

Effectiveness of Visual Aids in Teaching Grade 2 Pupils in Terms of Interest, Participation, and Learning Retention

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Abstract — This study examined the effectiveness of visual aids in teaching Grade 2 pupils in terms of their interest, participation, and learning retention during the School Year 2025–2026. A descriptive–correlational research design was employed to determine both the levels of these variables and the relationships among them. The participants consisted of sixty-five (65) Grade 2 pupils from Tokitok Elementary School in Cagayan, Philippines, selected through total enumeration. The findings revealed that pupils demonstrated a very high level of interest and high levels of participation and learning retention when visual aids were used during instruction. Visual materials such as pictures, videos, charts, and flashcards effectively captured pupils’ attention, encouraged active involvement, and enhanced their ability to remember lessons. Furthermore, the results showed significant positive relationships among interest, participation, and learning retention, indicating that these variables are interconnected. Specifically, higher levels of interest were associated with increased participation and improved retention of learning. The study concludes that the integration of visual aids is an effective instructional strategy for enhancing engagement and promoting meaningful learning among Grade 2 pupils. It is recommended that teachers consistently incorporate visual materials into their teaching practices to create a more interactive and stimulating classroom environment that supports both immediate understanding and long-term retention of knowledge.

Keywords: *visual aids, interest, participation, learning retention, Grade 2 pupils, elementary education*

I. INTRODUCTION

Education in the early years plays a vital role in shaping a child's cognitive, emotional, and social development. For Grade 2 pupils, the way lessons are presented significantly influences how they understand, process, and retain new information. At this stage, learners are naturally curious, highly visual, and responsive to stimulating learning environments. Effective learning experiences during the early grades are essential because they build the foundation for literacy, comprehension, critical thinking, and memory skills. When pupils fail to develop these skills at an early age, they may experience long-term academic difficulties such as poor reading comprehension, weak memory retention, low classroom participation, and decreased academic performance in higher grade levels. Because of this, educators are encouraged to use instructional strategies that can strengthen learning and engagement among young learners. One of these strategies is the use of visual aids in teaching.

Visual aids are instructional materials that incorporate elements such as pictures, charts, diagrams, flashcards, videos, and multimedia presentations to support learning. These tools help simplify complex ideas and make abstract concepts more concrete, which is especially beneficial for young learners. According to Cromley and Chen (2024), visual materials enhance learners' ability to process and organize information, making them more effective in understanding lessons. Similarly, Teng (2022) emphasized that learners retain information better when it is presented through both visual and verbal formats, highlighting the importance of visual aids in improving comprehension and memory. By strengthening understanding and memory during the early grades, visual aids may also help reduce future learning difficulties related to literacy and weak retention skills. These findings suggest that visual aids are essential tools in facilitating meaningful learning experiences among elementary pupils.

Interest is a crucial factor in the learning process, particularly for Grade 2 pupils who tend to have shorter attention spans. When learners are interested, they are more likely to stay focused, participate actively, and engage in classroom activities. Visual aids can capture attention more effectively through the use of colors, images, and interactive elements, thereby increasing motivation and enthusiasm toward learning. Increased interest at an early age can also encourage

positive attitudes toward schooling and continuous learning as pupils progress to higher grade levels.

Participation is another important element of effective instruction. It allows pupils to interact with lessons, express their ideas, and collaborate with their peers. In classrooms where lessons are not engaging, some pupils may become passive or hesitant to participate. Visual aids can help address this issue by encouraging interaction and providing visual prompts that stimulate discussion and collaboration. Active participation during the early years is important because it develops communication skills, confidence, and deeper understanding, which are necessary for future academic success.

Learning retention, or the ability to remember information over time, is a key indicator of successful teaching. Visual aids support retention by creating strong mental connections through visual representation, making it easier for learners to recall information. This is particularly important for Grade 2 pupils, as they are still developing their memory and comprehension skills. Strengthening retention skills during the early grades can help prevent future learning gaps and difficulties in mastering more advanced lessons.

Despite the recognized benefits of visual aids, their effectiveness in improving interest, participation, and learning retention among Grade 2 pupils still requires further investigation. While some teachers actively integrate visual materials into their instruction, others may face challenges due to limited resources or a lack of training. Therefore, it is important to examine how visual aids influence different aspects of learning in a structured and systematic way.

