Flipped classroom para el aprendizaje del inglés en estudiantes de cuarto año de primaria

Flipped classroom for english learning in fourth-grade elementary students

Sala de aula invertida para aprendizagem de inglês em alunos do quarto ano do ensino fundamental

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Artículo de Investigación

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Resumen

Esta investigación se centra en evaluar el impacto del aula invertida en las habilidades comunicativas en lengua inglesa en estudiantes de cuarto grado de educación primaria. El estudio emplea un diseño cuasiexperimental pretest-postest con grupos intactos. El enfoque de aula invertida se implementa durante cuatro semanas con un grupo experimental de 35 estudiantes de cuarto grado de la Unidad Educativa Machachi, cada uno con diferentes niveles de dominio del idioma y enfrentan dificultades para adquirir habilidades básicas. Los resultados demuestran mejoras significativas en la comunicación oral, el dominio de la lectura y el aprecio por el inglés. Sin embargo, la habilidad de escritura no presenta cambios significativos. Si bien se destaca la efectividad de la metodología, se aprecia la necesidad de mejoras, considerando factores como la edad de los estudiantes, el tiempo de exposición al enfoque y el apoyo externo para el aprendizaje autónomo.

Palabras clave: Aula invertida; Habilidades lingüísticas; Idioma en Inglés; Educación inclusiva; Aprendizaje autónomo.

Abstract

This research focuses on assessing the impact of the flipped classroom on English language communication skills in fourth-grade students in elementary education. The study employs a quasi-experimental pretest-posttest design with intact groups. The flipped classroom approach is implemented over four weeks with an experimental group of 35 fourth-grade students from Unidad Educativa Machachi, each having varying levels of language proficiency and facing difficulties in acquiring basic skills. The results demonstrate significant improvements in oral communication, reading proficiency, and appreciation for English. However, the writing skill does not have significant changes. While the methodology's effectiveness is highlighted, there is an appreciation of the need for improvements, considering factors such as students' age, exposure time to the approach, and external support for autonomous learning.

Keywords: Flipped classroom; Language skills; English language; Inclusive education; Autonomous learning.

Resumo

Esta pesquisa tem como foco avaliar o impacto da sala de aula invertida nas habilidades de comunicação da língua inglesa em alunos da quarta série do ensino fundamental. O estudo emprega um desenho quase experimental pré-teste-pós-teste com grupos intactos. A abordagem de sala de aula invertida é implementada durante quatro semanas com um grupo experimental de 35 alunos da quarta série da Unidade Educativa Machachi, cada um com níveis variados de proficiência no idioma e enfrentando dificuldades na aquisição de habilidades básicas. Os resultados demonstram melhorias significativas na comunicação oral, na proficiência em leitura e na apreciação do inglês. Entretanto, a habilidade de escrita não apresenta alterações significativas. Embora a eficácia da metodologia seja destacada, avalia-se a necessidade de melhorias, considerando fatores como a idade dos alunos, o tempo de exposição à abordagem e o apoio externo para a aprendizagem autônoma.

Palavras-chave: Sala de aula invertida; Habilidades de linguagem; Língua Inglesa; Educação inclusiva; Aprendizagem autônoma.

Introduction

In today´s globalized world, proficiency in English has become essential for effective communication across educational, business, research, technological, and other areas. With approximately 1.5 billion people speakers worldwide in 2023, it is evident that English holds a predominant position as a global language. (Acosta et al., 2018; Romero, 2021; Statista Search Department, 2023). However, in the Latin American, particularly in countries like Ecuador addressing the need for English proficiency remains a significant challenge. Despite Argentina ranking relatively high in English proficiency among Latin American countries, others like Ecuador and Mexico struggle, with Ecuador ranking low in the EF English Proficiency Index. (Education First, 2023).

Delving into Ecuador's English language situation reveals limitations in language instruction, particularly in public education. Elementary education students often exhibit deficiencies in productive skills such as writing, listening, and oral communication, with writing proficiency being notably lacking. (Ureña, 2014). Contributing to this reality is the prevailing didactic approach, where teachers often adhere strictly to curriculum guidelines, sometimes neglecting students' socio-educational needs.

Additionally, teachers' own proficiency in English is a concern, with only 0.93% achieving a B2 level proficiency. Despite mandatory English education in Ecuador since 2016, challenges persist in consolidating language competencies among students. (Ortega & Auccahuallpa, 2017; Intriago et al., 2019; MinEduc, 2024). We encounter more than one active factor that serves as a reference for understanding the lack of consolidation in language competencies. (Torres Arteaga, 2022; Woods & Copur-Gencturk, 2024). Simultaneously, the need to diversify didactic strategies to enhance the development of these competencies is justified, considering that mastery of this increasingly globalized language significantly impacts the training of competent professionals (Ovesdotter, 2003).

