

The Learning Train, a strategy for reading and writing in Elementary General Education students

*El tren del Aprendizaje, una estrategia para la lectura y escritura en
estudiantes de Educación General Básica Elemental*

Date of receipt: 2024-05-27 · Acceptance date: 2025-03-10 · Date of publication: 2025-09-10

Nadia Estefania Curipallo Peralta¹

Universidad Central del Ecuador, Ecuador

necuripallo@uce.edu.ec

<https://orcid.org/0000-0002-1612-4521>

Jacqueline Alejandra Díaz Parra²

Universidad Central del Ecuador, Ecuador

jadiazp1@uce.edu.ec

<https://orcid.org/0000-0002-2767-3868>

Abstract

The “learning train” (tren de aprendizaje) is an innovative strategy aimed at strengthening the reading and writing process, as it develops students’ linguistic skills such as syllable formation and text composition. In this sense, the purpose of the research was to explain how the application of this strategy contributes to the improvement of the reading and writing process in Basic General Education students.

For this purpose, a deductive method and field research with a mixed-method approach were used, obtaining both qualitative and quantitative data. According to the results, between 2018 and 2022 the percentage of people at the national level who did not know how to read and write decreased from 6.5% to 6%. Furthermore, the health emergency caused by Covid-19 generated significant limitations in the teaching-learning process, due to restricted access to teacher training, work overload, and scarce support from parents.

In this context, the application of the learning train yielded positive results; students showed progress in fluent reading, phonological recognition, and text comprehension, while parents became actively involved, showing motivation and interest in the educational process. In conclusion, this strategy favored the development of reading and writing skills and strengthened the students’ performance in the social, academic, and family spheres.

Keywords: learning train, reading, writing, linguistics, phonology, syllable

Resumen

El tren de aprendizaje es una estrategia innovadora dirigida a fortalecer el proceso de lectura y escritura, ya que desarrolla en los estudiantes habilidades lingüísticas como la formación de sílabas y la redacción de textos. En este sentido, el propósito de la investigación fue explicar cómo la aplicación de esta estrategia contribuye al mejoramiento del proceso de lectura y escritura en estudiantes de Educación General Básica.

Para ello, se utilizó el método deductivo y la investigación de campo con enfoque mixto, obteniendo datos cualitativos y cuantitativos. Según los resultados, entre los años 2018 y 2022 el porcentaje de personas a nivel nacional que no sabían leer y escribir pasó de 6,5% a 6%. Además, la emergencia sanitaria causada por el Covid-19 generó limitaciones significativas en el proceso de enseñanza-aprendizaje, debido al acceso restringido a la formación docente, la sobrecarga laboral y el escaso acompañamiento de los padres de familia.

En este contexto, la aplicación del tren de aprendizaje arrojó resultados positivos; los estudiantes mostraron avances en lectura fluida, reconocimiento fonológico y comprensión de textos, mientras que los padres se involucraron activamente, mostrando motivación e interés en el proceso educativo. En conclusión, esta estrategia favoreció el desarrollo de las habilidades de lectura, escritura y fortaleció el desempeño de los alumnos en los ámbitos social, académico y familiar.

Palabras clave: tren del aprendizaje, lectura, escritura, lingüística, fonología, sílaba

Introduction

Reading and writing are skills that involve a complex and progressive process, as they require letter recognition, word decoding, reading comprehension, and written expression. Different educational institutions experience varying difficulties from the early years of schooling, as not all children learn to read and write in the same way or at the same pace, which can affect their academic performance and personal development.

Thus, between 2018 and 2022, the percentage of people nationwide who could neither read nor write increased from 6.5% to 6%. This means that there were 764,610 illiterate people. According to the INEC (2023), this problem was rooted in rural areas, where illiteracy reached 11.1%, while in urban areas it reached 3.6%. In this sense, the figure increased as a result of the COVID-19 crisis, as many children stopped going to school to go to work. Thus, it can be said that illiteracy in Ecuador is due to a combination of factors, including poverty, geographic location, discrimination, and lack of opportunities.

On the other hand, one of the causes of this problem is the limited access to teacher training due to excessive workload, which makes it difficult for teachers to dedicate time to their training, affecting the quality of education. Thus, according to the Ministry of Education (2021) study, one of the causes affecting teacher development is the lack of connectivity and the availability of devices such as computers and cell phones, especially in rural areas, since more than 11,200 teachers cannot access the training provided by the ministerial body. That is, 7% of public teachers have not been able to resolve the doubts and problems that arise in the classroom. For this reason, the lack of teacher training is a complex problem that requires support from the State and educational institutions, since only through mutual effort can quality education be guaranteed for all children in Ecuador.

Taking these figures into account, the objective of the research was to explain how the “learning train” improves the reading and writing process of students in Basic General Education. According to the study by the National Institute of Statistics and Census (2023), 91.4% of students over 5 years of age know how to read and write, but present learning difficulties such as poor reading comprehension, difficulties recognizing sounds and letters, poor reading fluency, and limited vocabulary in their oral and written expression.

Finally, by implementing the strategy in a creative, dynamic, and planned manner, students achieved meaningful and lasting learning, as these learning spaces adapt to their learning styles and rhythms.

1.1. The learning train

In this sense, Ronald Bauer was one of the driving forces behind station-based learning in primary and secondary schools in Germany, promoting motivational and practical teaching. According to Bauer, cited in Gigena (2019se), it is a strategy in which educators plan the topic they are going to teach in various physical spaces inside or outside the classroom, using countless resources



such as worksheets, texts, games, and others, so that students can work independently and autonomously.

