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Artículo de investigación

The use of stories as a pedagogical strategy to improve reading comprehension

El uso de cuentos como estrategia pedagógica para mejorar la comprensión lectora

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***Abstract*:** This study aimed to evaluate changes in the reading comprehension performance of EFL students following an instructional intervention based on local legends from Pujilí. The intervention incorporated A2-level reading activities adapted from Cambridge A2 Flyers-type tasks combining culturally contextualized narrative texts with skimming and scanning strategies within Communicative Language Teaching and Task-Based Language Teaching (TBLT). A quantitative, one-group pretest–posttest pre-experimental design was employed with 22 fourth-semester students enrolled in the Pedagogy of National and Foreign Languages program at the Technical University of Cotopaxi, Pujilí Extension. Students worked with short narrative texts based on traditional legends from Pujilí, created by university students and faculty members and adapted to the A2 instructional level through pre-reading, while-reading, and post-reading activities. Reading-comprehension performance increased from a pretest mean of 5.62 to a posttest mean of 9.69. The paired-samples t test showed a statistically significant difference between the two measurement points, $t(21) = 8.465$, $p < .001$, and the Wilcoxon signed-rank test produced the same significant result, $p < .001$. The findings indicated substantial within-group improvement in reading-comprehension performance after the intervention. However, because the study used a one-group pre-experimental design, the results should not be interpreted as definitive evidence of causality.

Keywords: Comprehension, learning, performance, reading, strategy.

Resumen: *Este estudio tuvo como objetivo evaluar los cambios en el desempeño de la comprensión lectora de estudiantes de inglés como lengua extranjera (EFL) después de una intervención pedagógica basada en leyendas locales de Pujilí. La intervención incorporó actividades de lectura de nivel A2 adaptadas a tareas tipo Cambridge A2 Flyers y combinó textos narrativos contextualizados culturalmente con estrategias de skimming y scanning, dentro de los enfoques de Enseñanza Comunicativa de Lenguas y Enseñanza de Lenguas Basada en Tareas (TBLT). Se empleó un diseño cuantitativo preexperimental de un solo grupo con pretest y posttest, aplicado a 22 estudiantes de cuarto semestre de la carrera de Pedagogía de los Idiomas Nacionales y Extranjeros de la Universidad Técnica de Cotopaxi, Extensión Pujilí. Los estudiantes trabajaron con textos narrativos breves basados en leyendas tradicionales de Pujilí, elaborados por estudiantes y docentes universitarios y adaptados al nivel A2 mediante actividades de prelectura, lectura y poslectura. El desempeño en comprensión lectora aumentó de una media de 5,62 en el pretest a 9,69 en el posttest. La prueba t para muestras relacionadas mostró una diferencia estadísticamente significativa entre ambas mediciones, $t(21) = 8,465$, $p < .001$, resultado respaldado por la prueba de rangos con signo de Wilcoxon, $p < .001$. Los hallazgos indicaron una mejora sustancial dentro del grupo en el desempeño de la comprensión lectora después de la intervención; sin embargo, debido al diseño preexperimental, los resultados no deben interpretarse como evidencia definitiva de causalidad.*

Palabras clave*: Aprendizaje, comprensión, estrategia, lectura, rendimiento.*

1. Introduction

Research on reading comprehension in English as a Foreign Language (EFL) has received renewed attention because students do more than decode words when they read. They also select relevant information, connect ideas, infer meanings, recognize vocabulary in context, and monitor their comprehension throughout the reading process.

Therefore, reading comprehension depends on learners' linguistic knowledge, familiarity with vocabulary and text structure, and the reading strategies they employ during reading activities. Second-language reading involves coordinated lower- and higher-level processes rather than a single decoding operation (Grabe & Yamashita, 2022). Duke et al. (2021) likewise explain that comprehension instruction integrates vocabulary development, knowledge building, strategy use, and understanding of text structure.

Affective factors also deserve consideration. Dang (2024) reported a relationship between foreign-language reading anxiety and reading strategies, while Dang and Nguyen (2023) examined the association between reading anxiety and reading test performance. Together, these contributions support explicit and guided reading-strategy instruction, while acknowledging that emotional responses may also influence learners' reading processes and assessment performance.

A2 Flyers provides a useful assessment framework for this study because it includes reading activities based on familiar topics, short texts, vocabulary recognition, and communicative situations appropriate to its proficiency level. Cambridge University Press & Assessment (2024) describes A2 Flyers as part of the Young Learners English qualifications and indicates that these examinations are aligned with the Common European Framework of Reference for Languages (CEFR).

Cambridge University Press & Assessment (2024) also presents the A2 Flyers Word List as a resource designed to support learners' understanding of everyday spoken and written English. Compared with the broader CEFR descriptors, A2 Flyers provides specific guidance for assessment activities by connecting proficiency level, vocabulary, task type, and reading purpose.

Reading at the A2 level requires more than recognizing isolated words. Learners need to identify the main idea of a short text, locate specific information, interpret simple relationships between events, follow a narrative sequence, and infer the meaning of vocabulary from context. Tsang and Yeung (2024) found that young EFL learners' reading self-efficacy and perceived value of storybooks were associated with vocabulary knowledge, word recognition, reading fluency, and reading comprehension.

Similarly, Hidayat et al. (2024) reported that digital storytelling can enhance students' reading experiences when texts are combined with images, sequencing, and interactive activities. These findings help explain why narrative texts can serve as meaningful instructional resources for developing guided reading-comprehension activities.

In this study, the reading materials were based on local legends from Pujilí created by university students and faculty members. These legends were used as culturally contextualized narrative texts because they contain characters, settings, actions, events, conflicts, and narrative sequences that students can follow while reading.

