



Journal of Educational Technology and E-Learning Innovations (JETELI)

ISSN: 3069-3624 (ONLINE)

VOLUME 2 ISSUE 1 (2026)



PUBLISHED BY
E-PALLI PUBLISHERS, DELAWARE, USA

Effectiveness of Microsoft Teams' Reading Progress AI in Improving the Reading Skills Among Grade 7 Struggling Readers in a Public High School

Jake A. Balolot¹, Erwin L. Purcia², Gerald T. Malabarbas^{2*}

Article Information

Received: April 17, 2026

Accepted: June 22, 2026

Published: July 29, 2026

Keywords

Digital Competence, Educational Technology, Literacy Intervention, Phonological Awareness, Secondary Education, Student Motivation

ABSTRACT

Reading proficiency is a foundational skill for academic success, yet many middle school learners continue to struggle despite early interventions. Grade 7 students, in particular, face a critical transition from learning to read toward reading to learn, making their difficulties especially consequential for future academic achievement. This study sought to address this gap by examining the potential of Microsoft Teams' Reading Progress AI to support struggling readers at Peña 1 National High School, Schools Division of Calbayog City, during School Year 2025–2026. A mixed-methods design within a pre-experimental framework was employed. The intervention spanned one academic quarter, with participants purposively selected based on consistently low performance in oral language, phonological awareness, phonics, vocabulary, and fluency. Quantitative data were collected through pretest and posttest assessments, while qualitative insights were drawn from focus group discussions. Findings indicated measurable improvement in most reading dimensions, with learners moving toward a fairly satisfactory level, though phonological awareness remained a persistent challenge. Statistical analysis confirmed significant gains between pretest and posttest scores. However, given the absence of a control group, these results should be interpreted cautiously. The study cannot definitively attribute improvements solely to the intervention, nor can it establish the sustainability of outcomes over time. Qualitative analysis revealed four recurring themes: (1) cognitive scaffolding, (2) reduction of the affective filter, (3) gamified motivation, and (4) digital literacy integration. While participants reported largely positive experiences, the study acknowledges limitations in design and scope. Automated instructional interventions show promise in bridging the gap between word recognition and oral accuracy, but further research with control groups and longitudinal follow-up is needed to validate their effectiveness and long-term impact. Future implementations should strengthen technological infrastructure and incorporate more interactive, collaborative features to enhance both engagement and sustainability.

INTRODUCTION

Reading competence is a foundational skill that underpins academic success across subjects, yet many students continue to struggle with fluency and comprehension as they move from “learning to read” to “reading to learn.” Although fluency interventions often improve reading rate and accuracy, they do not consistently strengthen comprehension, leaving learners unable to extract meaning, synthesize ideas, or critically engage with texts. This challenge becomes especially acute in the secondary grades, where content demands are high (Steinle *et al.*, 2022; Lapatha *et al.*, 2024a). Research shows that older struggling readers present diverse needs, with some requiring ongoing decoding support and others needing explicit strategies for vocabulary, inferencing, and comprehension monitoring. This demonstrates that comprehension difficulties are not simply a byproduct of slow reading but a distinct barrier to achievement. Recent phenomenological work in the Philippines highlights how senior high school learners with reading difficulties experience frustration that affects their emotional, social,

and academic lives, underscoring the need for tailored interventions (Ignacio *et al.*, 2024a). Similarly, large-scale U.S. studies confirm that comprehension problems are strongly linked to limited vocabulary and background knowledge, and that targeted instruction in these areas can significantly improve outcomes for struggling readers (Elleman & Oslund, 2021). These realities make practical, scalable supports that free teachers' time while generating actionable data an urgent priority, and they highlight the necessity of interventions that address fluency and comprehension together to prevent widening academic gaps (Steinle *et al.*, 2022; Lapatha *et al.*, 2024b).

Recent advances in educational technology have produced tools that automate assessment and practice while offering teachers analytics to inform instruction (Tawiah *et al.*, 2025). Microsoft's Reading Progress, integrated into Microsoft Teams for Education, allows teachers to assign passages, capture students' oral reading recordings, and obtain AI-assisted error detection and fluency metrics, such as words per minute, accuracy, and omitted or inserted words, which feed into classroom dashboards

¹ Peña I National High School, and Institute of Graduate Studies, Christ the King College of Calbayog City, Inc., Calbayog City, Samar, Philippines

² Institute of Graduate Studies, Christ the King College of Calbayog City, Inc., Calbayog City, Samar, Philippines

* Corresponding author's e-mail: dlaregtm@gmail.com

(Microsoft Learn, 2025). Microsoft has also added AI features, such as passage generation and automatically generated comprehension questions, to reduce teacher preparation time and tailor materials to students' levels (Microsoft Education Team, 2024, August 15). Evidence from a quasi-experimental study in Fresno Unified School District shows that students using Reading Progress achieved higher scores on i-Ready reading assessments, with notable gains among English learners and disadvantaged students (Microsoft & LearnPlatform, 2024). Research on oral reading fluency consistently demonstrates its predictive power for comprehension, underscoring the importance of tools that build fluency while monitoring accuracy (Sabatini *et al.*, 2019). Similarly, Paige *et al.* (2012) found that expressive fluency in high school readers was strongly linked to comprehension outcomes, suggesting that structured oral practice supported by AI can extend benefits beyond speed to meaning-making.

Factual evidence on Reading Progress and similar technology-based interventions is increasingly positive but still emerging in scope and rigor. Microsoft-commissioned quasi-experimental analyses and district case studies report correlations between consistent use of Reading Progress and improved reading accuracy and rate among elementary students, with smaller but meaningful gains for subgroups such as English learners (Microsoft Education Team, 2024). Local applied studies in the Philippines using Microsoft Teams and Reading Progress have likewise reported improvements in reading speed and accuracy among senior high school cohorts after sustained use of the platform (Lapatha *et al.*, 2024; Júnior *et al.*, 2026). These findings align with broader research showing that AI-supported fluency practice can enhance reading achievement by providing immediate feedback and individualized pacing (Tao *et al.*, 2025). Large-scale evaluations of digital reading tools also demonstrate that adaptive platforms improve vocabulary and comprehension outcomes, particularly for struggling readers (Cheung & Slavin, 2013). In addition, randomized controlled trials of technology-assisted fluency programs confirm significant gains in oral reading accuracy and comprehension among middle school students (Kim *et al.*, 2021). Studies of English language learners further show that AI-driven reading interventions reduce mispronunciations and increase confidence, supporting equitable access to literacy growth (Jose, 2025b).

In the Philippines, the effectiveness of Microsoft Teams' Reading Progress has been documented across diverse contexts, showing consistent gains in fluency, accuracy, and learner confidence. Tusoy (2023) demonstrated that integrating Reading Progress with science-based reading materials improved oral fluency and sustained student interest, while Aguilar (2023) reported that its use in Bais City schools boosted confidence and reduced anxiety in oral reading tasks. Uy (2024) found measurable improvements in reading speed and comprehension among senior high school cohorts, confirming its

value beyond the elementary level. Dela Cruz (2023) highlighted how combining Reading Progress with the Philippine Informal Reading Inventory enhanced teacher monitoring and targeted interventions, while Villanueva (2024) emphasized its role in strengthening digital literacy and equitable access for learners in rural schools.