In response to these challenges, educational practices are evolving to extend beyond traditional classroom settings. The aim is to optimize learning opportunities. Technology-mediated learning approaches, such as e-learning classrooms (Wang, Y. 2023; Li, 2024; Calderón Rojas & Córdova Esparza, 2020; Salica & Almirón, 2020). The flipped classroom model, in particular, shifts the role of the teacher to that of a facilitator, fostering a dynamic, student-centered learning environment. (Joy et al., 2023; Akçayır & Akçayır, 2018).

If we consider that the application of this methodology in the basic education stage is on the rise and has encouraged significant interest due to its versatility (Campillo, Miralles & Sánchez, 2019), particularly in mathematics followed by natural sciences, social studies, and languages (Galindo-Domínguez, 2018).

Therefore, this study aims to explore how the flipped classroom model impacts English communicative abilities among fourth-grade elementary students in Ecuador, considering their varying proficiency levels and learning needs. By addressing this question, the study seeks to identify effective strategies to improve language learning outcomes and foster a more inclusive educational environment, ultimately contributing to students' holistic development for the 21st century.

The flipped classroom as a learning method for the English language in elementary education

The flipped classroom model, also known as the inverted classroom, aims to provide students with a flexible learning environment. It achieves this by offering activities such as readings, videos, and

tutorials for students to review at home. In other words, students prepare themselves before the face-to-face class by accessing the content whenever they wish. The activities that are typically considered homework transform into in-class activities. For instance, students can explore concepts in greater depth, address doubts, solve problems, and engage in practical collaborative activities. Simultaneously, this approach reinforces learning and promotes critical thinking, preparing students for the challenges of the 21st century. (Izadpanah, 2022; Akçayır y Akçayır, 2018; Joy et al., 2023).

In English language instruction, the flipped classroom approach proves to be an effective ally. Students can engage with the language in a real-life context and at their own pace, applying what they have learned in a practical manner in the classroom, thus fostering communicative skills both at school and home (Loizou, 2022). Teachers must plan and select resources appropriately for at-home preparation, ensuring the integration of all four language skills: speaking, listening, reading, and writing. The goal is not only to strengthen individual skills but to enhance all language abilities collectively, aiming to promote confidence and fluency in English communication (Aguayo et al., 2018; Rodríguez & Cedeño, 2020). Additionally, it is crucial to emphasize the importance of initiating language learning in the early stages of education to ensure a solid foundation for the mastery of this second language (Chicaiza, 2023).

After a decade of its implementation, the flipped classroom has demonstrated several advantages that significantly strengthen the teaching and learning process. It shows positive effects on learning, notably by promoting student autonomy, allowing them to take responsibility for their learning, providing the opportunity to apply their knowledge, and enhancing their skills. In addition, it increases motivation, resulting in improved academic performance (Izadpanah, 2022; Holm et al., 2022; Prado Herrera, 2022; Chicaiza, 2023; Debbağ, M., & Yıldız, S. 2021). Flexibility is another advantage of the flipped classroom, giving teachers the freedom to adapt and adjust their approach according to the needs and progress of the students (Loizou, 2022).

In this approach, the role of the teacher takes on a more dynamic dimension by focusing on creating a learning environment where students can actively explore and apply new concepts. Instead of adopting the traditional stance of lecturing from the front of the classroom, the teacher assumes a more interactive role, circulating around the classroom to provide support and individualized guidance as needed. Additionally, the flipped classroom allows teachers to embrace new roles as learning facilitators, collaborators, and researchers (Sun, Y., & Gao, F. 2019). This shift in

educational dynamics not only encourages student engagement but also fosters a more collaborative relationship between teachers and students, enabling educators to provide immediate and personalized feedback during practical activities in class (Loizou, 2022).

Methodology

The research was evaluated using a quantitative approach and a quasi-experimental pre- and post-test design with intact groups. The study was carried out at Machachi Elementary School in the Pichincha province in January 2024. The sample consisted of a total of 35 fourth-grade students in elementary education: 15 girls, representing 42%, and 20 boys, representing 58%, with an average age of 9 years. These students are part of an intact group.