Their use also connects reading practice with students' academic and local contexts, thereby increasing the contextual relevance of classroom reading activities. Pillaga (2021) examined the use of fairy tales in reading comprehension and applied standardized Cambridge tests as pretests and

posttests. The study reported that fairy tales helped learners develop an interest in reading, connect ideas, and understand texts more easily.

Although fairy tales and local legends are not the same narrative genre, both share elements such as characters, settings, events, sequences, conflicts, and resolutions. Therefore, Pillaga Riofrío's (2021) study provides a relevant reference for understanding how short narrative texts may support reading comprehension in EFL contexts.

Stories, understood in this study as short narrative texts, may support A2 learners because they usually present characters, actions, places, and events in a sequence that students can follow. However, the use of stories alone does not necessarily lead to improved comprehension; their pedagogical value depends on how reading activities are structured and guided.

Gonzalez-Torres and Vargas-Saritama (2025) showed that reflective reading journals helped A2 EFL students engage with texts and monitor comprehension. In contrast, Husnul et al. (2025) focused more directly on skimming and scanning as strategies for improving reading comprehension among EFL learners.

Although the studies emphasize different instructional processes, both provide evidence relevant to the design of structured narrative-based reading activities. Skimming and scanning are particularly relevant to A2 Flyers-type reading tasks because they enable learners to read with a specific purpose. Skimming refers to reading rapidly to identify the general meaning, main idea, or overall situation of a text.

Scanning involves reading selectively to locate specific information, such as names, places, actions, objects, numbers, or other relevant details. Zurita and Castro (2025) reported that the use of skimming and scanning supported the development of reading comprehension among EFL students. Husnul et al. (2025) similarly found improvements after learners practiced both strategies in reading activities.

Meta-analytic evidence further supports the use of reading strategies. Sun et al. (2021) identified positive associations between several categories of reading strategies and reading comprehension, whereas Yapp et al. (2021) reported favorable effects of multistrategy interventions on second-language reading comprehension.

Communicative Language Teaching (CLT) and Task-Based Language Teaching (TBLT) provide complementary methodological principles for integrating these strategies with local legends. Ismail et al. (2023) reported that task-based instruction can support reading comprehension when learners engage in meaningful tasks rather than isolated exercises. Nguyen (2022) also found improvements in reading comprehension among non-English-major university students who received task-based instruction.

Taken together, these findings support implementing reading activities in which students predict content, skim for general meaning, scan for specific information, compare responses, discuss interpretations, and complete comprehension-oriented tasks. Against this background, the present study examines reading-comprehension performance following an instructional intervention based on local legends from Pujilí.

The intervention incorporates short narrative texts aligned with A2 Flyers-type reading tasks and explicitly integrates skimming and scanning as reading strategies within communicative and task-based activities. The study was conducted with fourth-semester students from the Pedagogy of National and Foreign Languages program at the Technical University of Cotopaxi, Pujilí Extension.

A quantitative, pre-experimental, one-group pretest–posttest design was used to compare students' reading-comprehension performance before and after the instructional intervention.

Accordingly, the objective of this study was to evaluate changes in the reading comprehension performance of A2 EFL students after an instructional intervention based on local legends from Pujilí, integrating skimming and scanning within communicative and task-based reading activities. The study addresses the following research questions:

RQ1. What level of reading comprehension performance do A2 EFL students demonstrate before and after instruction based on local legends from Pujilí? RQ2. Is there a statistically significant difference between students' pretest and posttest reading comprehension scores following the communicative and task-based intervention? RQ3. How does students' performance vary across the different parts of the A2 Flyers-type reading test based on local legends from the canton of Pujilí before and after the intervention?

Reading comprehension is a receptive skill that requires learners to construct meaning from written texts. It involves more than word recognition, as students must connect ideas, identify relevant information, understand vocabulary in context, follow sequences, and make simple inferences. In EFL learning, reading comprehension is particularly important because learners interact with texts through developing linguistic resources. Therefore, they require guided practice, appropriate materials, and reading strategies that facilitate the construction of meaning.

In this study, reading is understood as the process of constructing meaning from local legends used as narrative texts in the EFL classroom. Through these texts, students identify the general idea, locate explicit information, recognize vocabulary in context, follow sequences of events, and make basic inferences. Tsang and Yeung (2024) explain that reading proficiency involves interrelated abilities such as vocabulary knowledge, word reading, fluency, and comprehension. Therefore, students not only recognize isolated words but also connect words, sentences, and events to construct the overall meaning of a text.

Within the present research, reading was linked to comprehension using local legends, which encouraged students to move from word recognition toward meaning construction within culturally contextualized narratives. The independent variable of this study is the use of local legends as pedagogical reading materials. It refers to the incorporation of short narratives from Pujilí into English reading instruction.

These legends were used to connect reading practice with students' cultural and territorial context while guiding them through activities involving prediction, vocabulary recognition, identification of main ideas, location of specific information, narrative sequencing, and basic inference. In this research, local legends were not supplementary materials; rather, they constituted the core instructional resource used throughout the intervention.

The dependent variable is reading-comprehension performance. It was operationalized through the scores obtained on the adapted A2 Flyers-type pretest and posttest, each organized into six reading parts and expressed on a 0–10 scale. The assessed components included identification of main ideas, location of specific information, vocabulary in context, narrative sequencing, and basic inference. Cultural references were incorporated into the instructional materials but were not treated as a measured outcome.

Short narrative texts can support reading comprehension because they usually present characters, settings, actions, conflicts, and events in an organized sequence. This narrative structure may help

learners organize information and use contextual clues to interpret vocabulary and relationships between events. In this study, the narrative texts used during the intervention consisted of local legends from Pujilí adapted to the A2 level. Their use connected reading practice with students' academic, cultural, and territorial contexts.

