classrooms and improve the teaching and learning process, this will motivate and encourage student participation and help them achieve meaningful learning (Pisco-Román & Bailón-Panta, 2023). 27% state that they do not apply them due to lack of knowledge of innovative resources for reading or simply do not want to leave their comfort zone.

# Table 10

#### Motivational strategies for reading

Variable	F	Fa	fr	FRA
Completely agree	1	4	0.067	0.067
OK	5	6	0.333	0.400
Neutral	0	6	0.000	0.400
I disagree a little	9	15	0.600	1,000
I totally disagree	0	15	0.000	1,000
Total	15		1,000	

The results obtained in Table 10 show the opinion of the subjects surveyed, which showed that 60% expressed some disagreement with the motivating strategies for reading, 33% agreed, 7% completely agreed, 0% disagreed, and 0% were neutral.

The data mentioned above allow us to deduce that a large number of teachers in the Educational Unit do not apply motivating strategies because 60% of those surveyed do





not give it significant importance in the reading process, knowing that it is a fundamental pillar in the teaching-learning process, with an effective educational process, in addition, it seeks to improve student learning through their competencies, skills, the interaction between their experiences and the new knowledge to be acquired (Cárdenas et al., 2014). 40% mention that they apply motivating strategies for reading.

# Table 11

Variable	F	Fa	fr	FRA
Completely agree	9	9	0.600	0.600
ОК	5	14	0.333	0.933
Neutral	0	14	0.000	0.933
I disagree a little	1	15	0.067	1,000
I totally disagree	0	15	0.000	1,000
Total	15		1,000	

#### Reading and writing activities in the classroom

The results obtained in Table 11 show the opinion of the subjects surveyed, which showed that 60% completely agree with the reading and writing activities, 33% agree, 7% slightly disagree, 0% totally disagree, and 0% are neutral.

The data mentioned above allow us to deduce that teachers do not carry out reading and writing activities because 7% of those surveyed do not give it significant importance in the development of the reading process despite the fact that these processes allow us to develop linguistic knowledge through phonological, lexical, syntactic and semantic analysis. Therefore, it contributes positively to written language since the psychological processes of cognition, attention, memory and phonological awareness intervene in reading comprehension (Montealegre & Forero, 2006). 93% state that if they carry out reading and writing activities in the classroom.

#### Table 12

Variable	F	Fa	fr	FRA
Completely agree	6	6	0.400	0.400
ОК	9	15	0.600	1,000
Neutral	0	15	0.000	1,000
I disagree a little	0	15	0.000	1,000

#### Initial activities during the academic day



# ED Digital

www.exploradordigital.org

I totally disagree	0	15	0.000	1,000
Total	15		1,000	

The results obtained in Table 12 show the opinion of the subjects surveyed, which showed that 60% agree that they carry out the initial activities during the day, 40% completely agree, 0% slightly disagree, 0% totally disagree and 0% neutral.

The data mentioned above allow us to deduce that the teachers of the Educational Unit carry out initial activities during the pedagogical day because 100% of those surveyed state that these activities are of utmost importance since they include educational games, group dynamics, use of dramas, board games, etc. These tools are used by teachers to reinforce the learning, knowledge and skills of students inside or outside the classroom, they facilitate learning through pleasant, emotional interaction and the application of the game motivates students (Cárdenas et al., 2014), they have clear ideas.

Variable	F	Fa	fr	FRA
Completely agree	7	7	0.467	0.467
ОК	6	13	0.400	0.867
Neutral	0	13	0.000	0.867
I disagree a little	1	14	0.067	0.933
I totally disagree	1	15	0.067	1,000
Total	15		1,000	

# Table 13

#### Problems writing new terms

The results obtained in Table 13 show the opinion of the subjects surveyed, which showed that 40% agree with the problems of new terms, 46% completely agree, 7% slightly disagree, 7% totally disagree, and 0% are neutral.

