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EMOGI-PDT: A proposed e-tool to aid students' development of understanding in analyzing descriptive texts

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Abstract

Aim: This study evaluated the effectiveness of the EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) as an instructional e-tool in enhancing students' comprehension in analyzing descriptive texts in secondary education.

Methodology: The study employed a quasi-experimental one-group pretest–posttest design involving ninety Senior High School students from Daguit National High School, selected through purposive sampling. The intervention was conducted over three weeks and included a pre-test, the implementation of EMOGI-PDT, and a post-test. Data were collected using a researcher-developed comprehension test, a questionnaire, and an observation checklist. Descriptive statistics summarized student performance, while a paired-sample t-test and correlational analyses were conducted to determine changes in comprehension and the relationship between tool usage and learning outcomes.

Results: The results revealed a significant improvement in students' comprehension of descriptive texts, as indicated by higher post-test scores compared to pre-test results. Students also reported increased engagement, improved understanding, and positive learning experiences during the use of the EMOGI-PDT tool.

Conclusion: The findings demonstrate that EMOGI-PDT is an effective pedagogical innovation that enhances students' comprehension and engagement in descriptive text analysis. Integrating interactive and visual e-learning tools can strengthen teaching strategies in language instruction and support the development of innovative and accessible instructional materials in secondary education.

Keywords: *EMOGI-PDT, digital pedagogy, descriptive text analysis, student comprehension, instructional innovation, e-learning tool*

INTRODUCTION

Reading comprehension is a fundamental skill in education, as it enable learners to construct meaning, interpret information, and engage critically with various types of texts. In contemporary learning environments, the ability to analyze texts—particularly descriptive texts—required not only basic comprehension skills but also higher-order thinking, including interpretation, visualization, and contextual understanding. As education evolved in the twenty-first century, the integration of technology into teaching and learning became increasingly essential in enhancing these competencies.

Globally, recent developments in educational technology highlighted the importance of digital and interactive tools in improving student engagement and learning outcomes. For instance, Bond et al. (2020) found that technology-enhanced learning environments significantly promoted active participation and learner engagement. Similarly, Zawacki-Richter et al. (2019) emphasized that digital tools supported personalized and flexible learning experiences, leading to improved comprehension outcomes. Furthermore, Holmes et al. (2023) reported that interactive and visual-based technologies contributed to deeper understanding by addressing diverse learning styles. Despite these advancements, challenges remained in ensuring equitable access to such technologies, particularly in developing contexts where resources were limited. Mayer (2021) explained that learning improves when information is presented through both visual and verbal channels. This supports the integration of multimedia tools in teaching.

In the Philippine educational setting, the Department of Education (DepEd) continued to promote the integration of innovative instructional materials through reforms such as the MATATAG Curriculum of the Department of Education (DepEd), which emphasized the development of literacy and comprehension skills. These initiatives

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highlighted the importance of contextualized, learner-centered, and technology-supported teaching strategies. However, many Filipino learners still experienced difficulties in analyzing complex texts, including descriptive texts. These challenges were often linked to limited vocabulary, underdeveloped visualization skills, and insufficient exposure to interactive and multimodal learning materials.

Recent local and international studies demonstrated that digital tools, including gamification and multimedia resources, significantly improved reading comprehension and student engagement. Moreover, emerging research suggested that visual communication elements, such as emojis, enhanced understanding by providing non-verbal cues that clarified meaning and supported interpretation. Despite these findings, limited research existed on the systematic use of emoji-based instructional tools in formal education, particularly in the teaching of Filipino (the national language of the Philippines) and descriptive text analysis. Additionally, most existing digital tools required internet connectivity, which posed accessibility issues for learners in remote or resource-limited areas.

This gap highlighted the need for innovative, accessible, and pedagogically grounded instructional tools that addressed students' comprehension difficulties while considering contextual limitations. In response to this need, the present study introduced EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool), an offline e-learning tool designed to enhance students' comprehension in analyzing descriptive texts. Unlike previous studies that primarily focused on online or generic digital tools, this research developed and evaluated a structured, offline, and context-specific instructional material tailored for Filipino language instruction.

The study specifically focused on Grade 12 students at Daguit National High School, where preliminary assessments revealed that a significant number of learners had difficulty in analyzing descriptive texts. By developing and implementing EMOGI-PDT, the study aimed to provide an innovative pedagogical solution that integrates visual learning, interactivity, and accessibility.

More importantly, this research makes a significant contribution to educational research in several key areas. It advances digital pedagogy research by demonstrating the effectiveness of offline digital tools in enhancing learning outcomes. It also contributes to the understanding of visual communication in learning, particularly by emojis as semiotic tools that support comprehension and interpretation of descriptive texts. In the context of Filipino language instruction, the study provides a localized and culturally responsive teaching strategy that aligns with learners' experiences and linguistic backgrounds. Furthermore, it strengthens the field of instructional technology for literacy development by offering an innovative and practical approach to improving reading comprehension among senior high school students.