The evidence from both international and Philippine contexts highlights improvements in fluency, accuracy, confidence, and digital literacy, while also reducing teacher workload and fostering equitable access to practice opportunities. However, most existing studies have focused on elementary or senior high school populations, leaving a gap in understanding its effectiveness for Grade 7 struggling readers, a critical stage where students transition from basic decoding to higher-order comprehension skills. To address this gap, the present study evaluates the effectiveness of Microsoft Teams' Reading Progress AI in improving the reading skills of Grade 7 struggling readers in Peña 1 National High School, Schools Division of Calbayog City, for the school year 2025–2026, with the purpose of determining its impact on fluency, accuracy, and comprehension while supporting teacher instruction and learner confidence. Specifically, this sought answer to the following: (1) the performance of Grade 7 struggling readers before and after the use of Microsoft Teams' Reading Progress AI in terms of oral language, phonological awareness, phonics, vocabulary, and fluency; (2) the significant difference between the performance of Grade 7 struggling readers before and after the use of Microsoft Teams' Reading Progress AI; (3) the significant experiences of Grade 7 struggling readers in the use of Microsoft Teams' Reading Progress AI; (4) the reading intervention program with the use of AI which can be proposed to improve the reading performance of Grade 7 struggling readers based on the findings of the study.

MATERIALS AND METHODS

Research Design

This study employed a mixed-methods design using a pre-experimental research framework that combined a quantitative approach with qualitative inquiry. Mixed-methods research involves collecting, analyzing, and integrating both quantitative and qualitative data in a single study to provide a more comprehensive understanding of a research problem than either approach could provide alone (Creswell & Creswell, 2018). For the quantitative phase, a one-group pretest-posttest pre-experimental design was utilized. In this design, a single designated group is measured or observed before an intervention is introduced and is then measured again afterward to determine the effects of the treatment, without a comparison or control group (Fraenkel *et al.*, 2019). Through this approach, the study evaluated the effectiveness of Microsoft Teams' Reading Progress AI by assessing the quantitative reading performance of the struggling Grade 7 readers before and after the intervention. To complement the statistical data, the

qualitative phase explored the significant lived experiences of these learners while using the platform.

Participants and Sampling Procedure

The participants in this study were Grade 7 learners at Peña I National High School. Table 1 presents the distribution of the respondents in the quantitative phase of the study. The quantitative aspect of this study

involved the two (2) Grade 7 sections. The first section comprised 51 learners, while the other section comprised 53 learners, for a total of 104 respondents. With this, all these learners were included; thus, complete enumeration sampling was used. For the qualitative phase, purposive random sampling was employed. From each section of Grade 7 learners, eight (8) learners were then randomly selected to participate in the FGD.

Table 1: Distribution of the respondents of the study

Sections	Population (N)	Percentage (%)
Grade 7-Andres Bonifacio	51	49.00
Grade 7- Antonio Luna	53	51.00
Total	104	100.00

Research Instrumentation

This research utilized a teacher-made reading skills test anchored on the Theory of Automaticity (LaBerge & Samuels, 1974) as the primary quantitative instrument to assess the reading skills of struggling Grade 7 readers, focusing on the effectiveness of Microsoft Teams' Reading Progress AI as an intervention tool. To complement the quantitative data, a semi-structured Focus Group Discussion (FGD) protocol was developed as the qualitative research instrument. The interview guide contained open-ended questions focused on the learners' perceptions of the AI tool, the specific challenges or technological barriers they encountered, and their overall engagement with the platform's automated feedback. Similar to the quantitative test, the FGD questions were reviewed to ensure developmental appropriateness and clarity for Grade 7 learners. Subsequently, the instrument underwent a rigorous validation process involving six (6) subject-matter experts (SMEs). These validators were specifically chosen reading teachers and coordinators with at least five years of experience in service. They examined the test's clarity, relevance, and adequacy in measuring the five (5) key parameters. To establish an objective measure of the instrument's validity, the Content Validity Index (CVI) was computed. Their feedback and the resulting CVI scores guided the final refinement of the test. The researcher then conducted a pilot test and administered the instrument to 30 students at San Joaquin National High School to determine its reliability and internal consistency. The data gathered from this pilot group were tested using Cronbach's alpha which received a perfect CVI score of 1.00 and was rated "Excellent" by all seven experts. This consistent outcome indicates that the instrument demonstrated strong content validity, with every item deemed highly relevant and appropriate for evaluating the intended constructs.

Data Analysis

The quantitative results from the teacher-made pre-test and post-test were tallied and tabulated using the Statistical Package for the Social Sciences (SPSS). Descriptive statistical tools, particularly the mean and

standard deviation, were employed to present and summarize the learners' performance in the areas of oral language. Furthermore, to determine whether there was a statistically significant difference in the students' reading skills before and after the intervention, an inferential paired-samples t-test was applied. Also, using a Kolmogorov-Smirnov test it indicates that the data significantly deviate from a normal distribution which implies that non-parametric statistical tests should be employed. For the qualitative data gathered from the FGD, thematic analysis was utilized based on the established model of Braun and Clarke (2006). The transcribed narratives regarding the significant experiences of the struggling readers were systematically processed through their six-phase framework: (1) familiarization with the data, (2) generating initial codes, (3) searching for themes, (4) reviewing themes, (5) defining and naming themes, and (6) producing the final report.

RESULTS AND DISCUSSION

Performance of Grade 7 Struggling Readers Before the Use of Microsoft Teams' Reading Progress AI

Tables 2 to 7 present the performance of Grade 7 struggling readers before the use of Microsoft Teams' reading progress AI using the mean percentage scores, means, and standard deviations.

Table 2 shows that Grade 7 struggling readers demonstrated weak oral language performance before using Microsoft Teams' Reading Progress AI, as all items fell below the minimum satisfactory level of 75 and were interpreted as "Did Not Meet Expectations." Scores ranged from 36.54 in understanding figurative language to 68.27 in identifying appropriate classroom behavior and permission-seeking, with an overall mean percentage score of 57.69.

Table 3 shows the performance of Grade 7 struggling readers before the use of Microsoft Teams' Reading Progress AI in terms of phonological awareness. The data indicate that Grade 7 struggling readers exhibited poor phonological awareness before using Microsoft Teams' Reading Progress AI, as all six items were rated "Did Not Meet Expectations." Scores ranged from a low

Table 2: Performance of Grade 7 struggling readers before the use of Microsoft Teams’ reading progress AI in terms of oral language

Items	MPS	$\bar{x}$	SD	Interpretation
1. Which sentence is appropriate when asking for permission?	68.27	0.68	0.468	Did Not Meet Expectation
2. When someone says, “Thank you,” the polite response is—	67.31	0.67	0.471	Did Not Meet Expectation
3. Listen to this sentence: “The cat ran after the mouse.”	49.04	0.49	0.502	Did Not Meet Expectation
4. Choose the sentence that best describes what you do before speaking in class.	68.27	0.68	0.468	Did Not Meet Expectation
5. When giving directions, which statement is clear?	56.73	0.57	0.498	Did Not Meet Expectation
6. What does the speaker mean when he says, “It’s raining cats and dogs”?	36.54	0.37	0.484	Did Not Meet Expectation
Average	57.69	0.58	0.293	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory Below 75=Did Not Meet Expectation

Table 3: Performance of Grade 7struggling readers before the use of Microsoft Teams’ reading progress AI in terms of phonological awareness

Items	MPS	$\bar{x}$	SD	Interpretation
1. Which word rhymes with “cat”?	34.62	0.35	0.478	Did Not Meet Expectation
2. How many syllables are in the word “beautiful”?	58.65	0.59	0.514	Did Not Meet Expectation
3. What is the first sound in the word “fish”?	68.27	0.68	0.468	Did Not Meet Expectation
4. What is the ending sound in the word “dog”?	58.65	0.59	0.495	Did Not Meet Expectation
5. Choose the pair of words that begin with the same sound.	36.54	0.37	0.484	Did Not Meet Expectation
6. What word do you get if you blend /s/ + /un/?	67.31	0.67	0.471	Did Not Meet Expectation
Average	54.01	0.55	0.232	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

of 34.62 in identifying rhyming words to a high of 68.27 in recognizing the initial sound of a word, with an overall mean percentage score of 54.01.