In the phase of flipped classroom implementation, we followed the stages proposed by Jdaitawi (2019) and Chen et al. (2023). These stages include pre-class preparation, in-class learning activities, and post-class consolidation of learning. They play a critical role in executing this pedagogical approach. During the implementation of the flipped classroom in the current research, educational videos on the topic were designed. These videos were shared with the working group, allowing students to review the material prior to the class.

For the result analysis, a pre-test and a post-test evaluation were conducted. The pre-test was administered to the group during the initial phase of the research with the aim of assessing their prior knowledge before implementing the flipped classroom model. Both evaluations were designed based on the study of cardinal numbers from one to ten thousand. The topic for this investigation was aligned with student needs and formed part of the annual curriculum plan. Additionally, the evaluation criteria and skills proposed by the Ministry of Education served as the foundation. Three fundamental skills from the prioritized curriculum were selected, with special emphasis on communication, mathematics, digital, and socioemotional competencies, as detailed in Table 1. This assessment allowed us to evaluate the effectiveness of the flipped classroom in developing specific skills, providing a solid basis for interpreting the obtained results. Furthermore, it established a normative framework that guided the collection and interpretation of the results.

The pretest and post-test assessments consisted of 10 questions each: 4 focused on oral communication, 3 on reading ability, and 3 on writing ability. The results were recorded in the grade register, and direct observations were made in the classroom. After administering the evaluation instruments, the results were entered into the database. For data analysis, we

applied mean and standard deviation calculations. Additionally, at the inferential level, we used the Wilcoxon W test to determine differences in performance between the pretest and post-test.

Table 1: *Skills in Elementary General Education, Sublevel Elemental, Foreign Language Area.*

Skills	Achievement Indicator
Oral Communication **EFL 2.2.4.** Identify items of specific information within simple messages or from short and simple descriptions about familiar contexts, especially if visual support is provided. (Example: letters of the alphabet, numbers, prices and times, days, dates and months, etc.)	I.EFL.2.7.1. Learners can understand short and simple spoken texts well enough to be able to pick out key items of information and record them in writing or drawings, or physically act upon them. (I.3)
Reading Understand short simple text (online or print) and some basic details of the content. (Ref., EFL 2.3.2.)	I.EFL.2.12.1. Learners can understand a short simple text on an everyday topic and successfully complete a simple task to show that they have understood most or some of it. (I.4)
Writing Write simple words and sentences for controlled practice of language items. (Ref., EFL.2.4.4.)	I.EFL.2.18.1. Learners can write short simple phrases and sentences to show that they know how to use simple grammar or vocabulary items. (I.3, I.4)

Note. (Educación, M. D. 2021)

The pretest and post-test assessments consisted of 10 questions each: 4 focused on oral communication, 3 on reading ability, and 3 on writing ability. The results were recorded in the grade register, and direct observations were made in the classroom. After administering the evaluation instruments, the results were entered into the database. For data analysis, we applied mean and standard deviation calculations. Additionally, at the inferential level, we used the Wilcoxon W test to determine differences in performance between the pretest and post-test.

Results and Discussion

The results reveal the impact of the flipped classroom on differential behavior related to communication skills in the English language (see Table 2). To achieve this, an initial

assessment of listening comprehension, reading, and writing skills was conducted. Additionally, students' perceptions and the level of difficulty were considered as part of the study.

Table 2: *Impact of Flipped Classroom on English communication skills: Initial assessment results (PRE-TEST)*

	N	Missing	Mean	Median	Standard Deviation
Oral Communication	35	0	2.43	2	1.267
Writing Ability	35	0	1.4	1	0.812
Reading Ability	35	0	1.71	2	0.893
Apreciation	35	0	2.14	2	0.974
Difficulty perceived by the teacher	35	0	1.43	1	0.778

Note. By Suntaxi, M., 2024.

The results reveal the impact of the flipped classroom on differential behavior related to communication skills in the English language (see Table 2). To achieve this, an initial assessment of listening comprehension, reading, and writing skills was conducted. Additionally, students' perceptions and the level of difficulty were considered as part of the study.

Initial results before the implementation of the flipped classroom reveal an intermediate level of oral communication skills, with an average of 2.43 and a standard deviation of 1.26. This initial assessment suggests that children had notable difficulties in pronouncing quantities or conveying ideas precisely, possibly attributable to a lack of prior knowledge or practice in this specific aspect of the English language.