The data mentioned above allow us to deduce that the teachers of the Educational Unit mention that 86% of the respondents have problems writing new terms, since they are activities in which several motor and visual perceptual systems participate, as well as linguistic and symbolic skills. A deficit in written language may also occur, these disorders are of an acquired nature or due to insufficient development in the learning of reading and writing, this is because adequate methods and techniques were not used at the time of teaching them to read and write, for this reason the children acquire a reading and writing problem (Bolaños et al., 2000). While 14% claim not to have reading and writing problems.





# Table 14

Variable	F	Fa	fr	FRA
Completely agree	1	1	0.067	0.067
ОК	5	6	0.333	0.400
Neutral	1	7	0.067	0.467
I disagree a little	6	13	0.400	0.867
I totally disagree	2	15	0.133	1,000
Total	15	•	1,000	

#### Student voluntary reading

The results obtained in Table 14 show the opinion of the subjects surveyed, which showed that 40% expressed a little disagreement about voluntary reading, 33% agreed, 13% totally disagreed, 7% completely agreed, and 7% were neutral.

The data mentioned above allow us to deduce that students do not read voluntarily because 53% of those surveyed state that students do not give significant importance to reading and writing in the learning process, despite the activities that the teacher structures with his experience so that the student builds his own knowledge, transforms it, problematizes it and evaluates it, and also gets feedback from his own process (Teberosky, 2000). 47% state that students read voluntarily.

#### Survey applied to students of the Fourth Year EGB "B"

According to García et al. (2016), it is stated that "It is important to clarify that the data collection methods and techniques designed are oriented towards the same study objective, and therefore, they seek to measure the same variable" (p. 642). Therefore, the results collected from the surveys directed to the Fourth Year EGB parallel "B" students related to reading and writing, the results of each of the closed questions established in the quantitative survey for students of the same year in person with items were tabulated. The same ones that are reflected in the different frequency tables.

#### Table 15

#### Students are used to reading in class

Variable	F	Fa	fr	FRA
Completely agree	3	4	0.079	0.079
ОК	4	7	0.105	0.184
Neutral	0	7	0.000	0.184
I disagree a little	28	35	0.737	0.921
I totally disagree	3	38	0.079	1,000
Total	38		1,000	·





The results obtained in Table 15 show that, of the 38 students surveyed, 8% state that they always read in class, that is, they completely agree, 10% agree, 0% are neutral, 74% disagree a little or sometimes read, and 8% completely disagree or never read in class.

The data mentioned above allow us to infer that most students do not read in class, due to not having the habit of participatory reading in class and at home, which is reflected in the low participation in the classroom. The processes within the classroom are essential for educational proposals to become individual or collaborative work in this way achieving a reading habit in students. (Meza, 2022).

Variable	F	Fa	fr	FRA
Completely agree	4	4	0.105	0.105
OK	5	9	0.132	0.237
Neutral	0	9	0.000	0.237
I disagree a little	26	35	0.684	0.921
I totally disagree	3	38	0.079	1,000
Total	38		1,000	

#### Table 16

#### Students read texts regularly

The results obtained in Table 16 show that, of the 38 students surveyed, 10% state that they always read texts regularly, that is, they completely agree, 13% agree, 0% are neutral, 68% disagree a little or sometimes, and 8% disagree completely or never.

The data mentioned above allow us to infer that a high number of students do not read texts frequently, this as a consequence of the lack of control and monitoring by parents and teachers. The misuse of theDigital technology is unfavorable for children since they spend a lot of time on social networks and do not develop their reading talent (United Nations Children's Fund [UNICEF], 2017).

#### Table 17

Variable	F	Fa	fr	FRA
Completely agree	2	2	0.053	0.053
ОК	10	12	0.263	0.316
Neutral	0	12	0.000	0.316
I disagree a little	22	34	0.579	0.895
I totally disagree	4	38	0.105	1,000
Total	38	•	1,000	•

#### Students understand and write what they read





The results obtained in Table 17 show that, of the 38 students surveyed, 5% state that they are always able to write what they understood, that is, they completely agree, 22% agree, 0% are neutral, 58% disagree a little or sometimes, and 11% disagree completely or never.

The data mentioned above allow us to infer that most students cannot interpret or make a written summary after reading a text. This is because students do not develop a critical or reflective reading, which generates future problems with reading comprehension. Students are encouraged to relate the text to their own lives and to construct meaning through interaction with the content. This could involve carrying out authentic projects that involve writing in real situations (Ruiz, 2004).