Therefore, teachers must clearly delimit the space or corner so that students can identify it in a timely manner. They must also organize, stock, and provide the necessary materials for all students, thus meeting the needs of each individual.

1.1.1. Benefits

The learning train encourages children's reading and writing skills, as it is equipped with innovative and engaging materials, which spark students' interest. Teachers can also plan different activities such as storytelling, reading alouds, discussions about the books read, dramatizations of books, story writing, among others, to develop students' creativity and cognitive, emotional, and linguistic skills. (Murillo, 2023)

On the other hand, according to Cantalejo (2021), learning spaces provide benefits for the comprehensive development of children: they facilitate meaningful and playful learning; they favor the development of autonomy and responsibility; they motivate teamwork and social skills; they allow students to express themselves freely, fostering creativity and imagination; and finally, they increase their personal motivation, helping them value their progress and accept their mistakes.

On the other hand, these spaces offer advantages for teachers, as they foster the development of their creativity when designing teaching materials such as picture and word cards, illustrated stories, interactive comics, and puppets. They also allow them to adapt their teaching strategies to students' different learning styles. They also foster innovation in the classroom and promote a dynamic and participatory environment.

1.1.2. Learning Train Materials

To develop the learning model, educators must consider various materials that will attract students' attention and motivate them to use it. Amaiquema (2023) believes the following resources should be used, the same ones used in this strategy:

- Natural materials (due to their composition): stones, leaves, sand, among others.
- Artificial materials: puzzles, printed images, illustrated stories, letter bingo, costumes for dramatizations, among others.
- Structured materials: rubber, glitter, scissors, plasticine, colored paper, among others
- Unstructured materials (those created by the teacher): reading windows, syllable, word and sentence posters, educational games, stories, writing cards, among others.

These materials not only enrich the teaching process but also increase student motivation by transforming the educational process into a participatory experience. They also strengthen their literacy skills, allowing them to associate words with images, structure narratives, and improve their oral and written expression in a fun and meaningful way.

In this way, teachers must work closely with the school's authorities and parents to obtain the materials that contribute to student learning. Likewise, for the maintenance of learning stations, rules and regulations must be established to maintain order, cleanliness, and the care of the materials children use in the designated spaces.

1.2. Literacy

1.2.1. Definition of reading

Reading is a form of communication between the person who wrote the text and the person who reads it, transmitting information and cultural foundations. It also benefits cognitive processes by producing reflections, encouraging creativity and critical thinking. The stages of reading are: pre-reading, reading, and post-reading (Sisa, 2023). In this sense, reading is a complex process that involves interaction between the reader and the text. The reader uses their prior knowledge, experiences, and imagination to interpret the text and construct its meaning. Reading is an essential skill for success in school, work, and life. By encouraging reading, we can help people reach their full potential.

1.2.2. Definition of writing

Writing is a system of graphic representation of a language, using signs drawn or engraved on a medium. It is the basis for the development of communication, as it captures ideas, feelings, desires, and events. Although there are other methods, writing is one of the most effective. Furthermore, writing itself can generate the pleasure of communicating and be appreciated for it (Sisa, 2023).

1.2.3. Phonological and syllabic reading and writing

Reading and writing are essential skills that children must acquire together. This is because children develop a phonological grapheme-phoneme relationship, where they begin to realize that words are made up of syllables, but also of phonemes. The beginning of reading and writing is vitally important, as it allows for the connection between what is heard and what is written (Pérez, 2018, p. 7-8). Therefore, relating auditory and written language develops children's phonological awareness, allowing them to understand that words are made up of sounds (phonemes) that can be represented by letters (graphemes).

After children acquire phonological awareness, they can begin to develop syllabic awareness, which consists of "joining vowels and consonants to form syllables, which is incorporated with greater difficulty, achieving the formation of meaningful words and phrases" (Morales and Escalona, 2023, p. 8). It is important for children to begin to know the vowel sounds (a, e, i, o, u). Once they have acquired this knowledge, they can start with the consonants and then practice spelling them with their sound, so that learning and forming words, sentences, and texts is easier. Additionally, it can be mentioned that phonological and syllabic reading and writing are two important stages in literacy since they allow the identification and manipulation of syllables. It is worth remembering

that in phonological awareness the focus is on the sounds of spoken language, while in syllabic awareness the emphasis is on the syllables of spoken language.

1.2.4. Fluent reading and writing comprehension

These are two fundamental skills that allow people to access information and express themselves effectively. Fluent reading is the ability to read accurately, quickly, and expressively, while reading comprehension is the ability to understand the meaning of the text being read.

As stated by Fumagalli et al. (2017), “Efficient reading allows one to read sentences and texts accurately and comprehensively. A prepared reader, upon seeing a word, activates its pronunciation and meaning” (p. 165). In this sense, word recognition skills allow one to relate the meaning to the signifier.

Fluent reading and comprehension are important skills for success in school, work, and life. People with strong reading skills are better able to learn new information, solve problems, communicate effectively, participate in civic activities, and develop critical thinking skills.

1.3. Relationship between the learning train and literacy.

One of the most important pillars of learning spaces is promoting reading and writing. Children are motivated by observing letters, drawings, cards, and other elements, motivating them in their learning through exploration, manipulation, and self-awareness. This model can be used at any educational level, but it is particularly effective for learning to read and write, as it allows students to practice their skills and strengthen their phonological and syllabic awareness.