Rather than functioning as additional reading material, the legends served as the basis for guided comprehension activities throughout the instructional intervention. Previous Ecuadorian research provides relevant evidence regarding the use of narrative texts for reading comprehension. Pillaga (2021) examined fairy tales as reading materials and used standardized Cambridge assessments as pretests and posttests.

The study reported that fairy tales helped learners develop interest in reading, connect ideas, and understand texts more easily. Although fairy tales and local legends represent different narrative genres, both contain elements such as characters, settings, events, sequences, conflicts, and resolutions. Therefore, Pillaga Riofrío's (2021) findings provide a relevant precedent for examining the pedagogical use of short narrative texts in EFL reading comprehension.

Skimming is a reading strategy used to rapidly identify the general meaning or main idea of a text. In this study, students applied skimming during their initial reading of the local legends from Pujilí. This strategy allowed them to identify the topic, main situation, characters, and overall sequence of events before answering comprehension questions.

Zurita and Castro (2025) indicate that skimming can help learners organize their initial approach to a text by directing attention toward its general meaning rather than every individual detail. Evidence from reading-strategy instruction also indicates improvements in reading performance among university EFL and L2 learners (Li et al., 2022; Yapp et al., 2023).

Scanning is a selective reading strategy used to locate specific information within a text. During the intervention, students applied scanning to identify names, places, actions, objects, and explicit details in the local legends from Pujilí. This strategy supported the identification of relevant textual evidence when answering reading-comprehension questions.

Husnul et al. (2025) reported improvements in EFL learners' reading comprehension after the implementation of skimming and scanning strategies, indicating that these techniques can help students search for information with a defined reading purpose. Communicative Language Teaching (CLT) can support reading comprehension by encouraging learners to interact with both texts and their classmates rather than completing reading questions exclusively as isolated activities.

Although reading involves individual cognitive processing, classroom interaction may help students compare interpretations, identify overlooked information, clarify meanings, and justify their responses. In this study, communicative activities enabled learners to use English to discuss textual information, compare interpretations, and explain their answers.

Task-Based Language Teaching (TBLT) provided the instructional structure for organizing the intervention around meaningful reading tasks. Ismail et al. (2023) reported that task-based instruction had a positive effect on reading performance when learners engaged in meaningful tasks. Nastiti et al. (2023) similarly found improvements in reading comprehension in areas such as summarizing, inference-making, and vocabulary interpretation.

These findings support the organization of reading instruction around pre-reading, while-reading, and post-reading tasks with clearly defined comprehension outcomes. In the present study, local

legends, skimming, scanning, CLT, and TBLT were integrated as complementary components of the instructional intervention.

The local legends from Pujilí provided the narrative material; skimming supported global comprehension; scanning facilitated the location of specific information; communicative activities promoted discussion and meaning negotiation; and task-based instruction organized the reading process around specific outcomes. Together, these components guided students to predict content, identify general and specific information, connect events, compare responses, justify interpretations, and reflect on the process of constructing meaning from written texts.

2. Methodology

Research Approach and Design

The study followed a quantitative approach and employed a one-group pretest–posttest pre-experimental design. This approach was selected because the study required numerical comparison of students' reading comprehension performance before and after the instructional intervention. Creswell and Creswell (2022) indicate that quantitative research is appropriate when numerical data are used to examine differences or changes in measured variables.

The pre-experimental design was selected because one intact class was available for the intervention. Therefore, random assignment and the inclusion of a separate control or comparison group were not possible. Consequently, the study focused on within-group changes between two measurement points rather than establishing definitive causal effects of the intervention.

The objective of the study was to evaluate changes in students' reading comprehension performance after an instructional intervention based on local legends from Pujilí. The intervention integrated culturally contextualized narrative texts, skimming and scanning strategies, Communicative Language Teaching (CLT), and Task-Based Language Teaching (TBLT).

The instructional activities were aligned with the characteristics of A2 Flyers-type reading tasks, including identification of general meaning, retrieval of specific information, vocabulary in context, narrative sequencing, and basic inference. Cambridge University Press & Assessment (2024) was used as a reference framework for the structure and characteristics of the reading activities developed for the study.

The intervention was conducted over four weeks. The same group completed a pretest before the instructional intervention and a posttest after its completion. This procedure allowed students' reading comprehension performance at the beginning and end of the intervention to be compared using the same assessment dimensions and scoring criteria.

Research Design

A one-group pretest–posttest pre-experimental design was employed, represented as follows:

$$O_1 \rightarrow X \rightarrow O_2$$

Where:

O_1 = Reading-comprehension pretest

X = Instructional intervention based on local legends

O_2 = Reading-comprehension posttest

The research process was organized into four stages. First, a reading-comprehension pretest was administered to establish students' initial performance. Second, the instructional intervention based on local legends from Pujilí was implemented. Third, the posttest was administered after completion of the intervention. Finally, pretest and posttest scores were statistically compared to examine changes in reading-comprehension performance between the two measurement points.

Participants

The participants were 22 undergraduate students enrolled in the fourth semester of the Pedagogy of National and Foreign Languages program at the Technical University of Cotopaxi, Pujilí Extension. The sample was selected through non-probability convenience sampling because the participants belonged to the intact class assigned to and available for the instructional intervention. The instructional and assessment materials were developed according to the reading demands and task characteristics associated with the A2 level of the CEFR and A2 Flyers.

Because the available information did not include an independent proficiency test administered specifically for participant selection, A2 was treated as the instructional and assessment reference level rather than as an independently verified proficiency classification for each participant. All participants received the same instructional intervention and completed both the pretest and the posttest.