#### Table 18

#### Difficulty pronouncing difficult words

Variable	F	Fa	fr	FRA
Completely agree	2	2	0.053	0.053
ОК	3	5	0.079	0.132
Neutral	0	5	0.000	0.132
I disagree a little	28	33	0.737	0.868
I totally disagree	5	38	0.132	1,000
Total	38	;	1,000	,

The results obtained in Table 18 show that, of the 38 students surveyed, 5% state that they always have difficulties when pronouncing difficult words, that is, they completely agree, 8% agree, 0% are neutral, 74% agree a little or sometimes, and 13% disagree completely or never.

The data mentioned above allow us to infer that the vast majority of students have difficulties when pronouncing difficult words. This is due to the lack of reading practice, which influences their daily vocabulary.Collaboration between parents at home is of vital importance, whether through practice or therapies to strengthen the pronunciation of new or difficult words.(Maco & Contreras, 2013).

#### Table 19

Variable	F	Fa	fr	FRA
Completely agree	1	1	0.026	0.026
ОК	15	16	0.395	0.421
Neutral	0	16	0.000	0.421
I disagree a little	21	37	0.553	0.974
I totally disagree	1	38	0.026	1,000
Total	38		1,000	•

#### Innovative resources from the teacher





The results obtained in Table 19 show that, of the 38 students surveyed, 3% state that the teacher always uses eye-catching materials to read in class, that is, they completely agree, 39% agree, 0% are neutral, 55% disagree a little or sometimes, and 3% disagree completely or never.

The data mentioned above allow us to infer that a high number of students surveyed mention that the teacher rarely uses eye-catching materials for reading practice, which is why students become demotivated and lose interest, considering learning to be insignificant.Lack of motivation on the part of the teacher does not allow the participation of the students, that is to say that the teacher does not use innovative reading strategies, therefore, interest in reading is lost.(Van, 2021).

	•			
Variable	F	Fa	fr	FRA
Completely agree	2	4	0.053	0.053
ОК	10	12	0.263	0.316
Neutral	0	12	0.000	0.316
I disagree a little	25	37	0.658	0.974
I totally disagree	1	38	0.026	1,000
Total	38		1,000	

#### Table 20

#### Playful strategies for reading

The results obtained in Table 20 show that, of the 38 students surveyed, 5% state that the teacher always uses different activities to teach reading in class, that is, they completely agree, 22% agree, 0% are neutral, 66% disagree a little or sometimes, and 3% disagree totally or never.

The data mentioned above allow us to infer that a high number of students surveyed mention that the teacher sometimes applies different activities to reinforce reading in class, which reflects a traditionalist teaching with outdated and uninnovative methods. According to the Constructivist theory, through reading and writing, students will be able to build their own learning, favoring the academic performance of students in oral and written expression (García-Cerda et al., 2019).





# Table 21

Variable	F	Fa	fr	FRA
Completely agree	0	0	0.000	0.000
OK	18	18	0.474	0.474
Neutral	0	18	0.000	0.474
I disagree a little	20	38	0.526	1,000
I totally disagree	0	38	0.000	1,000
Total	38		1,000	

#### Written activities to strengthen reading

The results obtained in Table 21 show that of the 38 students surveyed, 0% stated that they always the teacherfrequently writes in the classroom to assimilate the reading, that is, completely agree, 47% agree, 0% neutral, 53% disagree a little or sometimes, and 0% disagree completely or never.

The data mentioned above allow us to infer that a high number of students surveyed mention that the teacher rarely writes in the classroom, limiting the possibility of strengthening spelling and handwriting, as well as critical thinking. According to the constructivist approach, the focus has been on how teachers can support authenticity and voice in the development of students' writing, highlighting the importance of connecting with students' personal and cultural experiences (Villafranqui, 2020).