It is of great importance to implement the learning train in the classroom, as it fosters children’s motivation and allows them to express their feelings through storytelling, character creation, and comics. This will allow students to develop their communication skills in both writing and oral expression (Saltos and Moncayo, 2021). Stations can focus on different aspects of writing, such as spelling, grammar, writing, and creativity, helping them develop into successful readers and writers. Finally, station-based learning should be organized, friendly, and engaging, designed with fun activities that can help children develop a love of reading and writing, as well as improve their language skills.

Methodology

2.1. Type of Research

The purpose of this paper was to explain how the “learning train” improves the literacy process of students in elementary general education. Therefore, this research was field-based, as it was characterized by primary data collection. This involved direct interaction with the people involved, allowing us to observe and understand their perspectives in their context.

2.2. Research Method and Approach

The deductive method was used, which, from Palmero's (2020) perspective, is characterized by starting from general premises to reach specific conclusions. In this sense, this method allowed conclusions to be drawn from the opinions presented, facilitating the analysis and judgment of the information collected on the topic presented. Furthermore, this research had a mixed approach, since the benefits, results obtained, and materials used to implement station-based learning in the classroom for the meaningful learning of reading and writing among students in Basic Elementary General Education were detailed.

2.3. Instrument

For this research, a questionnaire was administered, consisting of a series of closed questions (14) to 150 elementary general education teachers and 10 to 150 elementary school parents. The purpose of the questionnaire was to gather information from the participants. This instrument also allowed for the creation of tables and graphs based on the information extracted from the surveys conducted on the topic presented, resulting in accurate information on the study variables. Finally, a satisfaction survey was administered to the 20 parents to determine their level of acceptance of the innovative strategy implemented.

2.4. Reliability Analysis

For the reliability analysis of the surveys, Cronbach's Alpha was used, which measures the level of reliability of the questionnaire. For this purpose, categorical questions were selected, resulting in 0.745 for the teachers' survey and 0.796 for the parents' survey, which was favorable for the research.

Table 1

Cronbach's alpha.

| Reliability statistics | |
|------------------------|--------------------|
| Cronbach's alpha | Number of elements |
| .745 | 8 |

Note. Analysis of the teacher survey (2024)

Table 2

Cronbach's alpha

| Reliability statistics | |
|------------------------|--------------------|
| Cronbach's alpha | Number of elements |
| .796 | 5 |

Note. Analysis of the parent survey (2024)

2.5. Statistical modeling

In the study carried out, the Chi-square test was applied, which is a statistical test developed by Carl Pearson, which uses the analysis of two or more groups of categorical variables, to determine whether or not there is a correlation and in turn the null hypothesis is ruled out or the alternative hypothesis is accepted (De la Rosa et al., 2017). In general, this test compares the observed frequencies with the expected ones; for this purpose, the following formula is observed in Figure 1:

Figure 1

Chi-square formula

$$\chi^2 = \sum \frac{(f_o - f_e)^2}{f_e}$$

Where:

f_o = Frequency of the observed value

f_e = Frequency of expected value

Note. General formula for the Chi-square test. Source: (Valera, 2020).

In this sense, if the result of the Chi square coefficient is greater than 0.05, the null hypothesis is approved; therefore, there is no relationship between variables, while, if the result of the Chi square coefficient is less than 0.05, the alternative hypothesis is approved, therefore, there is a correlation between variables. On the other hand, factor analysis was used, which according to Martínez (2021) "It is a statistical technique that can be used to study a set of observed variables (items) with a smaller number of factors that show correlations between the observed variables." (p.6). That is, this method allows reducing the data and grouping the variables that are correlated, for this, the Kaiser Meyer Oklin (KMO) index must be taken into account, which measures the magnitude of the correlation coefficient between 0 and 1, which if they are greater than 0.5 it is acceptable to use the method, but if they are less than 0.5 the variable must be eliminated and another process must be used. For this method, the factor analysis formula is shown in Figure 2.

Figure 2

Factor analysis formula

$$KMO = \frac{\sum \sum_{i \neq j} r_{ji}^2}{\sum \sum_{i \neq j} r_{ji}^2 + \sum \sum_{i \neq j} a_{ji}^2}$$

Where:

r_{ji} = correlation coefficient observed between the variables j e i

a_{ji} = partial correlation coefficient between variables j e i

Note. General formula for Factor Analysis. Source: (Chávez, 2017).

Results

For the discussion and interpretation of results, the most relevant questions from the survey, both from parents and teachers, were considered.