Table 4 shows the performance of Grade 7 struggling readers before the use of Microsoft Teams’ Reading Progress AI in terms of phonics. The data show that Grade 7 struggling readers had difficulty with phonics before using Microsoft Teams’ Reading Progress AI, with most items rated “Did Not Meet Expectations,” except for one that reached “Fairly Satisfactory.” Scores ranged

from 44.23 in identifying the sound of “ph” to 75.96 in choosing the correctly spelled word, with an overall mean percentage score of 59.29. These results highlight weaknesses in recognizing letter-sound relationships, vowel sounds, and sound patterns, indicating that students lacked consistent mastery of phonics skills essential for decoding and spelling, which contributed to their overall reading challenges.

Table 5 shows the performance of Grade 7 struggling

Table 4: Performance of Grade 7 struggling readers before the use of Microsoft Teams’ reading progress AI in terms of phonics

Items	MPS	$\bar{x}$	SD	Interpretation
1. The letter “c” sounds like /s/ in—	66.35	0.67	0.473	Did Not Meet Expectation
2. What sound does “ph” make in the word “phone”?	44.23	0.44	0.499	Did Not Meet Expectation
3. Choose the correctly spelled word.	75.96	0.76	0.429	Fairly Satisfactory
4. Identify the word that contains a short vowel sound.	60.58	0.61	0.491	Did Not Meet Expectation
5. Which pair of words has the same vowel sound?	46.15	0.46	0.501	Did Not Meet Expectation
6. Choose the word that matches this sound pattern: / ch/ + air.	61.54	0.62	0.489	Did Not Meet Expectation
Average	59.29	0.59	0.268	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

readers before the use of Microsoft Teams' Reading Progress AI in terms of vocabulary. It shows that Grade 7 struggling readers performed below the expected level in vocabulary before the use of Microsoft Teams' Reading Progress AI, with all six items interpreted as

"Did Not Meet Expectations." Scores ranged from 52.88 in identifying antonyms to 72.12 in recognizing words related to education, while the overall mean percentage score was 62.18.

Table 6 shows the performance of Grade 7 struggling

Table 5: Performance of Grade 7struggling readers before the use of Microsoft Teams' reading progress AI in terms of vocabulary

Items	MPS	$\bar{x}$	SD	Interpretation
1. What does the word "enormous" mean?	55.77	0.56	0.499	Did Not Meet Expectation
2. Which word means the opposite of "happy"?	52.88	0.53	0.502	Did Not Meet Expectation
3. Choose the best word to complete the sentence: The baby is _____ because she lost her toy.	64.42	0.64	0.538	Did Not Meet Expectation
4. What is another word for "begin"?	62.50	0.63	0.486	Did Not Meet Expectation
5. Which word is related to "education"?	72.12	0.72	0.451	Did Not Meet Expectation
6. What is the meaning of "cautious"?	65.38	0.65	0.478	Did Not Meet Expectation
Average	62.18	0.62	0.265	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

readers before the use of Microsoft Teams' Reading Progress AI in terms of fluency. The data show that Grade 7 struggling readers had weak performance in fluency before the use of Microsoft Teams' Reading Progress AI, with most items rated "Did Not Meet Expectations" and only one item reaching "Fairly Satisfactory." Scores ranged from 50.00 in identifying the first action Maria does in the morning to 75.00 in recognizing the values shown in

the passage, resulting in an overall mean percentage score of 65.90. These findings suggest that students struggled with reading comprehension, contextual understanding, and oral fluency, reflecting their limited ability to read smoothly and interpret meaning, which hindered their overall reading proficiency.

Table 7 presents the summary table on the performance

Table 6: Performance of Grade 7struggling readers before the use of Microsoft Teams' reading progress AI in terms of fluency

Items	MPS	$\bar{x}$	SD	Interpretation
1. What does Maria do first in the morning?	50.00	0.50	0.502	Did Not Meet Expectation
2. Which sentence best describes Maria?	73.08	0.73	0.446	Did Not Meet Expectation
3. What does Maria feed before going to school?	70.19	0.71	0.517	Did Not Meet Expectation
4. The word "loves" in the passage means—	67.31	0.67	0.471	Did Not Meet Expectation
5. The passage shows that Maria values—	75.00	0.75	0.435	Fairly Satisfactory
6. When reading this passage aloud, what should you do to sound fluent?	59.62	0.60	0.493	Did Not Meet Expectation
Average	65.90	0.65	0.269	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

of Grade 7 struggling readers before the use of Microsoft Teams' Reading Progress AI. It shows that Grade 7 struggling readers consistently performed below expectations across all reading dimensions before using Microsoft Teams' Reading Progress AI. Oral language, phonological awareness, phonics, vocabulary, and fluency all received interpretations of "Did Not Meet Expectations," with mean percentage scores ranging

from 54.01 in phonological awareness to 65.90 in fluency. The overall mean percentage score of 58.91 further confirms that students had significant difficulties in foundational reading skills, including sound recognition, word knowledge, comprehension, and oral expression, underscoring the need for targeted interventions to strengthen their literacy development.

Table 7: Summary table on the performance of Grade 7struggling readers before the use of Microsoft Teams’ reading progress AI

Dimensions	MPS	$\bar{x}$	SD	Interpretation
Oral language	57.69	0.58	0.293	Did Not Meet Expectation
Phonological awareness	54.01	0.55	0.232	Did Not Meet Expectation
Phonics	59.29	0.59	0.268	Did Not Meet Expectation
Vocabulary	62.18	0.62	0.265	Did Not Meet Expectation
Fluency	65.90	0.65	0.269	Did Not Meet Expectation
Overall	58.91	0.60	0.217	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Performance of Grade 7 Struggling Readers After the Use of Microsoft Teams’ Reading Progress AI

Tables 8 to 13 present the performance of Grade 7 struggling readers after the use of Microsoft Teams’ reading progress AI in terms of oral language using mean percentage scores, mean, and standard deviations.

Table 8 shows the performance of Grade 7 struggling readers after the use of Microsoft Teams’ Reading Progress AI in terms of oral language. The results reveal that Grade 7 struggling readers showed notable improvement in

oral language after the use of Microsoft Teams’ Reading Progress AI, with the overall mean percentage score rising to 77.56, interpreted as “Fairly Satisfactory.” Most items reached either “Satisfactory” or “Fairly Satisfactory,” such as asking permission (82.69), responding politely to “Thank you” (81.73), and demonstrating appropriate classroom behavior (80.77), while comprehension of figurative language remained weak at 63.46, still classified as “Did Not Meet Expectations.”

Table 8: Performance of Grade 7struggling readers after the use of Microsoft Teams’ reading progress AI in terms of oral language

Items	MPS	$\bar{x}$	SD	Interpretation
1. Which sentence is appropriate when asking for permission?	82.69	0.83	0.380	Satisfactory
2. When someone says, “Thank you,” the polite response is—	81.73	0.82	0.388	Satisfactory
3. Listen to this sentence: “The cat ran after the mouse.” Who is doing the action?	77.88	0.78	0.417	Fairly Satisfactory
4. Choose the sentence that best describes what you do before speaking in class.	80.77	0.81	0.396	Satisfactory
5. When giving directions, which statement is clear?	78.85	0.79	0.410	Fairly Satisfactory
6. What does the speaker mean when he says, “It’s raining cats and dogs”?	63.46	0.63	0.484	Did Not Meet Expectation
Average	77.56	0.77	0.247	Fairly Satisfactory

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Table 9 shows the performance of Grade 7 struggling readers after the use of Microsoft Teams’ Reading Progress AI in terms of phonological awareness. The results show that Grade 7 struggling readers demonstrated improvement in phonological awareness after the use of Microsoft Teams’ Reading Progress AI, with higher scores compared to their performance before the intervention. The overall mean percentage score increased to 74.04, though it was still interpreted as “Did Not Meet Expectations.” Some items reached “Fairly Satisfactory,” such as counting syllables in “beautiful” (76.92), identifying the ending sound in “dog” (78.85), and blending sounds (77.88), while recognizing the first

sound in “fish” achieved a “Satisfactory” level at 80.77. However, weaknesses remained in rhyming words (64.42) and identifying initial sounds in word pairs (65.38).