This study aimed to determine the effectiveness of visual aids in teaching Grade 2 pupils in terms of their interest, participation, and learning retention. The findings of this research could provide valuable insights for educators in improving instructional practices, strengthening early learning foundations, and reducing long-term academic difficulties related to poor literacy and weak memory skills.

Literature Review

Recent literature has emphasized that visual aids play a significant role in enhancing the learning process when they are aligned with instructional goals and learner characteristics. Cromley and Chen (2024) explained that visual materials such as illustrations, diagrams, and animations support comprehension by helping learners organize and process information more effectively. Their review highlighted that visual supports are particularly useful for young learners because they simplify abstract concepts and make them more accessible. This suggests that in elementary classrooms, visual aids are not merely supplementary tools but essential components that can improve how pupils understand and engage with lessons. For Grade 2 pupils, whose cognitive development is still in a concrete stage, the use of visual aids may provide meaningful learning experiences that support both understanding and engagement.

In terms of interest and motivation, several recent studies have found that visual and interactive materials can significantly increase learners' enthusiasm toward classroom activities. Rayan and Watted (2024) reported that the integration of gamified and visually engaging tools in elementary education improved learners' motivation and made lessons more enjoyable. Similarly, Yonanda et al. (2024) found that multimedia-based instructional materials encouraged learners to become more interested and attentive during lessons. These studies generally indicated that when lessons are presented using visually stimulating materials, pupils are more likely to show curiosity and sustain their focus. This is particularly important for young learners, as maintaining interest is a key factor in promoting active learning and preventing disengagement in the classroom.

Participation is another important aspect of effective teaching that has been positively influenced by the use of visual aids. González-Sanz et al. (2023) found that learners responded more positively to teaching approaches that incorporated visual thinking and interactive strategies. The study revealed that pupils were more willing to express their ideas and engage in discussions when visual elements were used as prompts. This suggests that visual aids can help create a more inclusive and participatory learning environment, especially for pupils who may feel shy or hesitant to speak. In the context of Grade 2 classrooms, where learners are still developing

communication skills, visual aids can serve as supportive tools that encourage interaction, collaboration, and confidence in expressing ideas.

Concerning learning retention, research has consistently shown that visual and multimedia materials contribute to better memory and understanding of lessons. Teng (2022) explained that learners retain information more effectively when it is presented through combined visual and verbal formats. In addition, Alyusfitri et al. (2024) found that the use of interactive multimedia materials improved learners' understanding and helped them remember concepts more effectively over time. These findings indicate that visual aids enhance retention by creating strong mental connections and reinforcing learning through multiple sensory inputs. Overall, the reviewed literature suggests that visual aids are effective in supporting interest, participation, and learning retention among elementary pupils, thereby providing a strong foundation for further investigation in the context of Grade 2 learners.

Research Questions

This study aimed to determine the effectiveness of visual aids in teaching Grade 2 pupils in terms of their interest, participation, and learning retention in Cagayan, Philippines.

Specifically, this study sought to answer the following questions:

1. What is the level of pupils' interest when visual aids are used in teaching?
2. What is the level of pupils' participation during lessons when visual aids are utilized?
3. What is the level of pupils' learning retention when taught using visual aids?
4. Is there a significant relationship among pupils' interest, participation, and learning retention when visual aids are used in teaching?

II. METHODOLOGY

Research Design

This study employed a descriptive–correlational research design to determine the effectiveness of visual aids in teaching Grade 2 pupils in terms of their interest, participation, and learning retention. The descriptive aspect was utilized to assess and describe the levels of pupils’ interest, participation, and learning retention when visual aids were used during instruction. Meanwhile, the correlational aspect was applied to examine the relationships among these three variables. This design allowed the researcher to gather relevant data and determine how pupils’ interest, participation, and learning retention were associated with one another in the context of using visual aids in teaching.