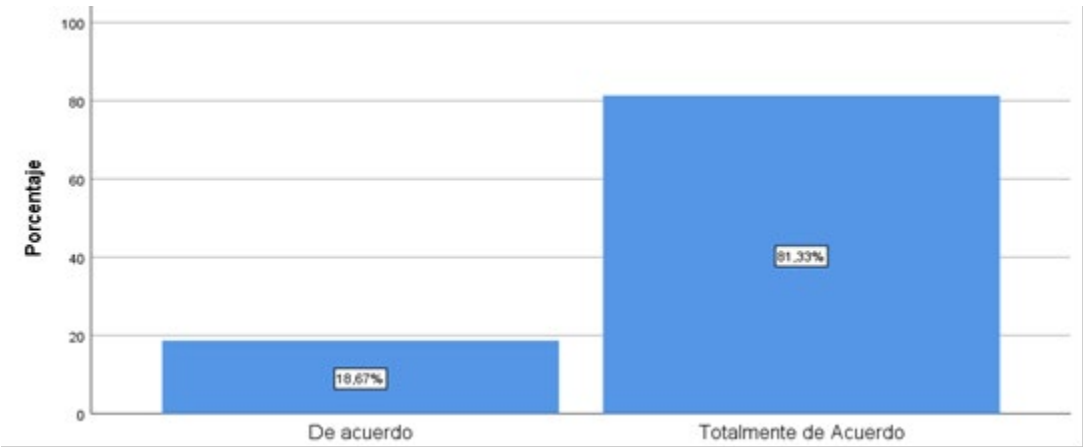
Table 3
Difficulties in the Reading and Writing Process.

| | | Frequency | Percentage | Valid Percentage | Cumulative Percentage |
|-------|----------------------------------------------------------------------------|-----------|------------|------------------|-----------------------|
| Valid | Learning difficulties (dyslexia, dysorthography, dysgraphia, among others) | 60 | 40.0 | 40.0 | 40.0 |
| | Poor reading comprehension in reading texts | 55 | 36.7 | 36.7 | 76.7 |
| | Little vocabulary | 11 | 7.3 | 7.3 | 84.0 |
| | Poor word decoding | 24 | 16.0 | 16.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

Note. Data taken from the teacher survey (2024)

Among the learning difficulties that basic general education teachers see in the literacy process, 40% of teachers identified their students with learning difficulties such as dyslexia, dysorthography, dysgraphia, and others. 36.7% of teachers reported poor reading comprehension, 7.3% reported limited vocabulary, and 16% reported poor word decoding. This result demonstrated that most children with literacy difficulties can overcome these challenges through a teaching strategy that enables students to learn to read and write effectively.

Figure 3
Use of Concrete, Visual and Auditory Materials in the Reading and Writing Process



Note. Data taken from the teacher survey (2024)

According to the results, 81.33% of teachers strongly agreed that the use of concrete, visual, and auditory materials benefits the literacy process; 18.67% agreed, therefore, that it is important for teachers to use a variety of materials and activities to ensure effective and motivating learning for students.

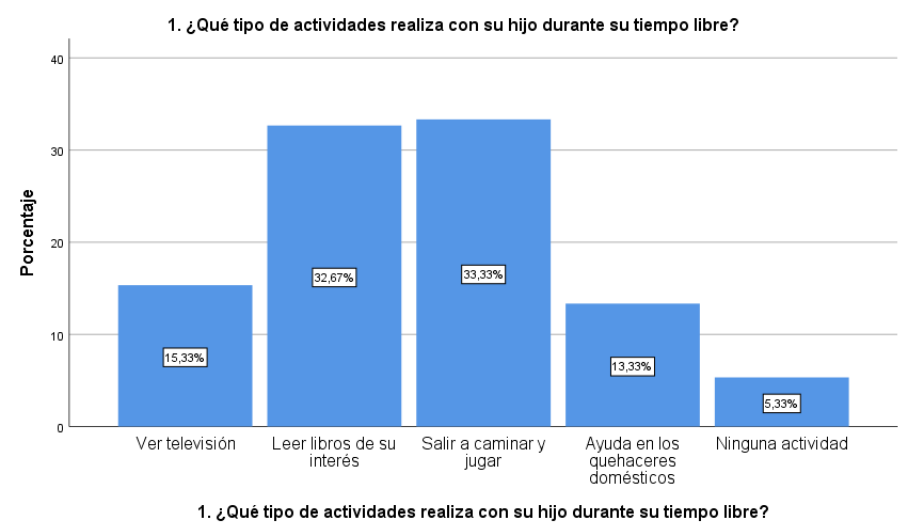
Table 4
Does your educational institution have learning spaces to strengthen reading and writing?

| | | Frequency | Percentage | Valid Percentage | Cumulative Percentage |
|-------|-------|-----------|------------|------------------|-----------------------|
| Valid | Yes | 36 | 24.0 | 24.0 | 24.0 |
| | No | 114 | 76.0 | 76.0 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

Note. Data taken from the teacher survey (2024)

According to the results, 24% of teachers mentioned that their educational institution does have a learning space that allows for the reinforcement of literacy skills, while 76% do not have such spaces, which hinders the reading and writing process. Therefore, it is recommended that teachers implement a learning space and pedagogical strategies in their classrooms or at school, as this allows for the creation of an environment that motivates students to read and write with pleasure and confidence.

Figure 4
Free Time Activities with Your Child.



Note. Data taken from the survey of parents (2024)

Figure 4 shows the activities that parents do with their children in their free time: 33.3% of parents spend their time going for walks and playing with their children, 32.7% spend time reading books of

interest, 15.3% spend time watching television, 13.3% spend time helping with household chores, and 5.3% do not spend any time with their children. This result reflects the lack of support during children's free time, and therefore, there is no incentive to read and create a daily reading routine.