Data Collection Instruments

Two instruments were used to measure reading-comprehension performance: a pretest and a posttest. Both assessments were adapted following the structure and task characteristics of Cambridge A2 Flyers reading activities and were aligned with reading skills associated with the CEFR A2 level. The assessments were not official Cambridge examinations. Rather, their format and task characteristics were used as a reference for developing study-specific reading assessments based on narrative texts.

Both instruments contained 43 items organized into six reading sections and assessed the same reading-comprehension dimensions. These dimensions included main-idea identification, retrieval of specific information, vocabulary in context, narrative sequencing, and basic inference. The pretest and posttest used the same number of items, assessment dimensions, scoring criteria, and 0–10 score conversion procedure.

However, different narrative texts were used in each assessment to reduce the likelihood of participants reproducing answers from memory. Thus, comparability between the two assessments was established in terms of structure, assessed components, task characteristics, and scoring procedures. No claim of psychometric equivalence between the two forms was made because such equivalence was not independently tested in the present study. No questionnaire or observation checklist was included because the primary outcome of the study was quantitatively defined as reading comprehension performance.

Adaptation of the Instrument

The reading assessments were adapted from the task characteristics and organizational structure of A2 Flyers rather than reproduced as official Cambridge tests. The adaptation preserved the targeted reading processes and general task format while replacing the original texts with narrative materials appropriate to the purposes of the study.

The adapted assessments maintained equivalent structural characteristics across pretest and posttest, including the number of items, number of sections, reading dimensions assessed, and scoring criteria. Different texts were deliberately employed to minimize recall effects while maintaining comparable assessment demands.

Cambridge University Press & Assessment (2024) served as the methodological reference for the format and reading demands considered during the adaptation process. Because the available study documentation did not report expert judgment, pilot testing, or an independent validation study, the instruments should be described as adapted and structurally comparable rather than formally validated.

3. Results

The analysis included 22 participants who completed both the pretest and the posttest. Both assessments were adapted from A2 Flyers-type reading tasks and included 43 readingcomprehension items organized into six parts. Scores were expressed on a 0–10 scale. To ensure comparability between the two measurement points, the primary pretest and posttest scores were calculated as the arithmetic mean of the six reading parts.

An additional pretest score was available from the original scoring procedure and was retained only as a descriptive reference. This score had a mean of 5.53, whereas the six-part pretest mean was 5.62. Because the posttest was organized and scored by six reading parts, the six-part pretest mean of 5.62 was selected as the consistent baseline for the pretest–posttest comparison and subsequent inferential analyses.

Table 1 presents the descriptive statistics for the reference pretest score, the six-part pretest mean, the six-part posttest mean, and the individual pretest–posttest difference. The table includes the mean, median, standard deviation, minimum and maximum values, range, and coefficient of variation, allowing comparison of both central tendency and score dispersion before and after the intervention.

Table 1

Descriptive statistics for reading-comprehension scores

Measure	n	Mean	Median	SD	Min	Max	Range	CV (%)
Reference pretest score	22	5.53	4.90	2.51	2.00	9.60	7.60	45.45
Pretest six-part mean	22	5.62	5.25	2.36	2.50	9.50	7.00	41.97
Posttest six-part mean	22	9.69	9.75	0.33	8.92	10.00	1.08	3.37
Posttest–pretest difference	22	4.08	3.83	2.26	0.50	7.33	6.83	55.41

Note. n = number of valid cases; SD = standard deviation; CV = coefficient of variation. Scores are expressed on a 0–10 scale. The six-part pretest and posttest means were used as the primary measures for comparative analyses because both were calculated using the same scoring structure.

The descriptive results showed a clear increase in reading-comprehension performance between the two measurement points. The six-part pretest mean was 5.62 (SD = 2.36), whereas the posttest mean increased to 9.69 (SD = 0.33). The mean difference between the two measurements was 4.08 points, indicating a substantial numerical increase in students' reading-comprehension scores after the instructional period.

Score variability also changed considerably. The standard deviation decreased from 2.36 in the pretest to 0.33 in the posttest, while the coefficient of variation decreased from 41.97% to 3.37%. These results indicate that posttest scores were not only higher but also considerably more homogeneous, as most participants obtained values close to the upper limit of the 0–10 scale.

The reference pretest score showed a mean of 5.53 (SD = 2.51), which was close to the six-part pretest mean of 5.62. However, this value was retained only as a descriptive reference and was not used in the inferential analysis. Overall, the descriptive evidence addressed the study objective by showing higher reading-comprehension performance after the intervention. Nevertheless, because the study used a one-group pre-experimental design, the results should be interpreted as pretest–posttest change within the observed group rather than definitive evidence of causality.

Table 2 presents the distribution of participants' reading-comprehension scores across three operational score ranges before and after the intervention. The ranges were established as below 7.00, from 7.00 to 8.99, and from 9.00 to 10.00. The six-part pretest mean and the six-part posttest mean were used as the primary measures for this comparison.

The reference pretest score was retained only for descriptive purposes and was not considered the main baseline for interpretation, because the six-part mean provided the consistent metric used throughout the comparative analysis.

Table 2

Distribution of reading-comprehension scores by operational ranges

Range	Pre-n	Pre %	Post n	Post %	Reference pre-n	Reference pre %
< 7.00	14	63.6	0	0.0	15	68.2
7.00–8.99	7	31.8	1	4.5	5	22.7
9.00–10.00	1	4.5	21	95.5	2	9.1

Note. Pre = six-part pretest mean; Post = six-part posttest mean. The reference pretest score is included only as supplementary descriptive information.