The descriptive–correlational design was chosen because the study focused on observing and analyzing existing classroom conditions without manipulating the learning environment or assigning pupils to controlled groups. Unlike an experimental design, which requires the manipulation of variables and the use of control and experimental groups, this study aimed primarily to describe the learning experiences of pupils and identify relationships among variables as they naturally occurred in the classroom setting. Since the study did not intend to establish direct cause-and-effect relationships but rather to examine associations among interest, participation, and learning retention, the descriptive–correlational design was considered the most appropriate and practical approach for the study.

Participants of the Study

The participants of this study consisted of sixty-five (65) Grade 2 learners from Tokitok Elementary School, located in Cagayan, Philippines, during the School Year 2025–2026. The respondents were selected using total enumeration, wherein all members of the target population were included in the study. This approach ensured that every Grade 2 pupil had an equal opportunity to participate, thereby providing a comprehensive representation of the group.

The study was conducted during the School Year 2025–2026 over a period of several weeks in the regular classroom setting where visual aids were integrated into daily instruction. The participants were considered appropriate for the study due to their developmental stage, where visual learning plays a significant role in enhancing understanding and engagement. Their involvement allowed the researcher to gather complete and reliable data in determining the effectiveness of visual aids in teaching in terms of interest, participation, and learning retention.

Instrumentation

This study utilized a researcher-made questionnaire as the primary data-gathering instrument. The questionnaire was designed to measure the pupils' level of interest, participation, and learning retention when visual aids were used in teaching. It consisted of items that were appropriate to the comprehension level of Grade 2 learners. To ensure clarity and better understanding among the respondents, the questionnaire was provided in both English and Tagalog versions. The Tagalog version was used to facilitate easier comprehension and to obtain more accurate responses from the pupils. Before its use, the instrument was reviewed to ensure its suitability and alignment with the objectives of the study.

Analysis of Data

The data gathered in this study were analyzed using both descriptive and inferential statistical methods. Descriptive statistics, specifically mean and standard deviation, were utilized to determine the levels of pupils' interest, participation, and learning retention when visual aids were used in teaching. The following scale was used to interpret the mean scores of the respondents in terms of interest, participation, and learning retention:

Range	Interpretation
1.00 – 1.74	Very Low
1.75 – 2.49	Low
2.50 – 3.24	High
3.25 – 4.00	Very High

To examine the relationship among these variables, the Pearson Product-Moment Correlation Coefficient (Pearson r) was employed. This statistical tool was used to determine the strength and direction of the relationship among pupils' interest, participation, and learning retention.

III. RESULTS AND DISCUSSION

Level of pupils' interest when visual aids are used in teaching

The findings revealed that the overall level of pupils' interest when visual aids were used in teaching Grade 2 pupils was very high, as indicated by the overall mean of 3.25. Most of the statements obtained very high ratings, particularly those related to increased attention, happiness, and excitement in learning, suggesting that visual aids effectively captured pupils' interest and made lessons more engaging. Pupils showed a strong preference for lessons that included pictures, videos, and colorful materials, indicating that these visual elements played a significant role in maintaining their focus and curiosity. Even the lowest-rated item still fell within the high level, which further supports the consistency of positive responses toward the use of visual aids.

These findings imply that integrating visual aids in classroom instruction is a highly effective strategy in enhancing pupils' interest, which is a crucial factor in the learning process. When pupils are interested, they are more likely to be attentive, motivated, and actively engaged in classroom activities. Therefore, teachers are encouraged to regularly incorporate various types of visual materials in their teaching to sustain learners' enthusiasm and create a more stimulating learning environment.