Table 5

Do you agree that establishing a suitable space or corner in the home is important for carrying out reading and writing processes?

| | | Frequency | Percentage | Valid Percentage | Cumulative Percentage |
|-------|----------------------------|-----------|------------|------------------|-----------------------|
| Valid | Neither agree nor disagree | 1 | .7 | .7 | .7 |
| | Agree | 27 | 18.0 | 18.0 | 18.7 |
| | Totally Agree | 122 | 81.3 | 81.3 | 100.0 |
| | Total | 150 | 100.0 | 100.0 | |

Note. Data extracted from the survey of parents (2024)

According to the analysis in Table 5, 81.3% of parents strongly agree with establishing a space or corner for reading and writing, 18% agree, and 7% neither agree nor disagree. Therefore, enabling and creating an appropriate space or corner can encourage, create, and develop reading and writing routines for children, in conjunction with their parents at home.

Furthermore, correlations between the questions were established by applying the Chi-square test using SPSS, which allowed us to draw conclusions within the research conducted, for which the most relevant ones were selected from the surveys.

Table 6

Relationship between Teachers' Age and Reading Time.

| Chi-square tests | | | |
|------------------------------|---------------------|----|------------------------------------|
| | Value | df | Asymptotic significance (2-tailed) |
| Pearson's Chi-square | 23.561 ^a | 12 | .023 |
| Likelihood ratio | 23.661 | 12 | .023 |
| Linear by linear association | 1.761 | 1 | .184 |
| Number of valid cases | 150 | | |

Note. Data extracted from the teacher survey (2024)

According to the chi-square analysis, the result obtained is 0.023, which shows that the value is lower than the 0.05 established in the statistical method; therefore, it is concluded that there is a correlation between the age of teachers and reading time. This allows us to deduce that teachers in the 33-43 age range dedicate 11-21 minutes to reading and writing, while teachers between 55-65 years old dedicate 0-10 minutes to reading and writing. Therefore, older teachers do not dedicate adequate time to reading and writing in the classroom.

Tabla 7*Relationship between Learning Spaces in Educational Institutions and the Books Read in Class per Year.*

| Chi-square tests | | | |
|------------------------------|---------------------|----|------------------------------------|
| | Value | df | Asymptotic significance (2-tailed) |
| Pearson's Chi-square | 22.129 ^a | 3 | .000 |
| Likelihood ratio | 22.440 | 3 | .000 |
| Linear by linear association | 11.271 | 1 | .001 |
| Number of valid cases | 150 | | |

Note. Data extracted from the teacher survey (2024)

In Table 7 the result obtained is 0.000 which shows that there is a correlation between learning spaces in educational institutions and the number of books read in class per year, which allows us to deduce that 76% of teachers surveyed do not have spaces to strengthen reading and writing, therefore they only manage to read 3-4 books per year.

Table 8*Relationship between Parents' Age and the Time They Spend Helping Their Child with Reading and Writing Homework.*

| Chi-square tests | | | |
|------------------------------|---------------------|----|------------------------------------|
| | Value | df | Asymptotic significance (2-tailed) |
| Pearson's Chi-square | 28.639 ^a | 9 | .001 |
| Likelihood ratio | 28.145 | 9 | .001 |
| Linear by linear association | 9.305 | 1 | .002 |
| Number of valid cases | 150 | | |

Note. Data extracted from the survey of parents (2024)

Table 8 shows that the result obtained from the Chi square is 0.001, which concludes that there is a correlation between the age of the parents and the time they spend helping their child with reading and writing homework. This allows us to deduce that 17.3% of the total number of parents aged 25-35 years, help their children with reading and writing homework for 33-43 minutes, while 2.0% of the total number of parents aged 58-68 years, help their children with reading and writing homework for 0-10 minutes, that is, younger parents spend more time helping their children with reading and writing homework.

Table 9
Relationship between Parents' Educational Level and Establishing the Learning Train.

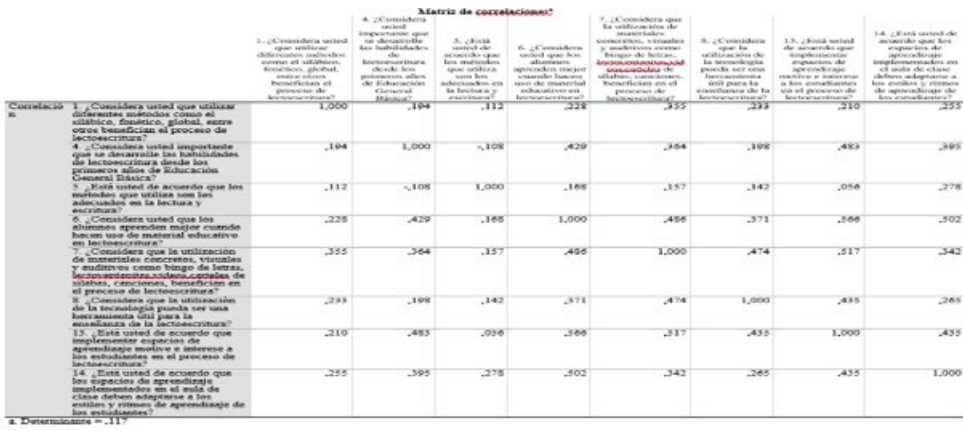
| Chi-square tests | | | |
|------------------------------|---------------------|----|------------------------------------|
| | Valor | df | Asymptotic significance (2-tailed) |
| Pearson's Chi-square | 17.573 ^a | 6 | .007 |
| Likelihood ratio | 14.993 | 6 | .020 |
| Linear by linear association | 10.188 | 1 | .001 |
| Number of valid cases | 150 | | |

Note. Data extracted from the survey of parents (2024).