Before the intervention, 14 participants (63.6%) obtained scores below 7.00, seven participants (31.8%) scored between 7.00 and 8.99, and only one participant (4.5%) reached the 9.00–10.00 range. After the intervention, no participant remained below 7.00. One participant (4.5%) scored between 7.00 and 8.99, while 21 participants (95.5%) reached the 9.00–10.00 range.

This shift indicates a marked upward change in the distribution of reading-comprehension scores between the pretest and posttest. The change was particularly evident among participants who had lower initial scores, as these students had greater potential for numerical improvement within the 0–10 scale.

The reference pretest distribution showed a similar initial pattern, with 15 participants (68.2%) below 7.00, five (22.7%) between 7.00 and 8.99, and two (9.1%) in the highest range. However, the six-part pretest distribution remained the primary basis for comparison because it was calculated using the same scoring procedure as the posttest.

Overall, the distribution results reinforced the descriptive findings presented in Table 1, showing a transition from more dispersed initial scores to predominantly high and concentrated posttest scores. These findings contributed to answering the first research question, as they demonstrated

that participants' reading-comprehension performance was substantially higher after the intervention.

To address the second research question, the normality of the pretest scores, posttest scores, and paired differences was examined before conducting the inferential analysis. Because the paired-samples *t* test assumes that the distribution of the difference scores is approximately normal, particular attention was given to the posttest–pretest difference. The Shapiro–Wilk test indicated that the distribution of the paired differences did not significantly deviate from normality, $W = 0.913$, $p = .055$ (table 3).

However, the posttest scores showed a significant departure from normality, $W = 0.853$, $p = .004$, which was consistent with the strong concentration of scores near the upper limit of the scale. For this reason, the paired-samples *t* test was complemented with the Wilcoxon signed-rank test as a nonparametric robustness analysis.

Table 3

Normality and paired-comparison tests

Test	Statistic	df	p
Shapiro–Wilk, pretest mean	0.912	—	.051
Shapiro–Wilk, posttest mean	0.853	—	.004
Shapiro–Wilk, posttest–pretest difference	0.913	—	.055
Paired-samples *t* test	8.465	21	< .001
Wilcoxon signed-rank test	0.000	—	< .001

Note. The paired-samples *t* test was interpreted primarily based on the normality of the difference scores. The Wilcoxon signed-rank test was used as a complementary nonparametric analysis.

The second research question examined whether students' reading-comprehension scores differed significantly between the pretest and posttest. The normality analysis showed that the pretest distribution was close to the conventional significance threshold, W = 0.912, p = .051, whereas the posttest distribution significantly departed from normality, W = 0.853, p = .004.

More importantly for the paired comparison, the distribution of the difference scores did not show a statistically significant departure from normality, $W = 0.913$, $p = .055$. Accordingly, a paired-samples *t* test was considered appropriate for evaluating the mean pretest–posttest difference. The paired-samples *t* test showed a statistically significant difference between the two measurement points, $t (21) = 8.465$, $p < .001$. This result indicated that posttest reading-comprehension scores were significantly higher than pretest scores.

The Wilcoxon signed-rank test also produced a statistically significant result, $p < .001$, providing additional support for the direction of the pretest–posttest change. The convergence of the parametric and nonparametric analyses strengthened the evidence that participants obtained higher reading-comprehension scores after the intervention.

These findings directly answered the second research question, demonstrating a statistically significant difference between pretest and posttest reading-comprehension performance. However, because the study employed a one-group pre-experimental design, the statistical difference should be

interpreted as an observed within-group change rather than as definitive evidence that the intervention alone caused the improvement.

To complement the statistical significance tests, the magnitude of the pretest–posttest change was examined using the mean difference, its 95% confidence interval, and standardized effect-size measures. Cohen's *dz* was used to estimate the standardized within-participant change, whereas Hedges' g provided an additional standardized estimate based on the variability observed across both measurement points. The confidence interval for the mean difference was also calculated to indicate the precision of the estimated change in reading comprehension scores (table 4).

Table 4

Effect size and confidence interval for the pretest–posttest difference

Indicator	Value	95% CI lower	95% CI upper
Mean difference	4.08	3.08	5.08
Cohen's *dz*	1.805	—	—
Hedges' g	2.339	—	—

Note. CI = confidence interval. Positive values indicate higher posttest than pretest scores. Cohen's *dz* represents the standardized within-participant change, whereas Hedges' g provides an additional standardized estimate of the pretest–posttest difference.

The mean posttest–pretest difference was 4.08 points, with a 95% confidence interval ranging from 3.08 to 5.08 points. Because the confidence interval did not include zero, the estimated change was consistently positive and was compatible with the statistically significant results reported in Table 3.

Cohen's *dz* was 1.805, indicating a large standardized within-group change between the pretest and posttest measurements. Hedges' g was 2.339, which also indicated a substantial standardized difference between the two measurement points.

These effect-size estimates were consistent with the descriptive results, which showed an increase from a pretest mean of 5.62 to a posttest mean of 9.69. However, the magnitude of the standardized effects should be interpreted cautiously because posttest scores were highly concentrated near the upper limit of the 0–10 scale.

The posttest standard deviation was only 0.33, and most participants obtained scores close to 10.00. This pattern indicated a possible ceiling effect and restricted posttest variability. Therefore, the standardized effect sizes should be considered together with the raw mean difference and its confidence interval rather than interpreted in isolation.

Overall, these results provided additional evidence for the second research question, showing that the pretest–posttest difference was not only statistically significant but also substantial in magnitude within the observed group. Nevertheless, because the study followed a one-group pretest–posttest pre-experimental design, the effect sizes represent the magnitude of the observed within-group change and should not be interpreted as definitive causal effects attributable exclusively to the intervention.