Overall, the study advances existing knowledge by proposing a novel approach to teaching descriptive texts and by demonstrating how offline digital tools can be effectively utilized to support inclusive, engaging, and meaningful learning experiences in diverse educational contexts.

Review of Related Literature and Studies

Conceptual Understanding in Text Analysis

Conceptual understanding referred to a learner's ability to grasp the deeper meaning of a text, process, or idea rather than merely decoding words, as originally explained by Bransford et al. (2000). In the context of text analysis, this understanding enabled students to interpret key ideas, structures, and nuances in written passages, which were essential for reading comprehension and critical thinking.

Recent studies expanded this perspective by emphasizing the role of structured and scaffolded instruction in developing deeper comprehension (Duke et al., 2021; Zhang et al., 2025). Furthermore, Mayer (2021) highlighted that visual and interactive strategies strengthened conceptual understanding by enabling learners to process information through multiple cognitive channels. This indicated that conceptual understanding was not only dependent on cognitive ability but also on the quality of instructional design.

Interactive Digital Tools and Student Engagement

The integration of interactive digital tools was shown to enhance learning by offering multimodal cues that supported comprehension and long-term retention. However, more recent studies provided stronger empirical support for these claims in modern educational contexts (Abu Table & Elshnawi, 2021; Yao, 2025). Similarly, Hwang, Wu, and Chen (2012) demonstrated that visual scaffolds enhanced learners' analytical skills, while more recent findings by Bond et al. (2020) confirmed that technology-enhanced environments consistently promoted active participation and deeper learning. These studies collectively suggested that interactive digital tools were most effective when they combined visual, cognitive, and participatory elements, thereby supporting both engagement and comprehension.

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Emojis as a Pedagogical Resource

Recent research emphasized the growing educational value of emojis beyond their traditional use in social communication. Emojis functioned as both verbal and nonverbal cues, helping to clarify meaning by compensating for the absence of facial expressions and tone in digital text, thereby reducing ambiguity and enhancing message interpretation (Kaye et al., 2021). In educational contexts, this dual function became particularly significant, as it allowed learners to better understand and interpret textual information.

Supporting this perspective, Fane et al. (2018) reported that the integration of emojis in learning environments enhanced students' ability to express ideas and improved retention of concepts. By providing visual representations that complemented textual content, emojis helped bridge the gap between abstract ideas and concrete understanding.

In relation to the present study, these findings supported the use of emojis as instructional aids within the EMOGI-PDT framework. By incorporating emojis as visual scaffolds in descriptive text analysis, the tool enabled learners to interpret details more effectively, strengthened comprehension, and promoted more active engagement in the learning process.

Emojis in Learning and Digital Literacy

In educational settings, emojis were increasingly used as visual aids to support conceptual understanding and learner engagement. Earlier research by Fane et al. (2018) demonstrated that emojis helped learners express abstract ideas and improved concept retention.

More recent studies reinforced these findings and found that emoji use in instructional communication positively influenced students' motivation and perception of teacher credibility, which in turn supported academic performance (Kim et al., 2022; Sia et al., 2024). This progression of research showed that emojis evolved from simple engagement tools to meaningful instructional supports in digital literacy.

E-Tools in Language Teaching

Recent research on information and communication technology (ICT)-based teaching tools demonstrated significant benefits in language education. Colendra and Carada (2023) reported that gamified platforms such as Wordwall and Raptivity improved students' literal, inferential, and critical reading comprehension in Filipino.

These findings suggest that digital tools were not only effective in improving comprehension but also in addressing different levels of cognitive processing. However, most existing tools focused on general literacy development and did not specifically target structured text analysis using innovative semiotic supports such as emojis.

Synthesis and Research Gap

The reviewed literature demonstrated that interactive visual tools and digital supports significantly enhanced conceptual understanding and communication in educational settings. Interactive elements, such as multimedia and digital modules, improved engagement and comprehension, while emojis supplemented communication and provided visual cues that clarified meaning. Likewise, e-tools in language teaching demonstrated positive learning outcomes. However, few studies investigated the use of emojis as structured learning aids for analyzing descriptive texts, especially within Filipino language instruction. No recent research developed or evaluated an original, scientifically grounded emoji-based tool designed to support senior high school students' conceptual understanding in Filipino text analysis.

This gap justified the present study's development and examination of the Emoji-Based Picture Driven Text Analysis Tool (EMOGI-PDT) as an innovative instructional strategy in teaching Filipino descriptive text analysis to senior high school learners.