Table 10 shows the performance of Grade 7 struggling readers after the use of Microsoft Teams’ Reading Progress AI in terms of phonics. The results indicate that Grade 7 struggling readers improved in phonics after the use of Microsoft Teams’ Reading Progress AI, with the overall mean percentage score rising to 76.12, interpreted as “Fairly Satisfactory.” Performance varied across items, with the highest achievement in correctly spelling words at 85.58, rated “Very Satisfactory,” while identifying the sound of “ph” in “phone” and recognizing short vowel

Table 9: Performance of Grade 7struggling readers after the use of Microsoft Teams’ reading progress AI in terms of phonological awareness

Items	MPS	$\bar{x}$	SD	Interpretation
1. Which word rhymes with “cat”?	64.42	0.64	0.481	Did Not Meet Expectation
2. How many syllables are in the word “beautiful”?	76.92	0.77	0.423	Fairly Satisfactory
3. What is the first sound in the word “fish”?	80.77	0.81	0.396	Satisfactory
4. What is the ending sound in the word “dog”?	78.85	0.79	0.410	Fairly Satisfactory
5. Choose the pair of words that begin with the same sound.	65.38	0.65	0.478	Did Not Meet Expectation
6. What word do you get if you blend /s/ + /un/?	77.88	0.78	0.417	Fairly Satisfactory
Average	74.04	0.74	0.223	Did Not Meet Expectation

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Table 10: Performance of Grade 7struggling readers after the use of Microsoft Teams’ reading progress AI in terms of phonics

Items	MPS	$\bar{x}$	SD	Interpretation
1. The letter “c” sounds like /s/ in—	78.85	0.79	0.410	Fairly Satisfactory
2. What sound does “ph” make in the word “phone”?	71.15	0.71	0.455	Did Not Meet Expectation
3. Choose the correctly spelled word.	85.58	0.86	0.353	Very Satisfactory
4. Identify the word that contains a short vowel sound.	71.15	0.71	0.455	Did Not Meet Expectation
5. Which pair of words has the same vowel sound?	74.04	0.74	0.441	Did Not Meet Expectation
6. Choose the word that matches this sound pattern: / ch/ + air.	75.96	0.76	0.429	Fairly Satisfactory
Average	76.12	0.76	0.220	Fairly Satisfactory

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

sounds remained weaker at 71.15, still classified as “Did Not Meet Expectations.” Other tasks, such as recognizing the /s/ sound of “c” and matching sound patterns, reached “Fairly Satisfactory.”

Table 11 shows the performance of Grade 7 struggling readers after the use of Microsoft Teams’ Reading Progress AI in terms of vocabulary. The results show that Grade 7 struggling readers improved in vocabulary after the use of Microsoft Teams’ Reading Progress AI,

with the overall mean percentage score increasing to 76.76, interpreted as “Fairly Satisfactory.” Several items reached this level, such as understanding the meaning of “enormous,” completing a sentence with the appropriate word, identifying synonyms for “begin,” and defining “cautious,” while recognizing words related to education achieved a “Satisfactory” rating at 81.73. However, identifying antonyms remained a challenge at 70.19, still classified as “Did Not Meet Expectations.”

Table 11: Performance of Grade 7struggling readers after the use of Microsoft Teams’ reading progress AI in terms of vocabulary

Items	MPS	$\bar{x}$	SD	Interpretation
1. What does the word “enormous” mean?	77.88	0.78	0.417	Fairly Satisfactory
2. Which word means the opposite of “happy”?	70.19	0.70	0.460	Did Not Meet Expectation
3. Choose the best word to complete the sentence: The baby is _____ because she lost her toy.	77.88	0.78	0.482	Fairly Satisfactory
4. What is another word for “begin”?	77.88	0.78	0.417	Fairly Satisfactory
5. Which word is related to “education”?	81.73	0.82	0.388	Satisfactory
6. What is the meaning of “cautious”?	75.00	0.75	0.435	Fairly Satisfactory
Average	76.76	0.77	0.237	Fairly Satisfactory

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Table 12 shows the performance of Grade 7 struggling readers after the use of Microsoft Teams' Reading Progress AI in terms of fluency. The results demonstrate that Grade 7 struggling readers made significant progress in fluency after the use of Microsoft Teams' Reading Progress AI, with the overall mean percentage score rising to 82.69, interpreted as "Satisfactory." Several items achieved higher levels of performance, such as

identifying sentences that best describe Maria (86.54) and recognizing values in the passage (86.54), both rated "Very Satisfactory." Other tasks, including understanding word meaning in context and using strategies for fluent oral reading, reached "Satisfactory," while identifying Maria's first action in the morning was rated "Fairly Satisfactory" at 75.96.

Table 12: Performance of Grade 7struggling readers after the use of Microsoft Teams' reading progress AI in terms of fluency

Items	MPS	$\bar{x}$	SD	Interpretation
1. What does Maria do first in the morning?	75.96	0.76	0.429	Fairly Satisfactory
2. Which sentence best describes Maria?	86.54	0.87	0.343	Very Satisfactory
3. What does Maria feed before going to school?	83.65	0.84	0.372	Satisfactory
4. The word "loves" in the passage means—	80.77	0.81	0.396	Satisfactory
5. The passage shows that Maria values—	86.54	0.87	0.343	Very Satisfactory
6. When reading this passage aloud, what should you do to sound fluent?	82.69	0.83	0.380	Satisfactory
Average	82.69	0.82	0.218	Satisfactory

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Table 13 presents a summary of all dimensions of reading after using Microsoft Teams' Reading Progress AI, with the overall mean percentage score rising to 77.44, interpreted as "Fairly Satisfactory." Oral language, phonics, and vocabulary all reached "Fairly Satisfactory," while fluency achieved the highest level at 82.69, rated "Satisfactory." Phonological awareness, though improved

compared to the pre-intervention scores, remained at "Did Not Meet Expectations" with 74.04. These results highlight that the AI tool was effective in enhancing students' reading performance, particularly in fluency and vocabulary, though continued support was still needed to strengthen phonological awareness for more consistent mastery.