To address the third research question, students' performance was examined separately across the six parts of the A2 Flyers-type reading-comprehension assessment. For each section, pretest and posttest means, standard deviations, mean differences, percentage change, paired-samples t-test results, Wilcoxon signed-rank test results, and Cohen's *dz* were calculated. This analysis allowed the

pattern of change to be examined across the different sections of the assessment rather than relying exclusively on the overall score (table 5).

Table 5

Performance by test part before and after the intervention

Part	Pre M	Pre SD	Post M	Post SD	Mean diff.	% change	*t*	df	*p* (*t*)	*p* (W)	*dz*
Part 1	6.95	2.61	9.50	0.80	2.55	36.6	4.306	21	< .001	.001	0.918
Part 2	6.27	3.40	9.64	0.79	3.36	53.6	4.492	21	< .001	< .001	0.958
Part 3	8.36	2.01	9.66	0.64	1.30	15.5	2.700	21	.013	.011	0.576
Part 4	6.45	2.46	9.36	1.05	2.91	45.1	5.712	21	< .001	< .001	1.218
Part 5	2.92	3.73	10.00	0.00	7.08	242.0	8.902	21	< .001	< .001	1.898
Part 6	2.73	3.73	10.00	0.00	7.27	266.7	9.142	21	< .001	< .001	1.949

Note. M = mean; SD = standard deviation; *dz* = Cohen's standardized effect size for paired measurements. The results are interpreted by test part and should not be equated with isolated reading subskills unless such correspondence was established in the assessment design.

The results showed higher posttest scores across all six parts of the reading-comprehension assessment. The largest mean differences were observed in Parts 5 and 6. Part 5 increased from M = 2.92 (SD = 3.73) to M = 10.00 (SD = 0.00), representing a mean difference of 7.08 points. Part 6 showed a similar pattern, increasing from M = 2.73 (SD = 3.73) to M = 10.00 (SD = 0.00), with a mean difference of 7.27 points. These sections showed the greatest numerical gains and had the lowest initial mean scores, suggesting that participants had more room for improvement in these parts.

Parts 1, 2, and 4 also showed substantial increases. Part 1 increased by 2.55 points, Part 2 by 3.36 points, and Part 4 by 2.91 points. Part 3 showed the smallest change, increasing from M = 8.36 to M = 9.66, with a mean difference of 1.30 points. The smaller change in Part 3 was consistent with its comparatively high initial score, which limited the amount of possible numerical improvement within the 0–10 scale. The paired-samples *t* tests indicated statistically significant pretest–posttest differences in all six parts, with *p* values ranging from .013 to < .001.

The Wilcoxon signed-rank tests showed the same overall pattern, providing additional support for the observed increases across the six test sections. Cohen's *dz* values ranged from 0.576 in Part 3 to 1.949 in Part 6, indicating that the magnitude of the within-group change varied across the assessment sections. The largest standardized changes were observed in Parts 5 and 6, whereas Part 3 showed the smallest effect size. However, the posttest means of 10.00 with SD = 0.00 in Parts 5 and 6 indicate complete concentration at the upper limit of the scale.

This pattern suggests a ceiling effect in these two sections, which should be considered when interpreting both the percentage changes and the standardized effect sizes. Overall, the analysis answered the third research question by showing that higher posttest performance occurred across all six parts of the assessment, although the magnitude of change differed between sections. The findings should be interpreted as performance by test part rather than as direct evidence of isolated reading subskills, because the available score structure did not establish that each section measured only one specific skill such as skimming, scanning, inference, vocabulary, or sequencing.

To complement the group-level analyses, individual pretest–posttest changes were examined for each of the 22 participants. Table 6 presents each participant's pretest mean, posttest mean, absolute difference, and percentage change, allowing the consistency of the score increase across the sample to be evaluated.

Table 6

Individual change between pretest and posttest

No.	Student	Pre mean	Post mean	Diff.	% change
1	Student No. 1	6.62	9.83	3.21	48.5
2	Student No. 2	4.67	9.50	4.83	103.6
3	Student No. 3	3.67	10.00	6.33	172.7
4	Student No. 4	8.19	9.75	1.56	19.0
5	Student No. 5	7.00	9.67	2.67	38.1
6	Student No. 6	2.50	9.83	7.33	293.3
7	Student No. 7	8.62	9.58	0.96	11.2
8	Student No. 8	9.50	10.00	0.50	5.3
9	Student No. 9	2.50	9.00	6.50	260.0
10	Student No. 10	5.00	8.92	3.92	78.3
11	Student No. 11	5.50	9.25	3.75	68.2
12	Student No. 12	8.26	9.67	1.40	17.0
13	Student No. 13	8.53	10.00	1.47	17.3
14	Student No. 14	3.00	9.50	6.50	216.7
15	Student No. 15	2.67	9.50	6.83	256.3
16	Student No. 16	8.43	10.00	1.57	18.6
17	Student No. 17	3.17	10.00	6.83	215.8
18	Student No. 18	7.45	10.00	2.55	34.2
19	Student No. 19	4.67	10.00	5.33	114.3
20	Student No. 20	4.00	9.75	5.75	143.8
21	Student No. 21	6.45	10.00	3.55	55.0
22	Student No. 22	3.17	9.50	6.33	200.0

All 22 participants obtained higher posttest scores than pretest scores, indicating that the observed increase was consistent across the entire sample. The largest absolute increase was 7.33 points, whereas the smallest increase was 0.50 points. Participants with lower pretest scores generally showed larger absolute gains, while those who began with comparatively high scores tended to show smaller increases. This pattern was consistent with the restricted opportunity for further numerical improvement among students whose initial scores were already close to the upper limit of the scale.