Theoretical Framework

This study was anchored on the Cognitive Theory of Multimedia Learning (Mayer, 2021), which posited that learners processed information more effectively when presented through both verbal and visual channels. According to Mayer, integrating words and images facilitated meaningful learning by reducing cognitive load, promoting active information processing, and enhancing retention. This theory was particularly relevant to the present study because students often struggled to comprehend descriptive texts due to difficulties in connecting textual details and visual representations. By employing visual cues, such as emojis, alongside textual content, learners were better able to interpret ideas, identify key elements, and develop deeper conceptual understanding. The Cognitive Theory of Multimedia Learning guided this study by providing a rationale for designing an interactive, visual-based e-tool. It influenced the research design, particularly the use of quantitative and descriptive methods to gather data on students' comprehension and preferences for learning aids. Additionally, it informed the interpretation of results, allowing the

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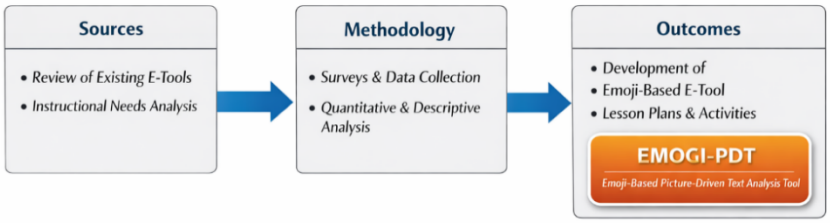
researchers to link the effectiveness of the EMOGI-PDT to its ability to integrate visual and verbal information in alignment with cognitive principles.

Conceptual Framework

Figure 1. Conceptual Framework of the Study



The conceptual framework of this study illustrated the systematic flow from literature review to methodology, outcomes, and the development of the EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool). The study was anchored on the independent variable, which was the use of EMOGI-PDT as an interactive, emoji-based instructional tool designed to support descriptive text analysis. The dependent variable was the students' comprehension of Filipino descriptive texts, which was measured through performance tasks and assessments. In addition, moderating variables such as student engagement, learning preferences, and prior familiarity with digital tools were considered, as they could influence the effectiveness of the instructional intervention. The framework began with the sources component, where theoretical and empirical literature highlighted the benefits of digital instructional tools, interactive exercises, and visual supports in enhancing comprehension. Guided by these sources, the methodology employed quantitative and descriptive research methods, including surveys administered to students and experts, to identify the most effective features for the e-tool. Based on the outcomes of these surveys, the study developed EMOGI-PDT, which incorporated lesson content, instructional strategies, and offline activities, such as PowerPoint-based emoji exercises, to provide structured support for descriptive text analysis. This framework demonstrated how the implementation of EMOGI-PDT enhanced conceptual understanding while accommodating student engagement and diverse learning preferences in a pedagogically meaningful and accessible manner.

Statement of the Problem

Despite the increasing integration of technology in education, many secondary-level students continue to demonstrate low proficiency in analyzing descriptive texts. Learners often encounter difficulties in identifying key details, interpreting meanings, and visualizing descriptive elements, which are essential skills in text analysis. These challenges are frequently associated with limited vocabulary, low engagement, and insufficient use of interactive and contextualized instructional materials in classroom instruction.

Although digital tools have been recognized for their potential to enhance teaching and learning processes, most available instructional resources depend on internet connectivity. This dependence limits their accessibility in geographically disadvantaged and resource-constrained areas. Furthermore, while visual communication elements such as emojis have been shown to support comprehension and meaning-making, limited empirical research exists on their structured use as pedagogical tools in teaching descriptive text analysis, particularly in Filipino language instruction.

Given these conditions, there is a need to develop and evaluate innovative, accessible, and pedagogically grounded instructional tools that address students' comprehension difficulties. This study responds to this need by introducing EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool), an emoji-based offline e-learning tool designed to enhance students' comprehension in analyzing descriptive texts among Grade 12 students at Daguit National High School.

Research Objectives

The general objective of this study was to evaluate the effectiveness of EMOGI-PDT as an instructional tool in enhancing students' comprehension in analyzing descriptive texts.

Specifically, the study aimed:

1. To determine the level of students' comprehension in analyzing descriptive texts before and after the use of EMOGI-PDT.
2. To identify the instructional tools preferred by students in learning descriptive text analysis.

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3. To evaluate the level of acceptance of EMOGI-PDT in terms of design and content.
4. To examine the effect of EMOGI-PDT on students' comprehension performance.

Research Questions

This study sought to answer the following research questions:

1. What is the level of students' comprehension in analyzing descriptive texts before and after the use of EMOGI-PDT?
2. What instructional tools do students prefer in learning descriptive text analysis?
3. What is the level of acceptance of EMOGI-PDT in terms of design and content?
4. What is the effect of EMOGI-PDT on students' comprehension in analyzing descriptive texts?

Hypothesis of the Study

There is no significant difference in students' comprehension of descriptive texts before and after the use of EMOGI-PDT.