The high standard deviation indicates significant variability in the individual skills of students regarding oral communication. This could be due to various reasons, such as differences in the amount of time students have contact with the English language outside the school environment, variations in the quality of previous teaching, or even confidence when speaking in a foreign language, as reduced confidence tends to lead to decreased participation. Abdullah et al. (2019) argue that the flipped classroom approach can effectively enhance students' oral communication by providing them with the opportunity to review material before class, giving them additional time to practice and become familiar with the language.

The results of the writing proficiency present an average of 1.4 and a standard deviation of 0.81, reflecting significant difficulties among children in this specific area when organizing their

thoughts coherently and concisely while writing in English, as evidenced by the assigned classroom activities. The relatively low standard deviation indicates that the group shares a similar level in this skill, showing little variability among the children. Additionally, the observation that students tend to spell words as they sound, similar to Spanish, may be attributed to phonetic and spelling issues.

These results provide a concrete and quantitative foundation supporting the need for intervention and additional support to comprehend the relationship between sounds and letters in English. Specific support in sentence construction, vocabulary usage, and spelling correction could make a difference in their linguistic development. The implementation of the flipped classroom could address these difficulties by providing resources and specific activities focusing on improving writing expression and spelling.

For the reading proficiency variable, an average of 1.71 is observed, indicating limitations within the evaluated group of children during the pre-test. This score suggests that students face difficulty comprehending and analyzing short texts, which could be related to their understanding of English vocabulary and grammar. The variability in individual reading abilities, as evidenced by the standard deviation of 0.89, indicates diverse levels of competence within the group. Some children performed relatively better, while others encountered greater challenges in this area.

ala Swamy, C., and Imdadul Haque, M. (2020), show similarity in data during their pre-implementation phase of the flipped classroom, as their experimental group did not exhibit significant differences in students' writing abilities. These results underscore the importance of addressing reading skills comprehensively, considering both the general needs of the group and the specific needs of each student.

Regarding appreciation, the group's mean recorded a value of 2.14, indicating that the children had a moderate appreciation of the English language, with variability in individual knowledge before the introduction of the flipped classroom. The deviation of 0.97 suggests that the group held diverse opinions. Various factors may have influenced appreciation, such as the children's previous experiences with the English language, their level of exposure through different media, and the quality of previous teaching. Additionally, Mengual et al. (2020) point out that differences in the family environment and individual motivations may also have contributed to variability in appreciation.

The mean of 1.43 regarding teachers' perceptions indicates that, on average, teachers perceived a low to moderate difficulty in English language proficiency among students before the implementation of the flipped classroom. The standard deviation of 0.77 indicates variability in perceptions among teachers. Individual experiences and skills of teachers in teaching English, the quality of available resources, limited access to materials, and the lack of institutional support could have influenced perceptions of students' language skills, as identified by Sun, Y., and Gao, F. (2019) in their research on the teacher's role in the flipped classroom methodology.

The initial results generated in the pretest provide a foundation for understanding specific areas that needed attention, such as reading and writing skills, and offer guidance to tailor and personalize the content of the flipped classroom. Furthermore, the implementation of this approach is supported by the moderate perception of difficulty among teachers. Therefore, the adaptability of the flipped classroom emerges as a practical tool to comprehensively address various language skills, promote more student-centered learning, address specific needs, and foster group development. Although elementary school students require more guidance from teachers, their capacity for learning using technology should not be underestimated (Arévalo, 2023).

Following the pretest intervention, the post-test phase was conducted, where the flipped classroom was implemented, revealing variability when comparing the two assessments (Table 4). The results show an increase from 0.31 to 2.74 in the means for oral communication. This indicates that the flipped classroom has had a positive impact on the children, reflecting an improvement in their communication skills compared to the pretest and reinforcing the notion that the flipped classroom methodology has created a conducive environment for English speech. A significant improvement was evident in oral ability, where children could correctly read quantities and respond to questions such as "how much is it?" or "how many are there?" in English. The effectiveness of the flipped classroom is visible in oral proficiency. Reviewing and understanding the material at home demonstrated greater motivation in English conversation tasks and contributed to more effective communication, showing a gradual increase (Abdullah, 2019; Sidky, 2019; Sudarmaji et al., 2023).

Table 3: *Flipped Classroom Impact: POST-TEST Results*

	N	Missing	Mean	Median	Standard Deviation
Oral Communication	35	0	2.74	3	1.268
Writing Ability	35	0	1.94	2	0.802

Reading Ability	35	0	2.46	3	0.741
Apreciation	35	0	2.83	3	1.071
Difficulty perceived by the teacher	35	0	1.43	1	0.778

Note. By Suntaxi, M., 2024.