The individual results reinforced the group-level descriptive findings, as the score increase was not limited to a small subset of participants Rather, every participant showed a positive pretest–posttest difference, supporting the consistency of the observed change across the sample. Regarding the research questions, the first was addressed through the descriptive comparison of pretest and posttest performance. The results showed higher posttest means, lower score dispersion, and a marked shift toward the upper score range after the intervention.

The second research question was addressed through the paired-samples *t* test and the Wilcoxon signed-rank test. Both analyses showed statistically significant differences between pretest and posttest scores, while the effect-size estimates indicated a large within-group change. The third research question was addressed through the analysis of the six test parts. All sections showed higher posttest scores, with the largest numerical gains observed in Parts 5 and 6 and the smallest gain in Part 3.

Overall, the results demonstrated a consistent pretest–posttest increase in reading-comprehension performance within the observed group. This pattern was reflected in higher posttest scores, reduced variability, statistically significant paired differences, large within-group effect sizes, and positive individual change across all participants. Because the study used a one-group pre-experimental design without a comparison group, the findings should be interpreted as evidence of change within the sample rather than as definitive causal evidence attributable exclusively to the instructional intervention.

4. Discussion

The results showed a substantial increase in students' reading-comprehension performance after the instructional intervention based on local legends from Pujilí. The group increased from a pretest mean of 5.62 (SD = 2.36) to a posttest mean of 9.69 (SD = 0.33), with an average gain of 4.08 points. This change was supported by the paired-samples *t* test, $t(21) = 8.465$, $p < .001$, and the Wilcoxon signed-rank test, $p < .001$. The convergence of both analyses provides consistent evidence of higher posttest performance, although the findings should be interpreted as within-group change rather than definitive causal evidence.

The findings are consistent with Ismail et al. (2023), who reported that task-based instruction can support reading performance when learners engage in meaningful activities rather than isolated exercises. In the present study, students not only answered comprehension items but also predicted content, identified general meaning, located specific information, compared responses, discussed interpretations, and reflected on the strategies used. Nguyen (2022) also reported favorable results for task-based instruction in reading comprehension, while Nastiti et al. (2023) identified improvements in summarizing, inference-making, and vocabulary interpretation.

These similarities suggest that organizing reading as a sequence of purposeful tasks may contribute to more active processing of written texts. The findings also relate to Pillaga Riofrío (2021), who examined fairy tales as resources for reading comprehension and reported improvements in learners' interest and understanding. Although fairy tales and local legends represent different

narrative genres, they share structural features such as characters, settings, actions, conflicts, sequences, and resolutions.

The present study extends this line of evidence by using local legends from Pujilí as culturally contextualized narrative materials for EFL reading instruction. This contextualization may be relevant because the texts connected classroom reading with students' immediate cultural and territorial environment. The observed increase is also consistent with Zurita Malliquinga and Castro Bungacho (2025) and Husnul et al. (2025), who reported improved reading comprehension performance after the use of skimming and scanning strategies.

In the present intervention, skimming was used to identify general meaning, whereas scanning was applied to locate specific textual information. However, the observed improvement cannot be attributed exclusively to these two strategies, because the intervention also incorporated vocabulary activities, narrative sequencing, collaborative work, teacher feedback, and post-reading reflection. Therefore, the findings are better interpreted as evidence associated with an integrated instructional approach rather than the isolated effect of skimming or scanning.

The analysis by test part provides further insight into the pattern of change. Parts 5 and 6 showed the largest mean gains, whereas Part 3 showed the smallest increase. This pattern appears to be related, at least in part, to differences in initial performance, since Parts 5 and 6 had the lowest pretest means and therefore provided greater numerical room for improvement. By contrast, Part 3 began with a comparatively high pretest mean, which limited the magnitude of possible change within the 0–10 scale. These differences should not be interpreted as evidence that particular parts represented specific reading strategies or subskills, because the available scoring structure did not establish such one-to-one correspondence.

Another relevant finding was the marked reduction in score dispersion after the intervention. Before the intervention, students displayed heterogeneous performance, whereas posttest scores were concentrated near the upper end of the scale. This pattern may indicate that the structured instructional sequence helped participants approach reading tasks more consistently. The repeated use of prediction, global reading, detail search, response comparison, and reflection may have provided students with a recognizable process for approaching narrative texts.

Gonzalez-Torres and Vargas-Saritama (2025) offer a related perspective by showing that reflective reading practices can promote engagement and comprehension monitoring. Although the present study did not employ reading journals, the post-reading reflection component similarly encouraged learners to revisit meaning, compare interpretations, and consider how comprehension had been constructed.

The findings can also be discussed in relation to Tsang and Yeung (2024), who identified relationships among storybook value, reading self-efficacy, vocabulary knowledge, fluency, and comprehension in young EFL learners. The present study did not measure self-efficacy or motivation, so direct comparison with those constructs is not possible.

Nevertheless, the use of narrative texts may have supported comprehension by providing coherent sequences of characters, actions, places, and events that facilitated connections across the text. Hidayat et al. (2024) similarly emphasized the potential of storytelling-based approaches to support reading when narrative structure and contextual elements are integrated into instruction.

Although the present study did not focus on digital storytelling, both approaches share an emphasis on organizing meaning through narrative structure. The pretest results also revealed considerable

variation in students' initial performance. This suggests that participants differed in their ability to identify general meaning, locate details, interpret vocabulary in context, and follow narrative sequences.

After the intervention, students showed higher and more homogeneous reading-comprehension scores, suggesting that structured practice may have supported a more systematic approach to the tasks. The communicative component may also have contributed to this process by allowing students to compare answers, clarify meanings, and justify interpretations with textual evidence.