Methodology

Research Design

The study employed a quasi-experimental one-group pretest–posttest design to examine the effect of the EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) on students' comprehension of descriptive texts and to determine the relationship between tool usage and comprehension outcomes. This design was considered appropriate because it allowed the researchers to assess students' comprehension before and after the intervention while identifying potential correlations between the use of EMOGI-PDT and learning outcomes.

Participants / Population and Sampling

Ninety (90) Grade 12 Senior High School students from Daguit National High School who were enrolled in the Filipino subject and had access to digital learning tools participated in the study. Participants were selected through purposive sampling to ensure inclusion of students who were directly exposed to the subject matter and capable of using EMOGI-PDT effectively. Inclusion criteria required students to be actively enrolled in the Filipino subject, possess basic digital literacy skills, and provide consent to participate, while students with prior extensive experience in emoji-based learning were excluded to control for bias. Participants' ages ranged from 16 to 18 years, and both male and female students were included, with demographic characteristics recorded to provide a detailed description of the sample.

Research Instruments

To collect data, the study utilized four researcher-developed instruments. The primary instrument was the EMOGI-PDT module, an emoji-based e-tool designed to enhance students' understanding of descriptive texts through interactive and visual exercises. Students' learning outcomes were measured using pre-test and post-test assessments, each consisting of ten items combining multiple-choice and short-answer questions aligned with the learning objectives of descriptive text analysis. A fifteen-item questionnaire using a five-point Likert scale captured students' perspectives, experiences, and engagement with the tool, while an observation checklist comprising ten indicators allowed the researchers to monitor active participation during the intervention. All instruments underwent content validation by experts in Filipino language instruction and educational technology, and feedback from validators was incorporated to refine the tools. Reliability testing was conducted through a pilot study involving ten students from a different class, with pre-test and post-test instruments yielding a Cronbach's Alpha of 0.87, indicating satisfactory internal consistency.

Data Collection

Data were collected over a three-week intervention period at Daguit National High School. In Week 1, EMOGI-PDT was introduced to participants, its purpose explained, and its usage demonstrated. A pre-test was then administered to assess baseline comprehension. During Weeks 2 and 3, students engaged with EMOGI-PDT through structured activities and interactive exercises, including PowerPoint-based emoji tasks. Weekly observations and questionnaires were administered to evaluate engagement and learning experiences. Following the intervention, a post-test measured changes in comprehension to determine the effectiveness of EMOGI-PDT.

Treatment of Data

The collected data were analyzed using descriptive statistics, including mean scores, percentages, and frequency distributions, to summarize student performance and engagement. To determine the statistical significance

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of EMOGI-PDT's (Emoji-Based Pedagogical Descriptive Tool) effect on comprehension, a paired-sample t-test was employed to compare pre-test and post-test results.

Ethical Considerations

Ethical protocols were strictly observed throughout the study. Approval to conduct the study was obtained from the school principal and the school research committee prior to data collection to ensure compliance with institutional requirements. Consent was also secured from both parents and students to guarantee proper participation. Privacy and confidentiality were maintained by safeguarding responses from the questionnaire, pre-tests, post-tests, and observation checklists. Voluntary participation was emphasized, and students were informed of their right to withdraw from the study at any time without penalty or adverse consequences.

RESULTS and DISCUSSION

This section presented and discussed the results of the study based on the research questions. Findings were interpreted in relation to learning theories and relevant empirical studies to explain observed outcomes.

Level of Knowledge in Analyzing Descriptive Texts

To determine the areas of difficulty among students in the subject *Reading and Analysis of Various Texts* in Filipino (the national language of the Philippines), a preliminary survey was conducted with ninety Grade 12 students. Table 1 presented the distribution of students' perceived difficulty across different text types.

Table 1. Lessons in Filipino That Students Found Difficult to Understand (Grade 12)

Lesson	Number of Respondents	Percentage	Rank
Informative	2	2.22%	5.5
Narrative	2	2.22%	5.5
Procedural	7	7.78%	4
Descriptive	56	62.22%	1
Persuasive	12	13.34%	2
Argumentative	11	12.22%	3
Total	90	100%	

The results indicated that descriptive texts were the most challenging for Grade 12 students, with 62.22 percent reporting difficulty, followed by persuasive (13.34%) and argumentative texts (12.22%), while procedural (7.78%), informative (2.22%), and narrative texts (2.22%) were less difficult. These findings suggest that students struggled with descriptive text analysis due to the need for extensive vocabulary and the ability to interpret detailed descriptions of objects, places, and events, whereas informative and narrative texts were more familiar and easier to understand noting that students often faced difficulties in selecting precise vocabulary and constructing meaningful sentences in descriptive writing. Pedagogically, these results highlighted the importance of instructional strategies that target vocabulary development and comprehension, such as the use of interactive and visual tools, including diagrams, images, or emoji-based modules, which scaffold learning by connecting abstract terms to concrete representations. The findings had broader implications for educational stakeholders: teachers could employ visual and interactive aids to enhance comprehension and engagement; students could improve analytical skills and confidence; school leaders could provide access to resources and professional development; curriculum developers could integrate technology-enhanced strategies into Filipino lessons; teacher education programs could train pre-service teachers in multimedia and scaffolding techniques; and policymakers could support equitable access to digital instructional tools. Collectively, these strategies promote inclusive, effective, and engaging learning environments that address students' difficulties in descriptive text analysis while leveraging technology to strengthen reading and writing competencies in Filipino, the national language of the Philippines.