According to the chi-square analysis in Table 9, the result obtained is 0.007, which shows that the value is lower than established. Therefore, it is concluded that there is a correlation between the educational level of parents and establishing learning spaces. This suggests that 50.0% of all parents with a university-level education believe that establishing an adequate space or corner in the home is important for reading and writing.

Furthermore, a factor analysis was performed using SPSS on the teacher survey, which determined that questions 1, 4, 5, 6, 7, 8, 13, and 14 are related.

Figure 5
Factor Analysis Determination Matrix for the Teacher Survey.



Note. Datos extraídos de la encuesta a los docentes (2024)

According to Figure 5, it is considered that question 7 and question 14 have a correlation because, with the use of concrete, visual, and auditory materials such as letter bingo, reading windows, videos, songs, among others, at the learning stations, they improve the reading and writing process of children in Basic General Education.

Figure 6
 Factor Analysis Determination Matrix for the Parent Survey.

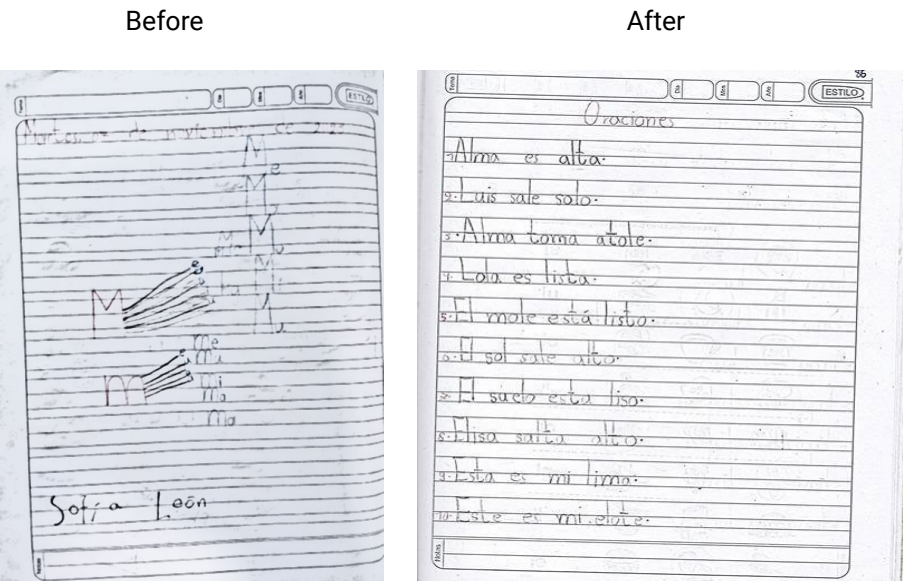
| Matriz de correlaciones* | | | | | | | |
|--------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Correlación | 2. ¿Está usted de acuerdo que la lectura y escritura son importantes para el desarrollo de su hijo? | 3. ¿Usted practica con el ejemplo leyendo libros, revistas, periódicos y transmite a su hijo conductas lectoras? | 7. ¿Está usted de acuerdo que realizar actividades de lectura y escritura en el hogar refuerzan el aprendizaje de su hijo? | 8. ¿Está usted de acuerdo que establecer un espacio o un rincón adecuado en el hogar es importante para realizar procesos de lectura y escritura? | 9. ¿Está usted de acuerdo que una manera de motivar la lectura y escritura de su hijo es utilizar materiales visuales, auditivos y concretos en el hogar? | 10. ¿Está usted de acuerdo que llevar a su hijo a espacios lectores como bibliotecas, librerías, obras de teatro, funciones de títeres promueven la lectura y escritura? | |
| | 1,000 | ,399 | ,389 | ,355 | ,218 | ,192 | |
| | | 1,000 | ,445 | ,313 | ,251 | ,242 | |
| | | | 1,000 | ,630 | ,413 | ,506 | |
| | | | | 1,000 | ,501 | ,557 | |
| | | | | | 1,000 | ,362 | |
| | | | | | | 1,000 | |

Note. Data extracted from the survey of parents (2024)

According to Figure 6, it is established that question 6 and question 7 are correlated because, with the support of parents, the implementation of the learning train and recreational activities at home, children’s reading and writing learning is reinforced.

After data collection, we implemented classroom learning spaces with elementary school students. Twenty students from the second grade of primary school were selected. They engaged in recreational activities such as word dominoes, word formation with cards, letter molding, and others. This led to improvements in writing and orderliness, as well as the development of fine motor skills, as seen in Figure 7.