The alignment between instructional activities and A2 Flyers-type tasks also requires careful consideration. Cambridge University Press & Assessment (2024) describes A2 Flyers as involving vocabulary, short texts, specific information, and basic comprehension demands. In the present study, the intervention and assessment shared similar levels, task characteristics, and reading demands.

This alignment may have facilitated students' understanding of what was expected during the posttest. However, it also introduces a potential task-familiarity effect, because gains may reflect both improved reading comprehension and increased familiarity with the assessment format. The magnitude of the observed change was large, with Cohen's $dz = 1.805$ and Hedges' $g = 2.339$.

These values were consistent with the substantial difference between pretest and posttest means. However, the effect-size estimates should be interpreted cautiously because the posttest showed restricted variability and strong concentration near the maximum score. This pattern indicates a ceiling effect, particularly in Parts 5 and 6, where all participants reached the maximum mean score.

Such concentration may inflate standardized effect-size estimates and limit the instrument's ability to distinguish higher levels of performance. Future studies could address this issue by using assessments with a broader range of difficulty, delayed posttests, or additional transfer tasks. These approaches would help determine whether the observed changes remain stable over time and extend to less familiar reading contexts.

The research design also imposes an important limitation on interpretation. Because the study used one intact group without random assignment or a comparison group, alternative explanations for the observed change cannot be ruled out. These may include increased familiarity with the test format, regular classroom exposure, maturation, repeated practice, and teacher feedback during the four-week intervention.

Accordingly, the findings should not be presented as proof that the intervention alone caused the improvement or that it would outperform other instructional approaches. Despite these limitations, the study provides practical evidence that a structured reading sequence based on local legends can be feasibly integrated into EFL instruction.

Its contribution lies not only in the increase in scores but also in the organization of reading into observable classroom actions: prediction, skimming, scanning, connecting events, discussing answers, and reflecting on meaning. Taken together, the findings are consistent with previous evidence on task-based instruction, reading strategies, reflective reading practices, and the use of narrative materials.

At the same time, the interpretation should remain cautious because of the pre-experimental design, close alignment between instruction and assessment, and the ceiling effect observed in the posttest. The strongest contribution of the study, therefore, lies in the integration of culturally situated narrative texts with communicative, strategic, and task-based reading practices within a coherent instructional sequence.

5. Conclusions

The use of local legends from Pujilí as part of an integrated pedagogical intervention was associated with higher reading comprehension performance among the participating students. After the intervention, the group obtained higher posttest scores, and all participants showed positive pretest–posttest differences.

These findings suggest that culturally contextualized narrative texts can be meaningfully incorporated into structured EFL reading activities. However, the observed change should be interpreted as a within-group improvement rather than as definitive evidence that the local legends alone caused the increase in performance.

The intervention combined local legends, skimming, scanning, communicative interaction, task-based activities, vocabulary work, sequencing, and post-reading reflection. Therefore, the improvement observed in the study cannot be attributed exclusively to skimming and scanning, because these strategies formed part of a broader instructional sequence.

Within this integrated approach, skimming supported the identification of general meaning, main situations, and overall narrative structure, whereas scanning facilitated the location of specific information. Their pedagogical value should therefore be understood in combination with the other components of the intervention rather than as isolated explanatory factors.

The organization of instruction through Communicative Language Teaching and Task-Based Language Teaching promoted active participation in the reading process. Students had opportunities to exchange ideas, clarify interpretations, compare answers, justify responses, and construct meaning collaboratively from the texts.

This structure transformed reading from an exclusively individual activity into a guided process that combined individual comprehension with interaction and reflection. The results also showed that posttest performance was more homogeneous than pretest performance, suggesting that the structured reading sequence may have helped students approach the assessment tasks more consistently.

Nevertheless, this interpretation should remain cautious because the study used a one-group pretest–posttest pre-experimental design without a comparison group. Consequently, other factors such as task familiarity, repeated practice, classroom exposure, maturation, and teacher feedback cannot be completely excluded as alternative explanations for the observed improvement.

The concentration of several posttest scores near the upper limit of the scale also indicated a possible ceiling effect, which reduced the ability of the assessment to distinguish among students with higher final performance. For this reason, future studies should consider comparison groups, larger samples, delayed posttests, and assessments with a broader difficulty range.

Such designs would allow researchers to examine whether the observed gains are maintained over time and whether they can be attributed more confidently to the instructional approach. Overall, the findings provide evidence of substantial improvement in students' reading comprehension performance following an integrated intervention based on local legends from Pujilí.

Its principal contribution lies in combining culturally situated narrative texts with strategic, communicative, and task-based reading practices within a coherent instructional sequence. This approach may represent a relevant pedagogical alternative for supporting EFL reading comprehension while connecting language learning with learners' local cultural context.

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Transparencia

Conflicto de interés

Los autores declaran que no existen conflictos de interés de naturaleza alguna como parte de la presente investigación.

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Declaración sobre el uso de Inteligencia Artificial (IA)

Durante la elaboración de este artículo se utilizó inteligencia artificial como apoyo técnico y analítico para la revisión lingüística, la corrección gramatical, la claridad expositiva, la organización de ideas y el análisis de la información, bajo supervisión y validación humana permanente. No se empleó para generar contenido científico original, argumentos, resultados, interpretar hallazgos o producir conclusiones, ni para sustituir el juicio crítico. La responsabilidad sobre la integridad, veracidad y contenido final del estudio recae exclusivamente en quien o quienes suscriben el artículo.

Contribución de autoría

Laydi Anabel Morocho Chipugsi: Conceptualización, metodología, validación, análisis formal, investigación, visualización, redacción - preparación del borrador original, financiamiento, administración del proyecto, recursos, Supervisión.

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Los autores contribuyeron activamente en el análisis de los resultados, revisión y aprobación del manuscrito final