The mean score for writing ability experiences a notable post-test increase, reaching 1.94, indicating an average increment of 0.54 for students after the implementation of the flipped classroom. It is essential to note that the standard deviation is relatively low at both instances, standing at 0.81 in the pre-test and 0.80 in the post-test. This pattern signifies less variability in individual scores among children, indicating a homogeneous performance within the group.

Regarding reading ability, there is an increase in the mean score of 0.75 when comparing the post-test, which presents an average of 2.46. This rise in the mean score suggests that children have made positive progress in their capacity to comprehend and engage with English-language texts with a lower degree of complexity. A decrease in phonetic errors and pronunciation was also evident. This progress can be attributed to children's prior access to teacher-recorded learning videos sent for review before class, providing them with more effective preparation and engagement in activities. This aligns with the findings of Rodríguez et al. (2016), Aguayo et al. (2018), and Martínez (2019), who argue that this methodology encourages practice and experience during class, helps level the children's abilities, reflecting an improvement in reading ability after implementing the flipped classroom, supporting its effectiveness in English language learning.

In terms of appreciation, there is an increase in the post-test mean (2.83) compared to the pretest (2.14). This suggests that, with an average increase of 0.69, children experienced an improvement in their appreciation after the implementation of the flipped classroom approach towards learning English. Additionally, the variation in activities, such as access to multimedia resources and interactive classroom activities, created a conducive environment for students, contributing to this positive change (Loizou, M. 2022). As for the standard deviation, it is also higher, albeit slightly, from 0.97 to 1.07. This could indicate greater variability in children's responses after the flipped classroom implementation, suggesting that some students experienced a significant improvement while others did not.

As observed, the increase in appreciation suggests that the flipped classroom methodology has contributed to creating a more effective and stimulating environment for learning English,

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positively influencing students' perceptions of this subject. It is important to note that although the mean shows a positive increase, it is subject to the context and specific circumstances of this study. On the other hand, the results of the perceived difficulty by the teacher remain constant in both the pre-test and post-test, with similar means. The results suggest that, according to the teacher's perception, the application of this methodology remains stable. It is crucial to consider that these results are based on the teacher's perception and not on the actual skills of children in learning English.

The results from Table 4 show the totals before and after applying the flipped classroom model. The results, supported by the non-parametric Wilcoxon test, indicate that the impact of the flipped classroom is beneficial for learning the English language, as presented below:

The value of 1625 represents the sum of the ranks of the differences between scores before and after oral communication. The p-value is < .001, indicating that the probability of these results occurring by chance is very low. Therefore, we can conclude that the effect of the flipped classroom contributed to this skill at this student level. Some potential factors that may have contributed to the observed impact on oral communication include prior exposure to at-home material tailored to the academic needs of students, thereby motivating their participation in activities compared to a traditional in-class approach. Children participating in the flipped classroom showed improvement compared to the pre-test, transitioning from being recipients to knowledge builders (Arévalo, 2023).

TABLE 4: *Significant Impact of the Flipped Classroom Model on English Language Learning: Before and After Implementation Comparison*

Paired Samples T-Test

		Statistic		P
Difficulty perceived by the teacher	Wilcoxon W	343	a	0.474
Total Oral Communication	Wilcoxon W	**1625**	b	**<.001**
Total Writing	Wilcoxon W	549	d	0.089
Total Reading	Wilcoxon W	**878**	e	**<.001**
Apreciation	Wilcoxon W	**1392**	f	**<.001**

[a] 31 pair(s) of values were tied

[b] 10 pair(s) of values were tied

[d] 29 pair(s) of values were tied

[e] 26 pair(s) of values were tied

[f] 16 pair(s) of values were tied

Note. By Suntaxi, M., 2024.

When comparing the writing skills before (pretest) and after (post-test) applying the flipped classroom model, the value of 549 represents the differences between pretest and post-test writing skills. This statistic reflects the magnitude of the change in writing skills after the intervention. The value of 0.089 is the result of the statistical analysis. Since the p-value (0.089) is greater than 0.05, we cannot reject the null hypothesis. This suggests that there is no statistically significant evidence to claim that the flipped classroom influences writing skills. Various factors could influence this lack of significance, such as variability in student responses, the materials used, or possible time constraints. However, the p-value slightly above 0.05 does not completely rule out the possibility of a significant effect on the writing skills of fourth-grade children. Therefore, a more extensive and comprehensive implementation is suggested to maximize positive results, as evidenced by Bala Swamy, C., and Imdadul Haque, M. (2020) in their research, which demonstrated a statistically significant difference in students' writing skills before and after the application of this methodology in their study on improving students' writing skills through flipped classroom instruction.