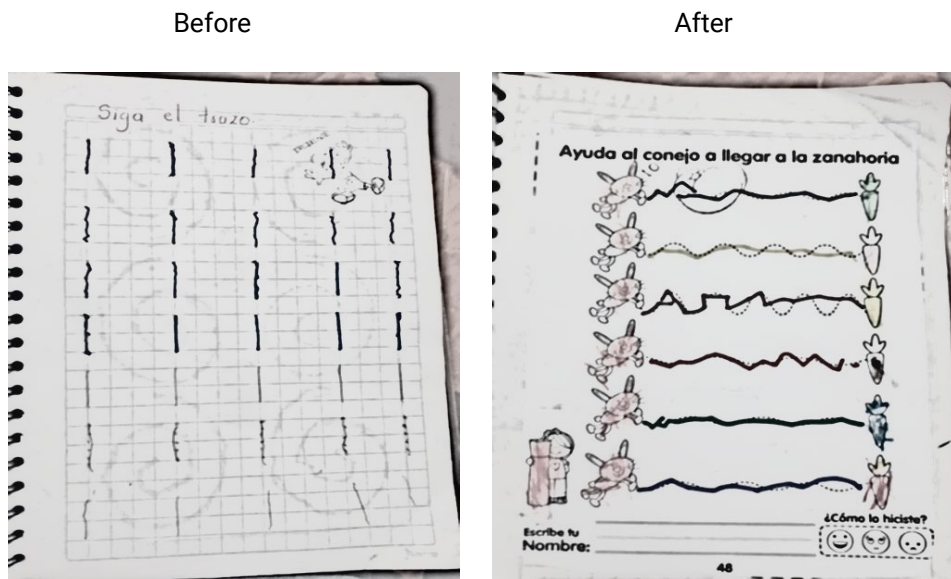
Figure 7
 Child’s Notebook: Writing Process.



Furthermore, this innovative strategy is adapted to students with Specific Educational Needs (SEN).

Figure 8

Traces of the Girl with Special Educational Needs.



In addition, we worked with the children's 20 parents, encouraging them to implement learning spaces within their homes. Recommendations included modeling letters with clay, word dominoes, and word formation with cards, among others, as shown in Figure 9.

Figure 9

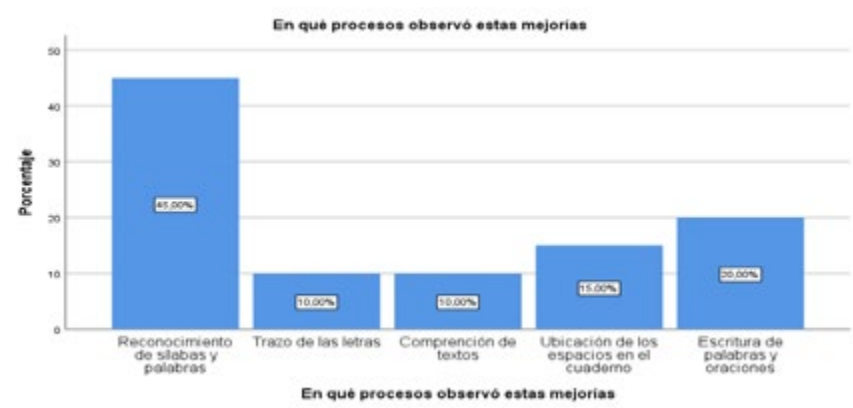
Fun Activity: Word Dominoes.



Note. Source: Parents (2024).

Finally, the satisfaction survey was applied to the parents who participated in the implementation of the learning stations, in which they mentioned that they did observe an improvement in the reading and writing process in the following aspects observed in Figure 10.

Figure 10
Improvements in the Reading and Writing Process.



Note. Data extracted from the parents’ satisfaction survey (2024)

As can be seen in Figure 10, 45% of parents surveyed observed improvements in the recognition and reading of syllables and words, 20% considered that they improved the writing of words and simple sentences, and 10% of parents saw improvements in the stroke of letters, comprehension of texts and the location of spaces in the notebook when writing.

Similarly, parents believe that the learning stations allowed them to interact and communicate with their children in a timely manner. Furthermore, the materials, such as cards, games, stories, and others, were appropriate. The implementation of these materials increased motivation and attention to reading and writing. Table 10 shows the level of satisfaction parents felt with implementing this teaching strategy in their children’s learning.

Table 10
Level of Satisfaction with the Learning Stations.

| Overall, how satisfied are you with the implementation of the learning station in your home? | | | | | |
|----------------------------------------------------------------------------------------------|----------------|-----------|------------|------------------|-----------------------|
| | | Frequency | Percentage | Valid Percentage | Cumulative percentage |
| Valid | Satisfied | 14 | 70.0 | 70.0 | 70.0 |
| | Very Satisfied | 6 | 30.0 | 30.0 | 100.0 |
| | Total | 20 | 100.0 | 100.0 | |

Note. Data extracted from the parents’ satisfaction survey (2024)

As seen in Table 10, 70% of parents surveyed are satisfied with the implementation of the home learning train, and 30% are very satisfied. This allows us to deduce that the learning spaces are effective in the reading and writing learning process for children in general basic education.

Conclusions

Developing students' literacy skills is a challenge that must be taught not only in the teaching-learning process but also in everyday life. This research showed optimal results in language skills, as literacy skills were strengthened when activities were carried out continuously. It was concluded that the diagnostic phase allowed for the identification of weaknesses in learning difficulties such as dyslexia, dysorthography, dysgraphia, poor reading comprehension, limited vocabulary, poor word decoding, a lack of learning spaces in educational institutions, and limited parental support in literacy activities. In this sense, the aforementioned highlights the need to promote the use of learning spaces to address reading and writing weaknesses.

For this reason, it is recommended to implement the learning train within the classroom and at home to reinforce language skills. This helps children develop their communication skills, giving them the opportunity to express their ideas and thoughts freely and spontaneously. Finally, the data obtained reflect the reliability of the implementation of learning spaces, considering that these stations must be welcoming and attractive, and they must not only focus on writing but also on spelling, grammar, composition, and creativity. Furthermore, they are adapted to the cognitive level and specific educational needs of students. For this reason, a teaching strategy helps children develop a love of reading and writing, as well as improve their language skills; but, above all, it is fun, as it is designed with countless recreational activities.