Table of Specification

To evaluate students' knowledge in analyzing descriptive texts, a ten-item objective test was administered, focusing on the lesson identified as the most challenging in the preliminary survey. The test items were carefully aligned with the learning objectives of *Reading and Analysis of Various Texts Leading to Research* and the Most Essential Learning Competencies (MELC) provided by the Department of Education (DepEd, Philippines). A Table of Specification

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(Table 2) was constructed to ensure that each item corresponded to the appropriate cognitive domain—understanding, application, analysis, and synthesis—while also allocating sufficient time for each task.

Table 2. Table of Specification

Topic	Competencies	Time Spent	Understanding	Application	Analysis	Synthesis	Total Number of Items
Analysis of Descriptive Text	1. Identifies the topic of the text.	1	2				2
	2. Identifies the meaning of the text.	1	2				2
	3. Describes the topic using adjectives.	2		3			3
	4. Relates personal experiences to the ideas presented in the descriptive text read.	2			1	2	3
Total		6 hours	4	3	1	2	10

The results of the test (Table 3) revealed that most students scored below the proficient level. Specifically, twenty students scored 1–2 (Limited Knowledge), thirty-nine scored 3–4 (Needs Improvement), twenty-two scored 5–6 (Fairly Proficient), nine scored 7–8 (Proficient), and none achieved scores of 9–10 (Highly Proficient).

Table 3. Students' Knowledge in Analyzing Descriptive Texts

Score	Tally	Interpretation
9–10	0	Highly Proficient
7–8	9	Proficient
5–6	22	Fairly Proficient
3–4	39	Needs Improvement
1–2	20	Limited Knowledge
0	0	No Knowledge
Total	90	

The results indicated that descriptive text analysis remained a significant challenge for many students, as reflected in their low scores: 20 students demonstrated limited knowledge, 39 needed improvement, 22 were fairly proficient, and only 9 were proficient, with none achieving the highly proficient level. These outcomes suggested difficulty in interpreting descriptive language, identifying key details, and connecting content to personal experiences, who observed that students often struggled with selecting precise vocabulary and accurately expressing concepts in descriptive writing. The findings highlighted the necessity of innovative and interactive instructional strategies to enhance comprehension, such as visual aids, e-learning tools, and structured exercises, which scaffolded learning, strengthened vocabulary acquisition, and improved analytical skills. These results supported the development of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool), an e-learning aid incorporating emojis and interactive features to facilitate students' analysis of descriptive texts in Filipino, the national language of the Philippines. Implications for educational stakeholders included teachers' use of visual scaffolding and interactive tools, students' improved engagement and comprehension, school leaders' provision of access to digital resources, curriculum developers' integration of technology-enhanced strategies into lesson plans, teacher education programs' preparation of pre-service teachers in multimedia and scaffolding techniques, and policymakers' support for equitable access to instructional technology, collectively promoting inclusive, effective, and engaging learning environments.

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Proposed Learning Aid for Analyzing Descriptive Texts

To identify the most suitable instructional tool for teaching descriptive text analysis, students were surveyed regarding their preferred learning aids. The results (Table 4) indicated that the majority of students, eighty-one out of ninety (90 percent), recommended the use of emojis offline via PowerPoint, ranking it as their first choice. In contrast, only nine students (10 percent) preferred traditional learning materials, and no students suggested online emoji tools or websites.

Table 4. Proposed Learning Aid for Analyzing Descriptive Texts

Proposed Tool	Number of Responses	Percentage	Rank
Emoji's Offline (via PowerPoint)	81	90%	1
Emoji's Online	0	0	-
Website	0	0	-
Traditional Materials	9	10%	2
Total	90	100%	

The survey results revealed a strong student preference for technology-enhanced learning tools, particularly offline emoji-based modules delivered via PowerPoint, which 81 students (90%) selected as their preferred learning aid. Traditional materials were chosen by only 9 students (10%), reflecting practical challenges such as limited internet access and lack of personal devices. These findings aligned with recent studies, which emphasized that offline, multimodal digital tools, including interactive PowerPoint modules, improved comprehension and engagement in language tasks by providing visual and interactive scaffolds (Colendra & Carada, 2023). The results suggested that teachers could leverage emoji-based e-learning aids to scaffold descriptive text analysis, while providing complementary traditional resources ensured inclusive learning for students with limited technological access. Implications for educational stakeholders extended beyond teachers and students: school leaders could support the provision and maintenance of digital resources, curriculum developers could integrate technology-enhanced tools into lesson plans, teacher education programs could train pre-service teachers in multimedia instructional strategies, and policymakers could promote equitable access to instructional technology, collectively fostering effective, engaging, and inclusive learning environments.