Statements	Mean	Interpretation
1. I like lessons when the teacher uses pictures. <i>(Gusto ko ang aralin kapag gumagamit ang guro ng mga larawan.)</i>	3.32	Very High
2. I enjoy looking at charts and drawings in class. <i>(Nasisiyahan akong tumingin sa mga tsart at guhit sa klase.)</i>	3.18	High
3. I feel happy when visual aids are used. <i>(Masaya ako kapag may ginagamit na visual aids.)</i>	3.35	Very High
4. I pay more attention when I see pictures or videos. <i>(Mas nakikinig ako kapag may mga larawan o bidyo.)</i>	3.40	Very High
5. I am excited to learn when there are colorful materials. <i>(Nasasabik akong matuto kapag may makukulay na materyales.)</i>	3.28	Very High
6. I like watching videos during lessons. <i>(Gusto kong manood ng bidyo habang may aralin.)</i>	3.30	Very High
7. I feel bored when there are no visual aids. <i>(Naiinip ako kapag walang visual aids.)</i>	3.10	High
8. I enjoy learning when the teacher shows images. <i>(Nasisiyahan akong matuto kapag may ipinapakitang larawan ang guro.)</i>	3.25	Very High
9. I am interested in the lesson when there are drawings. <i>(Nagiging interesado ako sa aralin kapag may mga guhit.)</i>	3.22	High
10. I like it when the teacher uses flashcards. <i>(Gusto ko kapag gumagamit ang guro ng flashcards.)</i>	3.15	High
11. I feel curious when I see pictures in the lesson. <i>(Nagiging mausisa ako kapag may mga larawan sa aralin.)</i>	3.27	Very High
12. I want to learn more when visual aids are used. <i>(Gusto kong matuto pa kapag may visual aids.)</i>	3.24	High
13. I like lessons with visual materials better than plain lessons. <i>(Mas gusto ko ang aralin na may visual kaysa sa simpleng aralin lang.)</i>	3.19	High
14. I feel excited to join class when there are visuals. <i>(Nasasabik akong pumasok sa klase kapag may visual aids.)</i>	3.26	Very High
15. I enjoy school more when visual aids are used. <i>(Mas nasisiyahan ako sa paaralan kapag may visual aids.)</i>	3.21	High
Mean	3.25	Very High

Level of pupils' participation during lessons when visual aids are utilized

The findings revealed that the overall level of pupils' participation during lessons when visual aids were utilized was high, as indicated by the overall mean of 3.14. Most of the statements were rated at a high level, showing that pupils were generally active in responding, joining activities, and engaging with the lesson when visual aids were present. Notably, some indicators, such as listening and responding to visuals, enjoying group work, and following instructions, obtained very high ratings, suggesting that visual aids effectively encouraged interaction and responsiveness among pupils. However, slightly lower ratings in items related to speaking and confidence indicate that while pupils were participative, some may still need support in expressing themselves more actively in class.

These findings imply that visual aids are effective in promoting active participation among Grade 2 pupils by making lessons more interactive and engaging. When pupils are exposed to visual materials, they are more likely to respond, collaborate, and involve themselves in classroom activities. Therefore, teachers should continue to incorporate visual aids in their instruction and create supportive classroom environments that further encourage pupils to confidently express their ideas and actively participate in learning.

Statements	Mean	Interpretation
1. I raise my hand when I see pictures in the lesson. <i>(Nagtataas ako ng kamay kapag may larawan sa aralin.)</i>	3.05	High
2. I answer questions when visual aids are used. <i>(Sumasagot ako sa tanong kapag may visual aids.)</i>	3.12	High
3. I join class activities when there are visuals. <i>(Sumasali ako sa mga gawain kapag may visual aids.)</i>	3.20	High
4. I like to share my ideas when I see pictures. <i>(Gusto kong ibahagi ang aking ideya kapag may larawan.)</i>	3.08	High
5. I talk more in class when there are visual aids. <i>(Mas nagsasalita ako sa klase kapag may visual aids.)</i>	2.95	High
6. I join group activities when there are charts or images. <i>(Sumasali ako sa pangkatang gawain kapag may tsart o larawan.)</i>	3.15	High
7. I listen and respond when the teacher shows visuals. <i>(Nakikinig at sumasagot ako kapag may ipinapakitang visual ang guro.)</i>	3.25	Very High
8. I feel confident to speak when I see pictures. <i>(Nagkakaroon ako ng lakas ng loob magsalita kapag may larawan.)</i>	3.00	High
9. I participate more when lessons have videos. <i>(Mas nakikilahok ako kapag may bidyo ang aralin.)</i>	3.18	High
10. I like to point and explain what I see in pictures. <i>(Gusto kong ituro at ipaliwanag ang nakikita ko sa larawan.)</i>	3.10	High
11. I answer faster when I understand the visuals. <i>(Mas mabilis akong sumasagot kapag naiintindihan ko ang visual.)</i>	3.22	High
12. I enjoy working with classmates using visual aids. <i>(Nasisiyahan akong makipagtulungan sa kklase gamit ang visual aids.)</i>	3.28	Very High
13. I ask questions when I see something interesting. <i>(Nagtatanong ako kapag may nakikita akong kawili-wili.)</i>	3.05	High
14. I follow instructions better when there are visuals. <i>(Mas nasusunod ko ang panuto kapag may visual aids.)</i>	3.30	Very High
15. I actively join the lesson when visual aids are used. <i>(Aktibo akong nakikilahok sa aralin kapag may visual aids.)</i>	3.19	High
Mean	3.14	High