References

- Amaiquema, G. (2023). *Utilización de los rincones de lectura en el proceso de aprendizaje los niños de educación inicial subnivel II en la Unidad Educativa Darío C. Guevara* [Tesis de grado, Universidad Técnica de Babahoyo]. Repositorio Institucional. <http://dspace.utb.edu.ec/bitstream/handle/49000/15495/E-UTB-FCJSE-EINIC-000061.pdf?sequence=1&isAllowed=y>
- Cantalejo, A. (2021). *Materiales para el trabajo por rincones en educación infantil*. [Tesis de grado, Universidad de Valladolid]. Repositorio Institucional. <https://uvadoc.uva.es/bitstream/handle/10324/47669/TFG-B.%201636.pdf>
- Chávez, M. (13 de febrero de 2017). Introducción a los métodos multivariantes. *RPubs*. https://rpubs.com/marcelo-chavez/multivariado_1
- De la Rosa, Y., Hernández, V., Batista, N., y Tejeda, E. (2017). ¿Chi cuadrado o Ji cuadrado?. *Medicentro*, 21(4), 294-295. <http://scielo.sld.cu/pdf/mdc/v21n4/mdc01417.pdf>
- Fumagalli, J., Barreiro, P., y Jaichenco, V. (2017). Niveles de fluidez lectora y comprensión de textos. *Revista Traslaciones de lectura y escritura*. 4 (8). <https://revistas.uncu.edu.ar/ojs3/index.php/traslaciones/article/view/1063>
- Instituto Nacional de Estadística y Censos (2023). Reducción del Analfabetismo en Ecuador: más de 199.000 personas libres de esta condición desde 2010. *Instituto Nacional de Estadística y Censos*. <https://www.ecuadorencifras.gob.ec/institucional/reduccion-del-analfabetismo-en-ecuador-mas-de-199-000-personas-libres-de-esta-condicion-desde-2010/#:~:text=Desde%202010%20hasta%20el%202022,3%2C-7%25%20en%202022>
- Martínez, M. (2021). Análisis factorial confirmatorio: un modelo de gestión del conocimiento en la universidad pública. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 12(23). <https://www.scielo.org.mx/pdf/ride/v12n23/2007-7467-ride-12-23-e059.pdf>
- Ministerio de Educación (2021). Currículo de Educación General Básica. <https://educacion.gob.ec/wp-content/uploads/downloads/2019/09/EGBElemental.pdf>
- Morales, A. y Escalona, J. (2023). Actividades lúdicas para el fortalecimiento de la lectura y escritura a través del método silábico. *Revista Infometric@-Serie Ciencias Sociales y Humanas*. 6(1). <http://www.infometrica.org/index.php/ssh/article/view/189/225>

Murillo, S. (2023). *Rincones de aprendizaje y su influencia en el rendimiento académico de los estudiantes de 5 año de EGB de la Unidad Educativa Eneida Uquillas de Rojas*. [Tesis de grado, Universidad Técnica de Babahoyo]. Repositorio Institucional. <http://dspace.utb.edu.ec/bitstream/handle/49000/15413/E-UTB-FCJSE-EBAS-000357.pdf?sequence=1&isAllowed=y>

Organización de Estados Iberoamericanos (14 de junio de 2022). Hábitos lectores, prácticas y consumos culturales. *Organización de Estados Iberoamericanos*.

<https://oei.int/oficinas/ecuador/noticias/se-presento-los-resultados-de-la-encuesta-de-habitos-lectores-practicas-y-consumos-culturales>

Palmero, S. (2020). La enseñanza del componente gramatical: El método deductivo e inductivo. [Tesis de posgrado, Universidad de La Laguna]. Repositorio Institucional. <http://riull.ull.es/xmlui/handle/915/23240>

Pérez, D. (2018). El proceso de enseñanza-aprendizaje de la lectoescritura: una revisión teórica. [Tesis de grado, Universidad de Laguna]. Repositorio Institucional. <http://riull.ull.es/xmlui/handle/915/15570>

Salto, A. y Moncayo, N. (2021). Rincones de lectoescritura para la optimización del aprendizaje de los estudiantes de Educación General Básica. *Dominio de las Ciencias*, 7(1), 395-411. <https://dialnet.unirioja.es/servlet/articulo?codigo=8231703>

Sisa, L. (2023). La lectura y escritura en el rendimiento académico de los estudiantes. [Tesis de posgrado, Universidad Tecnológica Indoamérica]. Repositorio Institucional.

Valera, J. (2020). *La política de gestión de recursos humanos y su relación con la calidad de servicio que brinda la Municipalidad Distrital de Manantay, año 2019*. [Tesis de grado, Universidad Nacional de Ucayali]. Repositorio Institucional. <https://hdl.handle.net/20.500.14621/4616>

Copyright (2025) © Nadia Estefania Curipallo Peralta, Jacqueline Alejandra Díaz Parra



This text is licensed under a [Creative Commons](#) 4.0 International License.

You are free to Share-copy and redistribute the material in any medium or format-and Adapt the document-remix, transform, and build upon the material-for any purpose, including commercial purposes, provided you comply with the Attribution terms. You must credit the original work appropriately, provide a link to the license, and indicate if changes have been made. You may do so in any reasonable manner, but not in such a way as to suggest that you have the licensor's support or receive it for your use of the work.

[License Summary](#) – [Full text of the license](#)