Level of Acceptance of the E-Learning Tool Based on Design and Content from the Students' Perspective

Following the survey on students' preferred learning aids, the EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) offline learning tool was developed using PowerPoint and subjected to a dry run with the Grade 12 Filipino (the national language of the Philippines) class.

Table 5. Level of Acceptance of the Learning Tool in Analyzing Descriptive Texts According to Design (Students)

Design Indicators	Weighted Mean	Interpretation
Appropriate use of emojis	3.76	HA
Well-constructed tool	3.82	HA
Visually appealing colors	3.90	HA
Clear and readable text	4.00	HA
Attractive learning tool	4.00	HA
Easy to use	3.98	HA
Overall Mean	**3.91**	**HA**

Legend:
3.26–4.00 = Highly Acceptable (HA)
2.51–3.25 = Acceptable (A)
1.76–2.50 = Moderately Acceptable (MA)
1.00–1.75 = Not Acceptable (NA)

The students' evaluation of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) indicated a high level of acceptance in both design and content, with an overall mean of 3.91 (Highly Acceptable, HA) for design. The highest

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ratings of 4.00 were observed for "Clear and Readable Text" and "Attractive Learning Tool," while other indicators, including appropriate use of emojis (3.76), well-constructed tool (3.82), visually appealing colors (3.90), and ease of use (3.98), also fell within the highly acceptable range. Content indicators received an overall mean of 3.95 (HA), with "Organized Content of the Learning Tool" scoring 3.99, reflecting students' appreciation of logical sequencing, clarity of language, and relevance of material. These findings aligned with recent research which highlighted that visually structured and interactive e-learning tools, including PowerPoint-based modules with visual scaffolds, enhanced comprehension, engagement, and motivation in language instruction (Colendra & Carada, 2023). The results implied that teachers could replicate these principles by designing instructional materials that combine clarity, interactivity, and aesthetic appeal to support effective learning. Implications for educational stakeholders extended beyond students and teachers: school leaders could ensure the provision and maintenance of multimedia resources; curriculum developers could integrate technology-enhanced tools into lesson plans; teacher education programs could train pre-service educators in multimedia instructional strategies; and policymakers could promote equitable access to digital learning aids. Collectively, these measures would support meaningful, inclusive, and engaging learning experiences in descriptive text analysis.

Table 6. Level of Acceptance of the Learning Tool in Analyzing Descriptive Texts According to Content (Students)

Content Indicators	Weighted Mean	Interpretation
Appropriate words used in the text	3.97	HA
Easy to understand content	3.94	HA
Organized content of the learning tool	3.99	HA
Learning tool helped in comprehension	3.89	HA
Overall Mean	**3.95**	**HA**

Legend:
3.26–4.00 = Highly Acceptable (HA)
2.51–3.25 = Acceptable (A)
1.76–2.50 = Moderately Acceptable (MA)
1.00–1.75 = Not Acceptable (NA)

The students' evaluation of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) based on content indicators revealed an overall mean of 3.95, classified as Highly Acceptable (HA). "Organized Content of the Learning Tool" received the highest rating at 3.99, followed by "Appropriate Words Used in the Text" (3.97), "Easy to Understand Content" (3.94), and "Learning Tool Helped in Comprehension" (3.89), indicating that students found the material clear, logically sequenced, and supportive of their learning needs. These results suggested that EMOGI-PDT effectively guided students through descriptive text analysis, allowing them to focus on understanding content rather than navigating the tool. Recent study confirmed that structured, coherent instructional content combined with visual and interactive elements significantly enhanced students' comprehension, engagement, and retention in language learning (Colendra & Carada, 2023), supporting the use of multimedia strategies to develop analytical and interpretive skills. Pedagogically, the findings implied that teachers should prioritize organization and clarity in instructional materials, particularly for complex text types such as descriptive passages. EMOGI-PDT's structured content and visual cues, such as emojis, aligned with these evidence-based strategies, promoting meaningful and accessible learning experiences. Implications for educational stakeholders extended beyond students and teachers: school leaders could ensure the availability and maintenance of multimedia resources; curriculum developers could integrate technology-enhanced tools into lesson plans; teacher education programs could prepare pre-service educators in multimedia instructional strategies; and policymakers could promote equitable access to digital learning aids. Collectively, these measures supported inclusive, engaging, and effective learning in descriptive text analysis.