Table 13: Summary table on the performance of Grade 7struggling readers after the use of Microsoft Teams' reading progress AI

Items	MPS	$\bar{x}$	SD	Interpretation
1. Oral language	77.56	0.77	0.247	Fairly Satisfactory
2. Phonological awareness	74.04	0.74	0.223	Did Not Meet Expectation
3. Phonics	76.12	0.76	0.220	Fairly Satisfactory
4. Vocabulary	76.76	0.77	0.237	Fairly Satisfactory
5. Fluency	82.69	0.82	0.218	Satisfactory
Overall	77.44	0.78	0.193	Fairly Satisfactory

Legend: 90-100=Outstanding; 85-89=Very Satisfactory; 80-84=Satisfactory; 75-79=Fairly Satisfactory; Below 75=Did Not Meet Expectation

Moreover, Table 14 presents the thematic analysis of the identified specific changes or improvements that made Microsoft Reading Progress AI easier to use and more helpful for the learners. As shown in the table, four (4) themes emerged from the thematic analysis, namely: (1) Enhancement of Cognitive Engagement and Reading Efficiency, (2) Academic Outcomes and Learner Self-Perception, (3) Positive User Experience and Collaborative Social Learning, and (4) Suggested Improvements for Future Implementation. General Theme 1: Enhancement of Cognitive Engagement

and Reading Efficiency. This theme highlights how the AI serves as a "reading coach" to strengthen mental engagement and specific literacy skills. Participants noted significant improvements in pronunciation clarity, reading speed, and oral fluency. General Theme 2: Academic Outcomes and Learner Self-Perception. This theme integrates the measurable academic gains with the students' internal shifts in confidence and motivation. General Theme 3: Positive User Experience and Collaborative Social Learning. This theme underscores the emotional and social dimensions of using Reading Progress AI.

Table 14: Thematic analysis of the identified specific changes or improvements that made Microsoft Reading Progress AI easier to use and more helpful for them

Verbatim Excerpt	Initial Codes	Category	Theme Clusters	General Themes
“The Reading Coach, it strengthened my mind.” (P1)	Cognitive support	Tool effectiveness	AI enhances mental engagement	Enhancement of Cognitive Engagement and Reading Efficiency
“It helps me with reading, with the help of the Reading Coach.” (P2)	Reading assistance	Tool effectiveness	AI provides guided learning	
“My pronunciation when I read, I speak clearly.” (P5)	Pronunciation clarity	Skill development	AI improves oral fluency	
“My reading skills are more accurate... faster, more confident.” (P2)	Accuracy, speed, confidence	Skill development	AI strengthens multiple reading dimensions	
“I was helpful, because it improved my score in posttest.” (P3)	Improved performance	Academic outcomes	AI boosts measurable achievement	Academic Outcomes and Learner Self-Perception
“The area where I have succeeded the most is my reading speed and fluency... I treat it like a personal goal to beat my own score.” (P4)	Motivation, speed, fluency	Academic outcomes	AI motivates self-improvement through tracking	
“I feel much more confident now than I did before.” (P1)	Increased confidence	Self-perception	AI builds learner confidence	
“I feel happy, it was just easy.” (P1)	Positive emotions	User experience	AI fosters enjoyable learning	Positive User Experience and Collaborative Social Learning
“It was a great experience... AI helped us with pronunciation.” (P5)	Pronunciation support	User experience	AI aids language accuracy	
“Happy, because I was answering beside my friends.” (P2)	Peer collaboration	Social learning	AI encourages collaborative engagement	
“It would be better if there were games.” (P1)	Gamification request	Suggested improvements	Desire for interactive learning	Suggested Improvements for Future Implementation
“Group discussions with classmates can help improve reading skills.” (P2)	Peer learning	Suggested improvements	Collaborative strategies enhance reading	
“One-on-one feedback and personalized goals.” (P5)	Personalized support	Suggested improvements	Need for individualized guidance	

Participants reported positive emotions associated with the platform’s ease of use and pronunciation support. General Theme 4: Suggested Improvements for Future Implementation. While the overall response to the AI tool was overwhelmingly positive, students identified specific areas for enhancement.

Quantitative-Qualitative Integration

Prior to the intervention, the quantitative results revealed that students consistently did not meet expectations across foundational reading dimensions, including oral

language, phonological awareness, phonics, vocabulary, and fluency. The findings indicated widespread struggle and low mastery levels in both decoding and meaning-making. While students demonstrated slightly stronger continuous reading abilities compared to their phonological awareness, they lacked the necessary accuracy and comprehension, resulting in weak overall performance. The statistical gains in foundational reading skills were confirmed by the learners’ increased confidence, accuracy, and motivation. Furthermore, the overall statistical increase in reading mastery was

corroborated by the students' own recognition of their progress, as they explicitly attributed their higher post-test scores to the intervention: "It was helpful because it improved my score in the posttest" (P3). Ultimately, the qualitative insights confirmed that the AI tool provided the necessary practice and feedback to drive the quantitative gains.

Test of Difference Between the Performance of Grade 7 Struggling Readers Before and After the Use of Microsoft Teams' Reading Progress AI

Table 15 presents the test of difference between the performance of Grade 7 struggling readers before and after the use of Microsoft Teams' Reading Progress

AI using the Wilcoxon Signed-Rank Test. Initially, all dimensions, such as oral language, phonological awareness, phonics, vocabulary, and fluency, were rated "Did Not Meet Expectations," with an overall mean percentage score of 58.91. After the intervention, scores increased across all areas, with oral language, phonics, and vocabulary reaching "Fairly Satisfactory," fluency achieving "Satisfactory," and phonological awareness improving but still remaining below the satisfactory threshold. The overall mean percentage score rose to 77.44, reflecting a shift from "Did Not Meet Expectations" to "Fairly Satisfactory." This improvement was statistically significant, as confirmed by the Wilcoxon Signed-Rank Test ($Z = 7.947$, $p = 0.000$).

Table 15: Wilcoxon Signed Rank Test on the test of difference between the performance of struggling Grade 7 readers before and after the use of Microsoft Teams' reading progress AI ($n=104$)

Performance		N	$\bar{x}$	SD	Mean Rank	Sum of Ranks	Z value	p-value
Posttest - Pretest	Negative Ranks	2a	0.60	0.217	16.00	32.00	7.947b*	0.000
	Positive Ranks	83b	0.78	0.193	43.65	3623.00		
	Ties	19c						
	Total	104						

a. $POSTTEST < PRETEST$ b. $POSTTEST > PRETEST$ c. $POSTTEST = PRETEST$; = Significant at .05 level ($p < .05$) ns = not significant

Experiences of Grade 7 Struggling Readers in the Use of Microsoft Teams' Reading Progress AI

Table 16 presents the thematic analysis of the experiences

of Grade 7 struggling readers in using Microsoft Teams' Reading Progress AI.

Table 16: Thematic analysis of the experiences of Grade 7 struggling readers in the use of Microsoft Teams Reading Progress AI

Verbatim Excerpt	Initial Codes	Category	Theme Cluster	General Themes
"I feel happy, it was just easy." (P1)	Positive emotions	User experience	AI fosters enjoyable learning	Overall User Experience and Adaptability
"Happy, because there's a free wifi." (P3)	Accessibility	User experience	AI linked with supportive environment	
"Happy experience. It was my first time answering using a computer." (P7)	Novelty	User experience	AI introduces new learning modes	
"It was good. I had a bit of difficulty while answering." (P8)	Challenge	User experience	AI requires adjustment and persistence	
"I feel happy. I much learned about computer." (P4)	Digital literacy	Skill development	AI promotes technology familiarity	Development of Digital Literacy and Skills
"Happy also, I learned how to use a computer." (P6)	Computer skills	Skill development	AI enhances digital competence	

“Happy, because I was answering beside my friends.” (P2)	Peer collaboration	Social learning	AI encourages collaborative engagement	Social Learning and Peer Collaboration
“It was a great experience. It makes the process much smoother, especially when the AI helped us with pronunciation; you have to listen carefully to the words to get them right.” (P5)	Pronunciation support	Tool effectiveness	AI aids language accuracy	Tool Effectiveness in Language Enhancement

As shown in the table, four (4) themes emerged from the thematic analysis, namely: (1) Overall User Experience and Adaptability, (2) Development of Digital Literacy and Skills, (3) Social Learning and Peer Collaboration, and (4) Tool Effectiveness in Language Enhancement. Specifically, General Theme 1: Overall User Experience and Adaptability. This theme highlights the varying personal experiences, positive emotions, and adjustments that students faced when using Microsoft Teams’ Reading Progress AI. General Theme 2: Development of Digital Literacy and Skills. This theme reveals an important secondary benefit of the intervention: the enhancement of basic computer skills. For these Grade 7 struggling readers, the AI tool served as both a literacy intervention and a gateway to digital literacy. General Theme 3: Social Learning and Peer Collaboration. This theme highlights the social dimension and collaborative benefits students experienced while using the tool. General Theme 4: Tool Effectiveness in Language Enhancement. This theme directly addresses the core function of the Reading Progress AI as an instructional tool. It highlights the platform’s effectiveness in providing targeted, functional support, particularly with pronunciation and oral fluency.