Level of pupils' learning retention when taught using visual aids

The findings revealed that the overall level of pupils' learning retention when taught using visual aids was high, as indicated by the overall mean of 3.21. Several statements obtained very high ratings, particularly those related to remembering lessons better, understanding concepts more clearly, and learning faster when visual aids were used. This suggests that visual materials such as pictures, videos, and diagrams helped pupils retain information more effectively and supported their comprehension of lessons. Although some items were rated at a high level, the results consistently showed that visual aids contributed positively to pupils' ability to recall and understand what they had learned, even after some time had passed.

These findings imply that the use of visual aids is an effective instructional strategy in enhancing pupils' learning retention. When lessons are supported by visual materials, pupils are more likely to form strong mental connections, making it easier for them to remember and apply what they have learned. Therefore, teachers should continue to incorporate visual aids in their teaching practices to improve not only immediate understanding but also long-term retention of knowledge among Grade 2 pupils.

Statements	Mean	Interpretation
1. I remember lessons better when there are pictures. <i>(Mas natatandaan ko ang aralin kapag may mga larawan.)</i>	3.30	Very High
2. I can recall what I learned from visual materials. <i>(Naaalala ko ang aking natutunan mula sa visual na materyales.)</i>	3.18	High
3. I understand lessons better when I see images. <i>(Mas nauunawaan ko ang aralin kapag may mga larawan.)</i>	3.25	Very High
4. I can explain lessons after seeing visual aids. <i>(Naipapaliwanag ko ang aralin pagkatapos makita ang visual aids.)</i>	3.15	High
5. I remember what the teacher showed in class. <i>(Naaalala ko ang ipinakita ng guro sa klase.)</i>	3.22	High
6. I can answer questions after watching videos. <i>(Nasasagot ko ang mga tanong pagkatapos manood ng bidyo.)</i>	3.27	Very High
7. I remember lessons longer when visuals are used. <i>(Mas tumatagal sa isip ko ang aralin kapag may visual aids.)</i>	3.24	High
8. I understand difficult lessons when I see pictures. <i>(Mas nauunawaan ko ang mahirap na aralin kapag may larawan.)</i>	3.19	High
9. I can recall details from charts and diagrams. <i>(Naaalala ko ang mga detalye mula sa tsart at diagram.)</i>	3.12	High
10. I learn faster when I see visual aids. <i>(Mas mabilis akong natututo kapag may visual aids.)</i>	3.28	Very High
11. I remember examples shown in pictures. <i>(Naaalala ko ang mga halimbawang ipinakita sa larawan.)</i>	3.21	High
12. I can retell the lesson after seeing visuals. <i>(Naikukuwento ko muli ang aralin pagkatapos makita ang visual aids.)</i>	3.14	High
13. I understand lessons clearly with visual aids. <i>(Malinaw kong nauunawaan ang aralin kapag may visual aids.)</i>	3.26	Very High
14. I do better in class when visuals are used. <i>(Mas gumagaling ako sa klase kapag may visual aids.)</i>	3.20	High
15. I can remember lessons even after a few days when visuals are used. <i>(Naaalala ko ang aralin kahit ilang araw na ang lumipas kapag may visual aids.)</i>	3.17	High
Mean	3.21	High

Relationship among pupils' interest, participation, and learning retention when visual aids are used in teaching

The analysis revealed that there were significant positive relationships among pupils' interest, participation, and learning retention when visual aids were used in teaching. The relationship between interest and learning retention showed the strongest association, followed by interest and participation, and participation and learning retention. These findings suggest that as pupils become more interested in the lesson through the use of visual aids, they are more likely to participate actively and retain what they have learned. This implies that interest plays a crucial role in enhancing both engagement and memory, while participation also contributes to reinforcing learning retention. Therefore, the integration of visual aids not only improves individual learning variables but also strengthens their interconnectedness, leading to more effective learning outcomes.