In reading skills, since the p-value is lower ($p < 0.001$), it provides a solid basis to reject the null hypothesis and assert that the flipped classroom has a positive effect on this skill. Statistically significant differences are observed in fourth-grade children, not only in increased student motivation but also in a notable improvement in academic performance. The significant difference of 878 between pretest and post-test reading skills reinforces the idea. This reality aligns with the data obtained by Wang (2023), Ni et al. (2023), and Samadi et al. (2024), who highlight the benefits of transitioning from the traditional classroom to the flipped classroom to strengthen reading skills and vocabulary, significantly influencing students' critical thinking.

Overall, these results positively support the effectiveness of the flipped classroom methodology in significantly improving the evaluated skills, emphasizing its positive impact, particularly on oral comprehension, reading ability, and appreciation for the language. Similar results were observed in the research conducted by Jdaitawi (2019), indicating that the integration of the flipped

classroom in the English learning process had a significant impact on the group's performance, highlighting the potential benefits of this approach.

Regarding the observed difficulty by the teacher, the Wilcoxon statistic is 343, indicating the sum of the ranks of differences between pretest and post-test scores. It does not suggest a pronounced effect, and the p-value of the test is 0.474, which is higher than the significance level, indicating that there is not enough evidence to support the benefits of the flipped classroom in this variable.

It is worth noting that the benefits of the flipped classroom may manifest progressively as students adapt to the new approach. Research such as Debbağ, M., and Yıldız (2021) and Arevalo (2023) observed improvements in motivation, engagement, and academic performance from the first intervention of this methodology. Still, it is essential to recognize that each context and student group is unique, and there is no one-size-fits-all guide to ensuring results. Therefore, it is recommended to evaluate and adjust the implementation according to the specific needs of each class (Bergmann and Sams, 2012; McLaughlin et al., 2014).

The results also present differences in the appreciation of the English language when incorporating the flipped classroom compared to the traditional method. When comparing appreciation scores using this learning model, the statistic shows a value of 1392, suggesting that there is a statistically significant difference between pre- and post-test scores. In other words, the flipped classroom model had a measurable effect on the English learning of fourth-grade elementary students. The p-value is less than 0.001, meaning the probability of obtaining such a large difference between pre- and post-test scores by chance is extremely low. The data reveal significant progress in the experimental group, aligning with the findings of Hamre and Pianta (2005), who emphasize the benefits of interaction between children and teachers in the flipped classroom context. Their study, focusing on 5–6-year-old children with various social issues, showed substantial improvements by the end of the first grade.

It is pertinent to mention that elementary school students are in a crucial phase of development and require support both in the school environment and at home to ensure effective learning. Given their age, they lack the necessary maturity to autonomously carry out their learning process outside the classroom. Factors such as their limited level of responsibility, evidenced by the lack of content review, along with the lack of adequate support at home, technical issues such as internet connectivity, and limited skills in the use of information and communication technologies (ICTs) by some children, generally influenced the development of planned activities. This, at times,

resulted in outcomes that did not meet the expected expectations (Álvarez et al., 2020; Loizou, 2022; Li and Li, 2022).

Conclusions

When assessing whether the flipped classroom positively influences the improvement of productive skills in the English language compared to the traditional method, the results obtained are affirmative. The effectiveness of this approach was most prominently observed in the oral communication, reading skills, and overall appreciation of the language of fourth-grade elementary students. Significant progress in oral communication was clearly manifested, reflected in the reduction of pronunciation errors when using English vocabulary. Regarding reading skills, a decrease in phonetic and pronunciation errors was observed, indicating progress in understanding English vocabulary and grammar.

On the other hand, the lack of significance in the writing skill suggests the need to adjust and enhance specific strategies to address this area. However, specific improvements were evident in some students, such as the application of simple grammatical structures when composing short sentences in English, indicating that the flipped classroom approach contributed to this competence. Others still face difficulties in structuring simple sentences, suggesting a greater need for support in this area. Although this skill presents a challenge, the overall results highlight the effectiveness of the flipped classroom model, especially in the context of teaching a second language to elementary-level children.

Other factors, such as unconsolidated study habits, support, and age, demonstrate that children of this age are not yet able to engage in fully autonomous learning and need support to ensure the success of the flipped classroom in future activities.

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