#### Table 22

	· · ·	·	·	
Variable	F	Fa	fr	FRA
Completely agree	1	1	0.026	0.026
ОК	10	11	0.263	0.289
Neutral	0	11	0.000	0.289
I disagree a little	25	36	0.658	0.947
I totally disagree	2	38	0.053	1,000
Total	38		1,000	

# Motivation to start class

The results obtained in Table 22 show that, of the 38 students surveyed, 3% state that the teacher always begins the class with a motivation, that is, they completely agree, 22% agree, 0% are neutral, 66% disagree a little or sometimes, and 5% disagree completely or never.





The data mentioned above allow us to infer that a high number of students surveyed maintain that the teacher rarely motivates them before starting the class, which generates mental and emotional fatigue, developing a tiring and monotonous class, resulting in loss of interest. The lack of motivation on the part of the teacher, creativity and student participation are not prioritized, meaning that the teacher does not use innovative strategies and prefers the traditional model. (Van, 2021).

# Table 23

Variable	F	Fa	fr	FRA
Completely agree	1	1	0.026	0.026
OK	7	8	0.184	0.211
Neutral	0	8	0.000	0.211
I disagree a little	23	31	0.605	0.816
I totally disagree	7	38	0.184	1,000
Total	38	•	1,000	•

#### Difficulty writing new vocabulary

The results obtained in Table 23 show that, of the 38 students surveyed, 3% state that they always have difficulty writing new words, that is, completely agree, 18% agree, 0% neutral, 61% disagree a little or sometimes, and 18% disagree completely or never.

The data mentioned above allow us to infer that a high number of students surveyed have difficulties when writing new words, this as a consequence of not being investigative, and not using physical dictionaries. Cognitive skills, abilities and actions are achieved based on the construction of meaningful learning, through strategic activities that strengthen the understanding of knowledge (Figueroa et al., 2022).

#### Table 24

#### Voluntary writing activities

Variable	F	Fa	fr	FRA
Completely agree	3	3	0.079	0.079
OK	3	6	0.079	0.158
Neutral	1	7	0.026	0.184
I disagree a little	30	37	0.789	0.974
I totally disagree	1	38	0.026	1,000
Total	38		1,000	

The results obtained in Table 24 show that of the 38 students surveyed, 8% state that they always He likes to do writing exercises without being forced, that is, 8% completely agree, 3% are neutral, 79% disagree a little or sometimes, and 3% disagree completely or never.





The data mentioned above allow us to infer that a high number of students surveyed rarely do writing exercises on their own, since they simply comply with the teacher's specifications and are not willing to do extracurricular activities related to writing. Learning to write in primary school children requires practice and prior knowledge of the students, where participation is required and with the appropriate writing material it will be their motivation.(Murillo, 2022).

#### Conclusions

- From the results obtained from the survey to teachers it can be established that 60% agree that reading and writing does affect the academic performance of fourth year EGB students, while 40% of teachers consider that reading and writing affects academic performance because the strategies used are not adequate and therefore do not develop communication skills such as reading comprehension, difficulty in pronouncing difficult words, and voluntary reading. In addition, it allows to show that a group of teachers do not correctly apply motivating strategies for this reason students lose interest in reading, in addition, the limited collaboration of parents in the educational process does not acquire the reading habit therefore the desired results are not met and learning is deficient.
- According to the results obtained from questions 1, 2, 3, 4, 9 and 10, it can be stated that students do not have a reading habit, both in the classroom and at home, so they can hardly develop reading comprehension, this as a consequence of the lack of collaboration from parents and little motivation from teachers, which justifies our methodological proposal, which contains activities to improve this reading and writing deficiency, thus achieving significant learning in students of the Fourth Year EGB "B". On the other hand, this innovative strategy allows to strengthen the level of comprehension not only in the subject of language and literature but in all other areas of study.

# **Conflict of interest**

The authors Diego Armando Chancusig Tuso, Alexandra Maribel Flores Cuyachamin, Luis Fernando Suntasig Ronquillo & Wendy Judith Suntasig Calvopiña have no conflict of interest in relation to the submitted article.

# **Bibliographic References**

- Arias, J. (2021). Guide for developing the operationalization of variables. Innovation plus Development, X (28), 44-55. https://doi.org/10.31644/IMASD.28.2021.a02
- Bauce, G., Córdova, M., & Ávila, A. (2018). Operationalization of variables. Journal of the National Institute of Hygiene "Rafael Rangel", 49(2), 43-50.