Level of Acceptance of the Learning Tool According to Teachers

The acceptance of the EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) was evaluated to address Research Questions 3 and 4, focusing on teachers' perceptions of the tool's design and content, as well as its overall effectiveness in supporting descriptive text analysis. Three Filipino (the national language of the Philippines) teachers assessed the tool using structured evaluation criteria.

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Table 7. Level of Acceptance of the Learning Tool in Analyzing Descriptive Texts According to Design (Teachers)

Design	Weighted Mean	Interpretation
Appropriate use of emojis	3.67	Very Acceptable (VA)
Well-constructed learning tool	3.67	Very Acceptable (VA)
Visually pleasing colors used	4.00	Very Acceptable (VA)
Text is clearly readable	4.00	Very Acceptable (VA)
Learning tool is attractive	4.00	Very Acceptable (VA)
Easy to use learning tool	4.00	Very Acceptable (VA)
Overall Mean	3.89	Very Acceptable (VA)

Legend:
3.26–4.00 — Very Acceptable (VA)
2.51–3.25 — Acceptable (A)
1.76–2.50 — Moderately Acceptable (MA)
1.00–1.75 — Not Acceptable (NA)

The teacher evaluation of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) based on design indicators revealed an overall mean of 3.89, interpreted as Very Acceptable (VA). Indicators such as "Visually Pleasing Colors Used," "Text is Clearly Readable," "Learning Tool is Attractive," and "Easy to Use Learning Tool" received perfect scores of 4.00, while "Appropriate Use of Emojis" and "Well-Constructed Learning Tool" scored 3.67, demonstrating that teachers found the tool visually appealing, coherent, and user-friendly. These findings indicated that EMOGI-PDT's design met educators' expectations by providing structured content, consistent visual elements, and interactive cues, such as emojis, which enhanced student engagement and comprehension. Recent study confirmed that integrating visual, interactive, and multimedia components in instructional materials improved learning outcomes and engagement in secondary language classrooms (Colendra & Carada, 2023), supporting the Cognitive Theory of Multimedia Learning, which posits that students benefit when verbal and visual information are presented coherently. Pedagogically, the results suggested that teachers could confidently use EMOGI-PDT as a supplementary instructional tool, guiding attention to key content, improving readability, and sustaining engagement. Beyond classroom implications, school leaders could facilitate access to multimedia resources; curriculum developers could integrate interactive tools into lesson plans; teacher education programs could train pre-service educators in technology-enhanced instruction; and policymakers could promote equitable access to digital learning aids. Collectively, these measures supported inclusive, engaging, and effective learning in descriptive text analysis.

Table 8. Level of Acceptance of the Learning Tool in Descriptive Text Analysis According to Content (Teachers)

Content	Weighted Mean	Interpretation
Appropriate words used in the text	3.67	Very Acceptable (VA)
Easy to understand the content	4.00	Very Acceptable (VA)
Organized content of the learning tool	4.00	Very Acceptable (VA)
Helped improve students' learning	4.00	Very Acceptable (VA)
Overall Mean	3.92	Very Acceptable (VA)

Legend:
3.26–4.00 — Very Acceptable (VA)
2.51–3.25 — Acceptable (A)
1.76–2.50 — Moderately Acceptable (MA)
1.00–1.75 — Not Acceptable (NA)

The teacher evaluation of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) based on content indicators revealed an overall mean of 3.92, interpreted as Very Acceptable (VA). Indicators such as "Easy to Understand the Content," "Organized Content of the Learning Tool," and "Helped Improve Students' Learning" received perfect scores of 4.00, while "Appropriate Words Used in the Text" scored 3.67, suggesting that teachers found the instructional

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material clear, logically organized, and highly effective in supporting students' comprehension of descriptive texts. The slightly higher content score compared with design (3.89) indicated that educators valued the instructional material itself as a critical contributor to learning outcomes. These results aligned with recent study highlighting that structured digital instructional tools with coherent content and visual supports enhance comprehension, engagement, and motivation in senior high school language learning (Colendra & Carada, 2023). By integrating visual cues such as emojis, EMOGI-PDT provided cognitive scaffolding to support active engagement and meaningful learning, consistent with Mayer's (2021) Cognitive Theory of Multimedia Learning, which emphasizes the integration of verbal and visual information.

From an educational stakeholder perspective, the findings suggested multiple applications: teachers could employ emoji-based and visually scaffolded tools to enhance instruction; students benefited from improved comprehension and engagement; school leaders could support the adoption and accessibility of such technology-enhanced instructional materials; curriculum developers could incorporate similar tools into lesson plans; teacher education programs could provide training on integrating multimedia-based instruction; and policymakers could promote equitable access to digital and interactive learning resources. Collectively, these implications reinforced the potential of EMOGI-PDT to improve teaching practices, student outcomes, and policy-level strategies in Filipino language education.