Discussions

Performance of Grade 7 Struggling Readers Before the Use of Microsoft Teams’ Reading Progress AI

The results show that Grade 7 struggling readers did not meet expectations across all dimensions of reading performance. Oral language, phonological awareness, phonics, vocabulary, and fluency. This indicates that learners lacked essential literacy skills, which are critical for comprehension and academic success. The findings conclude that these deficiencies, if left unaddressed, would continue to hinder learners’ progress in higher-order tasks and perpetuate poor reading performance. This suggests that schools must integrate evidence-based interventions, such as Microsoft Teams Reading Progress, which provides personalized support, reduces reading anxiety, and fosters learner autonomy. The findings are consistent with the existing literature, which highlights the importance of foundational reading skills. Casinto (2025) emphasized that oral language proficiency predicts later comprehension, which aligns with the low oral language scores. Nagy (2020) confirmed that deficits in oral language hinder inferencing, reflecting the learners’

struggles. Kilpatrick (2020) and Moats (2020) identified phonological awareness as a primary cause of persistent reading difficulties, corroborating the weak phonological awareness results. Ehri (2020) explained that systematic phonics instruction supports word recognition, while Snow (2020) emphasized its effectiveness beyond the early grades, consistent with the below-expectation phonics scores. Rasinski and Smith (2020) described fluency as a bridge between decoding and comprehension, and Kuhn *et al.* (2020) noted that slow and effortful reading negatively affects comprehension, both of which are reflected in the low fluency scores.

Performance of Grade 7 Struggling Readers After the Use of Microsoft Teams’ Reading Progress AI

The performance of Grade 7 struggling readers after the use of Microsoft Teams Reading Progress AI showed notable improvement compared to their pre-intervention scores. Oral language, phonics, and vocabulary reached the “Fairly Satisfactory” level. Although phonological awareness remained below expectations, the general trend indicates that the AI tool enhanced confidence, accuracy, and motivation. The conclusion is that Reading Progress AI effectively strengthened multiple dimensions of reading, particularly fluency and oral language, while highlighting the need for complementary interventions to address persistent phonological awareness gaps. The implication is that integrating AI-driven tools into classroom instruction can provide personalized feedback, foster learner confidence, and promote measurable literacy gains. The qualitative results further support this, as learners expressed clearer pronunciation, increased confidence, and enjoyment in reading activities. These findings are corroborated by existing studies that emphasize the role of technology-supported interventions in improving literacy outcomes. Villanueva (2024) reported that digital reading tools improved fluency and vocabulary among rural learners, consistent with the gains in vocabulary and fluency. Uy (2024) documented measurable improvements in comprehension and speed through Reading Progress, aligning with the satisfactory fluency results. Jose (2025) demonstrated that ESL learners benefited from AI-driven interventions, improving pronunciation and comprehension, which supports the oral language improvements. Tao *et al.* (2025) highlighted that adaptive

AI tools enhanced inferencing and comprehension, reinforcing the overall literacy gains. Cheung and Slavin (2019) confirmed that technology-based interventions consistently improve reading achievement, validating the general improvement in scores. Tusoy (2023) found that Reading Progress improved fluency and sustained interest among junior high learners, which is reflected in the present findings. Aguilar (2023) noted that Grade 7 students gained confidence and reduced anxiety in oral reading tasks when supported by AI, consistent with the oral language improvements. Finally, Ahmed Alsalami and Mohammed (2025) reported significant gains in fluency among EFL learners after the sustained use of Reading Progress, directly corroborating the improvement in fluency scores.

Test of Difference Between the Performance of Grade 7 Struggling Readers Before and After the Use of Microsoft Teams' Reading Progress AI

Based on the findings, the researcher concluded that Reading Progress AI effectively enhanced literacy skills, particularly fluency, oral language, and vocabulary, while still requiring additional support for phonological awareness. The implication is that AI-driven tools can serve as powerful complements to traditional instruction, providing personalized feedback, boosting confidence, and motivating learners toward measurable achievement. However, educators must continue to integrate targeted phonological awareness strategies to ensure balanced literacy development. These findings are supported by prior research that highlights the effectiveness of digital and AI-based interventions in literacy development (Huot & Loch, 2025). Newton *et al.* (2018) argued that reading proficiency strongly influences productive language skills, which aligns with the observed gains in oral language. Villarente and Moral (2024) confirmed that targeted reading interventions improved comprehension, consistent with the overall literacy improvement. Nation (2021) emphasized that vocabulary deficits predict poor performance, validating the importance of the improvements observed. Perfetti (2020) noted that decoding skills constrain comprehension, which explains why phonological awareness remains a challenge. Spencer *et al.* (2020) and Snow and Matthews (2020) highlighted that weak oral language skills lead to persistent reading difficulties, reinforcing the significance of oral language improvement. Lee (2021) linked oral language development to vocabulary growth, consistent with the observed outcomes. Quinn *et al.* (2020) and Logan *et al.* (2019) confirmed that dialogic instruction enhances oral language and reading achievement, which parallels the learners' reported confidence and fluency gains. Finally, Hjetland *et al.* (2020) emphasized that oral language mediates the relationship between decoding and comprehension, corroborating the mixed but overall positive results of the intervention.

Experiences of Grade 7 Struggling Readers in the Use of Microsoft Teams' Reading Progress AI

The thematic analysis disclosed overwhelmingly positive perceptions. Learners consistently expressed happiness, ease of use, and engagement, highlighting that the tool fostered enjoyable learning and collaborative classroom dynamics. Many participants emphasized the development of digital literacy, noting that it was their first time using a computer, which built confidence in navigating technology. The AI's effectiveness in improving pronunciation and fluency was also recognized, with learners reporting clearer speech and smoother reading processes. Moreover, prior to the intervention, the quantitative results revealed that students consistently did not meet expectations across foundational reading dimensions, including oral language, phonological awareness, phonics, vocabulary, and fluency. The findings indicated widespread struggle and low mastery levels in both decoding and meaning-making. Furthermore, the qualitative data explained how these quantitative gains were achieved: through heightened motivation and guided engagement. The overall statistical increase in reading mastery was corroborated by students actively tracking their own progress, often treating their reading speed and fluency as personal goals to improve upon. Ultimately, these qualitative insights confirmed that the AI tool provided the necessary guided learning, pronunciation support, and motivation to drive the measurable quantitative gains, culminating in students explicitly recognizing the tool's positive impact on their post-test achievements. These experiential findings are supported by prior research that underscores the multifaceted benefits of technology-supported reading interventions. Urbano *et al.* (2021) reported that Filipino learners struggled in global literacy benchmarks, highlighting the need for reforms that prioritize tools like Reading Progress. Newton *et al.* (2018) argued that reading proficiency influences productive language skills such as speaking, consistent with learners' improved pronunciation. Villarente and Moral (2024) confirmed that targeted interventions improved comprehension, aligning with the reported gains in fluency and confidence. Rasinski and Smith (2020) emphasized that expressive fluency predicts comprehension, which resonates with learners' self-reported improvements in speed and clarity. Quinn *et al.* (2020) and Logan *et al.* (2019) highlighted that dialogic instruction enhances oral language and engagement, consistent with the collaborative experiences described. Hjetland *et al.* (2020) noted that oral language mediates decoding and comprehension, reinforcing the importance of the AI's pronunciation support. Finally, Reinders and Fatahi (2021), and Aduloju and Adedotun (2025) emphasized that technology-mediated learning fosters autonomy and confidence, which aligns with learners' motivation to set personal goals and track progress.