- Bolaños, B., Cambronero, M., & Venegas, A. (2000). Didactics of Reading and Writing, Part II. Google Books: https://www.google.com.ec/books/edition/DID%C3%81CTICA\_DE\_LA\_LECT O\_ESCRITURA\_II\_part/I0JCJSCggV8C?hl=es&gbpv=0
- Cárdenas, N., Castro, A., & Fanny, C. (2014). Innovative Pedagogical Strategies in the Teaching Learning Process. Catholic University of Cuenca: https://www.pedagogia.edu.ec/public/docs/Comision\_2/estrategias\_pedagogicas \_innovadoras.pdf
- Casas, J., Repullo, J., & Donato, J. (2003). The survey as a research technique. Aten Primari, XXXI (8), 527-38.
- Castillo, M., Ramos, M., & Revuelta, M. (2016, June 01). The analysis of educational data, strategies and techniques for its implementation as a preliminary phase to supervisory action. Journal of the Association of Education Inspectors of Spain: https://rio.upo.es/xmlui/bitstream/handle/10433/4223/ase25\_art04\_ix-adide-andal.pdf?sequence=1&isAllowed=y
- Chacha-Supe, MM, & Rosero-Morales, EDR (2020). Initial teaching-learning processes of reading and writing in high school students. Koinonía Interdisciplinary Peer Review Journal, 5(9), 311–336. https://doi.org/10.35381/rkv5i9.650
- Espinoza, E. (2019). Variables and their operationalization in educational research. Part two. Conrado Journal, XV (69), 171-180. https://doi.org/https://orcid.org/0000-0002-0537-4760.
- Figueroa, J., Romero, P., Alarcón, P., & Sieveking, G. (2022). Learning to read and write in times of pandemic: exploratory study of freely accessible videotaped capsules. Educational Thought. Latin American Educational Research Journal, 59(1), 1-17. https://doi.org/10.7764/PEL.59.1.2022.11
- United Nations Children's Fund [UNICEF]. (2017). Children in a digital world. In UNICEF, The State of the World's Children (pp. 1-40). UNICEF Communications Division.
- García, F., Alfaro, A., Hernández, A., & Molina, M. (2016). Design of questionnaires for data collection: methodology and limitations. Clinical Journal of Family Medicine, I (5), 232-236.
- García-Cerda, L., Rodríguez-Fernández, O., Betancourt-Galindo, R., Saldívar-Guerrero, R., & Torres-Torres, M. (2019). Synthesis and properties of magnetite ferrofluids. Surfaces and Vacuum., 16(1), 28-31.





Grajales, T. (2000, March 27). Types of research. chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://cmapspublic2.ihmc.us/rid =1RM1F0L42-VZ46F4-319H/871.pdf

- Leyva, H., Pérez, M., & Pérez, S. (2018, December 01). Google Forms in diagnostic evaluation as support for teaching activities. Obtained from the Ibero-American Journal for Educational Research and Development: https://www.scielo.org.mx/pdf/ride/v9n17/2007-7467-ride-9-17-84.pdf
- López, P. (2004). Sample population and sampling. Punto cero, IX (8), 69-74. Punto cero.
- Maco, E., & Contreras, E. (2013). "Reading and writing" ... beyond school. Horizonte de la Ciencia, III (4), 67-70.
- Meza, A. (2022, February 08). Innovative strategies: techniques to improve teaching in children. Luca Academy: https://www.lucaedu.com/estrategias-innovadorastecnicas-para-mejorar-la-ensenanza-en-losninos/#:~:text=%C2%BFQu%C3%A9%20son%20las%20estrategias%20de,pr% C3%A1cticas%20actuales%20en%20la%20educaci%C3%B3n
- Montealegre, R., & Forero, L. (2006). Reading and writing development: acquisition and mastery. Colombian Act of Psychology, IX(1), 25-40.
- Moreno, E. (2013, August 12). Research methodology, guidelines for writing a thesis. Blogger Leadership and political charisma: https://tesis-investigacioncientifica.blogspot.com/2013/08/concepto-de-diseno-de-investigacion.html
- Munita, F. (2016). Teaching practices, beliefs and reading habits of teachers in a successful school in promoting reading. Ocnos, 15(2), 77-97. https://doi.org/10.18239/ocnos\_2016.15.2.1140
- Murillo, M. (2022). Covid-19 pandemic and reading and writing gaps in Costa Rican primary education. Some proposals to optimize learning recovery in the new work spaces. Electronic Journal Leer, Escribir y Descubrir, I (6), 71-89.
- Pinchao, L. (2020). Pedagogical-didactic strategy to promote critical reading. Education, 29(56), 146-169. https://doi.org/10.18800/educacion.202001.007
- Pisco-Román, J., & Bailón-Panta, A. (2023). Literacy as a fundamental element in the teaching-learning process of secondary school students. 593 Digital Publisher CEIT, 8(1-1), 328 -347. https://doi.org/10.33386/593dp.2023.1-1.1658