Effectiveness of EMOGI-PDT

The effectiveness of EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool) in enhancing students' comprehension of descriptive texts was evaluated through pre-test and post-test assessments. Results showed a significant improvement, with a pre-test mean of 4.27 and a post-test mean of 6.85. A paired-sample t-test revealed a t-value of 14.56 and a p-value of 0.000, indicating that the improvement was statistically significant. These findings confirmed that EMOGI-PDT effectively facilitated learning by combining structured content, interactive exercises, and visual cues, supporting meaningful engagement and comprehension in descriptive text analysis. Recent study in digital pedagogy further supports the integration of structured multimedia tools with visual and interactive elements to improve comprehension, engagement, and motivation in senior high school language learning (Colendra & Carada, 2023).

The implications for educational stakeholders are extensive. Teachers could use emoji-based tools and visual scaffolding to enhance instructional strategies, while students benefited from improved engagement, comprehension, and confidence in analyzing descriptive texts. School leaders could support the implementation and equitable access to technology-enhanced learning materials. Curriculum developers could incorporate interactive digital tools into lesson planning, and teacher education programs could provide training on integrating multimedia instructional strategies. Policymakers could advocate for resources and policies that ensure inclusive access to innovative learning tools, reinforcing the alignment of effective teaching practices with modern digital pedagogy and promoting equitable learning outcomes.

Summary of Findings

1. Preliminary assessment revealed that fifty-six students (62.22%) experienced difficulty in analyzing descriptive texts, with test results showing twenty students scored 1–2 (Limited Knowledge), thirty-nine scored 3–4 (Needs Improvement), twenty-two scored 5–6 (Fairly Proficient), and only nine scored 7–8 (Proficient). This highlighted a clear need for targeted instructional support.
2. Survey results indicated that eighty-one students (90%) preferred emojis offline (via PowerPoint) as a learning aid, while nine students (10%) opted for traditional tools. This preference guided the development of EMOGI-PDT alongside a non-digital option to ensure inclusivity.
3. Student evaluation of the tool showed high acceptance, with an overall mean of 3.91 (Very Acceptable, VA) for design and 3.95 (VA) for content, while teacher evaluation resulted in 3.89 (VA) for design and 3.92 (VA) for content. These results demonstrated that both students and teachers perceived EMOGI-PDT as a highly effective and acceptable instructional tool.
4. The effectiveness of EMOGI-PDT was evidenced by the significant improvement in students' comprehension of descriptive texts. Pre-test and post-test assessments revealed a pre-test mean of 4.27 and a post-test mean of 6.85. Statistical analysis using a paired-sample t-test yielded a t-value of 14.56 and a p-value of 0.000, confirming that the improvement in comprehension was statistically significant. These findings indicated that EMOGI-PDT successfully enhanced students' conceptual understanding, facilitated meaningful engagement with descriptive texts, and supported its integration as a supplementary instructional tool in Filipino language classrooms.

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Conclusions

Based on the findings of the study, it can be concluded that the emoji-based e-learning aid, EMOGI-PDT (Emoji-Based Pedagogical Descriptive Tool), served as an effective instructional innovation for enhancing students' comprehension in analyzing descriptive texts. The integration of visual cues and interactive activities improved students' engagement, understanding, and motivation in learning descriptive language structures.

The findings demonstrate that technology-supported instructional strategies, particularly those incorporating visual learning tools such as emojis, may enhance teaching and learning processes in language education. The use of EMOGI-PDT also addressed accessibility concerns by functioning as an offline e-learning tool, thereby supporting inclusive learning environments for students with limited access to digital resources.

The study contributes to educational practice by providing an innovative instructional tool that may assist teachers in improving reading comprehension instruction in Filipino language education. Furthermore, the findings highlight the potential of integrating multimedia learning principles in curriculum implementation and instructional design to support students' analytical skills and language development.

Recommendations

1. Distribution of EMOGI-PDT Modules
   The administration of Daguit National High School may support the reproduction and distribution of EMOGI-PDT modules so that Filipino teachers and students may access the instructional tool for classroom use.
2. Provision of Alternative Learning Materials
   Schools may provide complementary traditional instructional materials for students who do not have access to digital devices or reliable internet connectivity to ensure inclusive learning opportunities.
3. Teacher Training and Professional Development
   Filipino language teachers may participate in orientation or training programs that introduce effective strategies for integrating EMOGI-PDT and similar visual learning tools into classroom instruction.
4. Monitoring and Evaluation of Instructional Tools
   School administrators may establish monitoring and feedback mechanisms to assess the effectiveness of EMOGI-PDT and other instructional innovations in improving students' comprehension and engagement.
5. Integration into Curriculum Planning
   Curriculum developers and school leaders may consider incorporating EMOGI-PDT or similar multimedia learning tools into lesson planning and instructional strategies for the subject *Reading and Analysis of Various Texts* in Filipino to enhance students' comprehension skills.

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