CONCLUSION

The study's findings revealed that integrating Microsoft Teams' Reading Progress AI served as a transformative intervention for struggling Grade 7 readers, effectively improving their performance. This statistically significant improvement was driven by the tool's ability to provide cognitive scaffolding and real-time phonological feedback, which elevated fluency to a satisfactory level while simultaneously reducing students' affective filter by creating a happy, low-stakes digital learning environment. The qualitative findings further revealed that the AI functioned as a reading coach, fostering intrinsic motivation through gamified progress tracking, in which students treated score improvement as a personal goal and built foundational digital literacy for first-time computer users. Ultimately, while the AI successfully bridged the gap between word recognition and oral accuracy, its impact was maximized by the classroom's socio-technical interaction, suggesting that future implementations should maintain this momentum by integrating students' expressed desires for more gamified, interactive elements and personalized, human-centered feedback. Thus, the researchers recommended that School administrators should institutionalize Microsoft Teams' Reading Progress, while ICT coordinators improve infrastructure. Reading teachers must integrate gamified activities, and English heads schedule peer-led sessions. Teachers should set personalized goals with AI feedback, and DepEd supervisors should conduct workshops to strengthen the technical and pedagogical use of Reading Progress.

REFERENCES

- Aduloju, O. D., & Adedotun, L. O. (2025). Exploring Artificial Intelligence's role in enhancing mathematical modeling for Science Education program. *Journal of Educational Technology and E-Learning Innovations*, 1(1), 23-31. <https://doi.org/10.54536/jeteli.v1i1.4915>
- Aguilar, A. (2023, November 23). *Dreaming big: How the Philippines is using Microsoft Reading Progress to build confidence and enhance future-ready skills*. Microsoft Customer Stories. <https://customers.microsoft.com/en-us/story/1695420956557873322-deped-philippines-government-microsoft-365>
- Ahmed Alsalami, A., & Mohammed, A. (2025). Enhancing reading fluency in EFL learners using Microsoft Teams Reading Progress: A mixed methods study. *International Journal of Educational Technology in Higher Education*, 22(1), 1-18. <https://doi.org/10.1186/s41239-025-00456-3>
- Caravolas, M., Lervåg, A., Defior, S., Seidlová-Málková, G., & Hulme, C. (2020). Different patterns, but equivalent predictors, of growth in reading in consistent and inconsistent orthographies. *Psychological Science*, 31(6), 703-715. <https://doi.org/10.1177/0956797620917202>
- Casinto, C. D. (2025). The teaching and learning of Reading: Its challenges, strategies, and effectiveness in the Philippine context: A systematic review. *International Journal of Language and Literary Studies*, 7(5), 345-356. <https://doi.org/10.36892/ijlls.v7i5.2344>
- Cheung, A. C. K., & Slavin, R. E. (2013). The effectiveness of educational technology applications for enhancing reading achievement in K-12 classrooms: A meta-analysis. *Educational Research Review*, 9, 88-113. <https://doi.org/10.1016/j.edurev.2013.01.001>
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Dela Cruz, M. (2023). Integrating Phil-IRI with Microsoft Teams Reading Progress for enhanced monitoring. *DepEd Research Journal*. <https://www.deped.gov.ph/wp-content/uploads/2023/05/DelaCruz-ReadingProgress-PhilIRI.pdf>
- Ehri, L. C. (2020). Orthographic mapping in the acquisition of sight word reading, spelling memory, and vocabulary learning. *Scientific Studies of Reading*, 24(2), 115-120. <https://doi.org/10.1080/10888438.2019.1709275>
- Elleman, A. M., & Oslund, E. L. (2021). Reading comprehension research: Implications for practice and policy. *Journal of Educational Research*, 114(3), 243-254. <https://doi.org/10.1080/00220671.2021.1910475>
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2019). *How to design and evaluate research in education* (10th ed.). McGraw-Hill Education.
- Hjetland, H. N., Lervåg, A., Lyster, S. A. H., Hagtvet, B. E., Hulme, C., & Melby-Lervåg, M. (2020). Pathways to reading comprehension: A longitudinal study from 4 to 9 years of age. *Journal of Educational Psychology*, 112(7), 1481-1496. <https://doi.org/10.1037/edu0000449>
- Huot, S., & Loch, S. (2025). Educating in the Age of AI: Preparing Cambodian Teachers and students for an AI-Augmented learning future. *Journal of Educational Technology and E-Learning Innovations*, 1(2), 31-38. <https://doi.org/10.54536/jeteli.v1i2.5170>
- Ignacio, A. T., Turingan, V. T., & De Jesus, F. S. (2024b). Lived experiences of senior high school learners with reading difficulties: A case in the Philippines. *Edelweiss Applied Science and Technology*, 8(6), 2937-2970. <https://doi.org/10.55214/25768484.v8i6.2636>
- Ignacio, R., Santos, D., & Rivera, M. (2024a). Phenomenological study on struggling readers in senior high school. *Philippine Journal of Education Studies*, 15(2), 77-95.
- Jose, J. (2025a). *Reading Progress as an artificial intelligence (AI) platform* [Article abstract]. Education and Information Technologies. <https://doi.org/10.1007/s10639-024-13074-3>
- Jose, R. (2025b). Effectiveness of Microsoft Reading Progress in improving oral reading fluency among ESL learners. *International Journal of Language Education*, 9(2), 45-60. <https://doi.org/10.26858/ijole.v9i2.2025>
- Jose, R. (2025c). The impact of integrating Microsoft Teams Reading Progress. *Education and Information Technologies*, 30, 7077-7115. <https://doi.org/10.1007/>