- Ramos, C. (2020). The scope of an investigation. CienciAmérica, IX (3), 1-5. https://doi.org/http://dx.doi.org/10.33210/ca.v9i3.336
- Reguant, M., & Martínez-Olmo, F. (2014). Operationalization of concepts/variables. Barcelona: Dipòsit Digital of the UB: https://diposit.ub.edu/dspace/bitstream/2445/57883/1/Indicadores-Repositorio.pdf
- Rodríguez, A., & Pérez, A. (2017). Scientific methods of inquiry and construction of knowledge. EAN Journal (82), 179-200. https://doi.org/https://doi.org/10.21158/01208160.n82.2017.1647
- Rugel, J., Ruiz, A., Alvarez, L., & Roman, D. (2023). Challenges and solutions for literacy in the digital age. FIPCAEC Scientific Magazine, VIII(3), 63-79. https://doi.org/https://doi.org/10.23857/fipcaec.v8i3
- Ruiz Estrada, G. (2004). Development of a drug delivery system based on magnetic nanoparticles coated with polyethylene glycol for the treatment of different diseases. Madrid: Autonomous University of Madrid. Department of Applied Physics.
- Salinas, D. (2021). Strengthening reading and writing processes in times of pandemic. https://repository.javeriana.edu.co/bitstream/handle/10554/54378/TESIS%20DA NA%20DURLEY%20SALINAS%20CRUZ%20PUJ.pdf?sequence=1
- Sanabria, D. (2019). Critical reading of scientific articles based on the themes of density and buoyancy. Universidad Pedagógica y Tecnológica de Colombia(22). https://doi.org/ https://doi.org/10.19053/0120-7105.eyc.2019.22.e10057
- Teberosky, A. (2000). Writing Systems. World Congress on Reading and Writing: http://www.waece.org/biblioweb07/pdfs/d152.pdf
- Townsend, J. (2021). From the abstract to the concrete in the construction of an operationalization matrix. Journal of University and Society, XIII (5), 586-595. https://doi.org/https://orcid.org/0000-0001-5319-4425.
- Van, H. (2021, May 04). Traditional School. Teaching Pedagogy: https://pedagogiadocente.wordpress.com/modelos-pedagogicos/la-escuelatradicional/
- Vargas, Z. (2009). Applied research: A way of understanding realities with scientific evidence. Revista Educación, 33(1), 155-165.





 Villafranqui, W. (December 5, 2020). Scientific research in the learning process. Digital Journal of Research in University Teaching, XIV(2), 1-8. Digital Journal of Research in University Teaching: http://www.scielo.org.pe/pdf/ridu/v14n2/2223-2516-ridu-14-02-e1359.pdf

Westreicher, G. (2021-03-01). Sampling. Economipedia: https://economipedia.com/definitions/sampling.html





ISSN: 2661-6831 Vol. 8 No. 2, pp. 164 – 194, April - June 2024

www.exploradordigital.org

The published article is the sole responsibility of the authors and does not necessarily reflect the thoughts of Revista Explorador Digital.



The article remains the property of the journal and, therefore, its partial and/or total publication in another medium must be authorized by the director of the Revista Explorador Digital.