These findings are supported by several related studies. Rayan and Watted (2024) found that the use of visually engaging and interactive tools increased pupils' motivation and participation, which in turn improved their learning outcomes. Similarly, Teng (2022) emphasized that learners exposed to visual and multimedia inputs demonstrated better retention and understanding, highlighting the link between engagement and memory. In addition, Cromley and Chen (2024) explained that visual supports enhance comprehension by helping learners process information more effectively, which can lead to increased interest and improved retention. These studies collectively support the present findings, indicating that visual aids play a vital role in promoting interconnected improvements in pupils' interest, participation, and learning retention.

The findings further imply the need for schools to strengthen teacher training programs and curriculum planning that emphasize the effective integration of visual aids and multimedia strategies in classroom instruction. Teachers may benefit from professional development activities focused on designing and utilizing engaging visual materials that can stimulate learners' interest and encourage active participation. Likewise, curriculum planners may incorporate more visual-based and interactive learning activities into lesson guides and instructional materials to support

improved learning retention. By aligning teacher training and curriculum development with the effective use of visual aids, schools can directly apply these findings to create more engaging, participatory, and meaningful learning experiences for pupils.

Variable	Coefficient (r)	Probability	Statistical Inference
Interest * Participation	0.680	0.000	Significant
Interest * Learning Retention	0.720	0.000	Significant
Participation * Learning Retention	0.650	0.000	Significant

*Tested using Pearson Correlation at 0.005 level of significance

IV. CONCLUSION

The study concluded that the use of visual aids in teaching Grade 2 pupils was effective in enhancing their interest, participation, and learning retention. Pupils demonstrated a very high level of interest and high levels of participation and learning retention when visual aids were utilized during instruction. Furthermore, the results revealed significant relationships among interest, participation, and learning retention, indicating that these variables are interconnected and collectively contribute to improved learning outcomes. This suggests that when pupils are more interested, they tend to participate actively and retain information more effectively. Therefore, the integration of visual aids in classroom teaching is a valuable instructional strategy that promotes engagement and supports meaningful and lasting learning among young learners.

REFERENCES

- [1.] Alyusfitri, R., Gistituati, N., Yerizon, Y., Fauzan, A., & Yarman, Y. (2024). The effectiveness and relationship of student responses toward learning outcomes using interactive multimedia-based e-modules in elementary schools. *International Electronic Journal of Elementary Education*, 16(5), 573–584. <https://doi.org/10.26822/iejee.2024.354>
- [2.] Cromley, J. G., & Chen, R. (2024). Instructional support for visual displays: An updated literature review. *Technology, Knowledge and Learning*, 29, 1191–1205. <https://doi.org/10.1007/s10758-023-09699-x>
- [3.] González-Sanz, M., Wilson-Daily, A. E., Feliu-Torruella, M., & Ibanez-Etxeberria, A. (2023). What type of learning methods do pupils prefer in museums and at school? Elementary school pupils' perceptions of visual thinking strategies. *SAGE Open*, 13(4). <https://doi.org/10.1177/21582440231209690>
- [4.] Rayan, B., & Watted, A. (2024). Enhancing education in elementary schools through gamified learning: Exploring the impact of Kahoot! on the learning process. *Education Sciences*, 14(3), 277. <https://doi.org/10.3390/educsci14030277>
- [5.] Teng, M. F. (2022). The effectiveness of multimedia input on vocabulary learning and retention. *Innovation in Language Learning and Teaching*, 17(3), 738–754. <https://doi.org/10.1080/17501229.2022.2131791>
- [6.] Yonanda, D. A., Islahuddin, I., Ramadhani, F. A., Febriyanto, B., Saputra, D. S., Yuliati, Y., & Nurhidayat, E. (2024). Improving motivation and learning outcomes of elementary school students with multimedia-based interactive media. *Profesi Pendidikan Dasar*, 11(3), 197–210. <https://doi.org/10.23917/ppd.v11i3.5761>