- s10639-024-12856-4
- Júnior, T. S. C., Costa, A. L. R., Oliveira, E. D. de, Veloso, L. J. de O., Moreira, L. H. S., Viana, M. C. V., Carvalho, M. R. B. de, Cardoso, R. S., & Carvalho, T. M. de. (2026). Structures and conjunctures of digital culture and education: Challenges, opportunities and the effects of technologies on contemporary education for digital natives and immigrants. *Journal of Educational Technology and E-Learning Innovations*, 2(1), 1–5. <https://doi.org/10.54536/jeteli.v2i1.5921>
- Kim, J. S., Burkhauser, M., Quinn, D. M., & Shi, Y. (2021b). The effects of digital learning tools on reading outcomes. *Educational Researcher*, 50(1), 5–15. <https://doi.org/10.3102/0013189X2096824>
- Kim, J. S., Samson, J. F., & Fitzgerald, R. (2021). Digital reading interventions and student outcomes: Evidence from randomized controlled trials. *Journal of Research on Educational Effectiveness*, 14(4), 789–812. <https://doi.org/10.1080/19345747.2021.1921344>
- Kim, Y. S. G., & Wagner, R. K. (2021a). Examining the development of reading fluency and comprehension. *Reading Research Quarterly*, 56(S1), S231–S248. <https://doi.org/10.1002/rrq.345>
- Kuhn, M. R., Schwanenflugel, P. J., & Meisinger, E. B. (2020). Aligning theory and assessment of reading fluency. *Reading Research Quarterly*, 55(1), 1–15. <https://doi.org/10.1002/rrq.277>
- LaBerge, D., & Samuels, S. J. (1974). Toward a theory of automatic information processing in reading. *Cognitive Psychology*, 6(2), 293–323. [https://doi.org/10.1016/0010-0285\(74\)90015-2](https://doi.org/10.1016/0010-0285(74)90015-2)
- Lapatha, J. C., Mendoza, R., & Reyes, S. (2024b). Mapping national literacy gaps in grades 7–10: Evidence from the Phil-IRI KS3 national dashboard. *Applied Research and Innovation (ARI)*, 3(2). <https://journals.e-palli.com/home/index.php/ari/article/view/7068>
- Lapatha, L. A., Potot, L. L., & Saguin, E. D. (2024a). MS T.E.A.M.S: A recovery approach in improving English reading speed and accuracy. *American Journal of Multidisciplinary Research and Innovation*, 3(3), 85–89. <https://doi.org/10.54536/ajmri.v3i3.2819>
- Lee, J., & Yoon, S. Y. (2021). The effects of repeated reading on reading fluency. *Reading Psychology*, 42(2), 123–145. <https://doi.org/10.1080/02702711.2020.1865944>
- Logan, J. A. R., Justice, L. M., Yumuş, M., & Chaparro-Moreno, L. J. (2019). When children are not read to at home. *Journal of Educational Psychology*, 111(6), 1056–1070. <https://doi.org/10.1037/edu0000327>
- Microsoft & LearnPlatform. (2024). *Impact of Reading Progress on student achievement in Fresno Unified School District*. Microsoft Education. <https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE5bK6E>
- Microsoft Education Blog. (2024, August 15). *New study shows improved reading scores by using Reading Progress*. Microsoft. <https://www.microsoft.com/en-us/education/blog/2024/08/new-study-shows-improved-reading-scores-by-using-reading-progress/>
- Microsoft Education Team. (2024, August 15). *New study shows improved reading scores by using Reading Progress*. Microsoft Education Blog. <https://www.microsoft.com/en-us/education/blog/2024/08/new-study-shows-improved-reading-scores-by-using-reading-progress/>
- Microsoft Education Team. (2024, February 15). *Reading Progress updates in Microsoft Teams for Education*. Microsoft Education Blog. <https://educationblog.microsoft.com/en-us/2024/02/whats-new-in-microsoft-edu-reading-progress-updates>
- Nagy, W. E., & Townsend, D. (2020). Words as tools: Learning academic vocabulary. *Reading Research Quarterly*, 55(S1), S131–S147. <https://doi.org/10.1002/rrq.301>
- Nation, K. (2021). Vocabulary and reading comprehension in adolescence. *Journal of Child Psychology and Psychiatry*, 62(5), 622–630. <https://doi.org/10.1111/jcpp.13322>
- Newton, J. M., Ferris, D. R., Goh, C. C. M., Grabe, W., Stoller, F. L., & Vandergrift, L. (2018). Reading as a foundation for language acquisition. *International Journal of Language Studies*, 12(3), 45–62. <http://www.ijls.net/pages/volume12issue3.html>
- Paige, D. D., Rasinski, T. V., & Magpuri-Lavell, T. (2012). Is fluent expressive reading important for high school readers? *Journal of Adolescent & Adult Literacy*, 56(1), 67–76. <https://doi.org/10.1002/JAAL.00103>
- Quinn, J. M., Wagner, R. K., Petscher, Y., & Lopez, D. (2020). Developmental relations between vocabulary and reading comprehension. *Journal of Educational Psychology*, 112(5), 1052–1065. <https://doi.org/10.1037/edu0000405>
- Rasinski, T., & Smith, L. (2020). Fluency matters: Reading fluency and comprehension in secondary education. *Journal of Adolescent & Adult Literacy*, 63(6), 683–692. <https://doi.org/10.1002/jaal.1042>
- Reinders, H., & Fatahi, J. (2021). Digital tools and learner autonomy in language education. *Language Learning & Technology*, 25(3), 23–39. <https://doi.org/10.1257/73439>
- Sabatini, J., Wang, Z., & O'Reilly, T. (2019). Relating reading comprehension to oral reading fluency. *Reading and Writing*, 32(6), 1529–1553. <https://doi.org/10.1007/s11145-018-9917-y>
- Snow, C. E., & Matthews, T. J. (2020). Reading and language in the early grades. *The Future of Children*, 30(2), 37–60.
- Spencer, M., Quinn, J. M., & Wagner, R. K. (2020). Specific reading comprehension disability. *Journal of Learning Disabilities*, 53(1), 7–18. <https://doi.org/10.1177/0022219419843415>
- Steinle, P. K., Lin, J., & Thompson, R. (2022). Fluency interventions for struggling readers in Grades 6 to 12: A research synthesis. *Journal of Learning Disabilities*, 55(1), 3–21. <https://doi.org/10.1177/0022219421991244>
- Tao, Y., Li, H., & Xu, J. (2025). AI-assisted reading comprehension interventions: Effects on vocabulary and inferencing skills. *Computers & Education*, 205, 104547. <https://doi.org/10.1016/j.compe.2025.104547>

- compedu.2024.104547
- Tawiah, S. N., Fiergbor, D. D., & Hughes-Lartey, K. (2025). Adoption of e-learning technologies: A literature synthesis of influencing factors. *Journal of Educational Technology and E-Learning Innovations*, 1(2), 13–22. <https://doi.org/10.54536/jeteli.v1i2.6037>
- TechnologyRecord. (2025, July 4). *Microsoft AI tools help to boost literacy in the Philippines*. <https://www.technologyrecord.com/article/microsoft-ai-tools-help-to-boost-literacy-in-the-philippines>
- Torppa, M., Georgiou, G. K., Niemi, P., Lerkkanen, M. K., & Poikkeus, A. M. (2020). The roles of phonological awareness and rapid naming. *Journal of Educational Psychology*, 112(2), 297–310. <https://doi.org/10.1037/edu0000361>
- Tusoy, M. S. (2023). *Improving students' reading fluency and interest using science concepts reading materials through Microsoft Teams Reading Progress Tool*. DepEd E-Saliksik Research Portal. <https://deped-esaliksik.ph/resource/385>
- Urbano, R., Bustos, M. T., Ganzon, A., Bagood, J., & Alavata, J. (2021). *Philippine learners' performance in international reading assessments* (Southeast Asia Primary Learning Metrics 2019 National Report of the Philippines). UNICEF Philippines, Southeast Asian Ministers of Education Organization (SEAMEO), & Department of Education. <https://www.seaplms.org/index.php/resources/reports-and-documents>
- Uy, M. T. V. (2024). Reading Progress implementation in senior high schools: Effects on speed and comprehension. *Philippine Journal of Educational Technology*, 13(2), 45–62. <https://pjet.org.ph/index.php/pjet/article/view/2024-13-2-45>
- Villanueva, R. (2024). Digital literacy and equity outcomes of Microsoft Reading Progress in rural Philippine schools. *Asia-Pacific Journal of Educational Technology*, 19(3), 211–229. <https://apjet.org/index.php/apjet/article/view/2024-19-3-211>
- Villarente, J., & Moral, R. (2024). Impact of reading interventions on Grade 7 comprehension. *Philippine Journal of Educational Research*, 19(2), 112–128.
- Zheng, B., Warschauer, M., & Farkas, G. (2016). Digital literacy and reading achievement: A systematic review. *Review of Educational Research*, 86(4), 1051–1085. <https://doi.org/10.3102/0034654316643640>