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Project CONAN: Enhancing Grade 8 Students' Retention in Learning History using Contextualized Animation

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ABSTRACT

The study's primary goal is to enhance student retention in learning World History by employing Contextualized Animation as a method of instruction. Contextualized animation is a pedagogical approach that utilizes a comic-like format, incorporating pictures and narratives relevant to the lesson content. There are 39 respondents in the controlled group and 39 respondents in the experimental group. The study reveals that, before the intervention, both groups exhibited negative *t*-values, indicating a decrease in scores from the pre-test to the post-test. The experimental group scored slightly higher (11.97) than the control group (11.49). The results indicated that Grade 8 students had a baseline level of historical information retention, highlighting the need for effective intervention measures to enhance learning outcomes. However, after the intervention, the comparison between the pre-test and post-test scores of both the controlled and experimental groups offered valuable insights into the effectiveness of the intervention employed. The results revealed a remarkable level of significance with a *p*-value of .000 for both the pre-test and post-test scores of both groups, indicating a substantial and meaningful impact of the intervention. There was a shift in *t*-values, with the experimental group demonstrating a more pronounced improvement compared to the control group. These findings underscored the effectiveness of the intervention, Project CONAN, in enhancing historical knowledge retention among Grade 8 students.

Keywords: *Classroom-based action research, contextualized animation, education, retention in learning history, social studies*

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INTRODUCTION

Memory retention is of paramount importance in the academic life of students. Aprilia and Aminatun (2022) define memory as a mental process that involves acquiring, storing, or retrieving information. On the other hand, one of the problems teachers have encountered is that students need to remember the lesson being taught, resulting in low grades on standardized tests and poor academic performance (Grnaz, 2020). Decreased retention resulted from a lack of active learning, as opposed to traditional lecture methods where students passively received information (Wright et al., 2019).

The idea of motivating and engaging learners is the foundation for the usage of contextualized animation in education. Traditional methods, including lectures, narratives, and discussions, were primarily employed by the teachers (Sivarajah, 2019). It was concluded that a new strategy for teaching history is needed in light of these factors. Contextualized animation can be used more effectively to engage all students, enhance their understanding of the material, and foster a sense of accomplishment and involvement in the learning process (Crosby, 2023).

According to Castro (2023), the historical narrative formula of comics, which should undoubtedly be considered, is another technique of recounting the past that is inextricably related to the historian's narrative discourse. As the learner interacts with the world through an imaginary lens, they are encouraged to seek information independently, recognizing the importance of confronting and contrasting documentary sources, which promotes discussion and interpretation of the narrative, resulting in an improved perspective on the role of history in their education (Galera, 2023).

Furthermore, Azhimia (2023) highlights the efficacy of animated stories in enhancing knowledge acquisition by offering a combination of visual and auditory materials. This study emphasizes the role of animated narratives in contextualizing complex concepts, affirming their significance as a valuable tool for facilitating meaningful learning experiences. The integration of visual and auditory elements within animated stories is proposed as a strategy that enables the comprehension and recall of information, thereby contributing to successful

knowledge acquisition among learners (Bangroo, 2023).

Additionally, a study by Enario et al. (2022) found that visual aids increase the likelihood of students retaining the information. Moreover, by associating concepts with relevant visuals, students retain information in their long-term memory. Ugbamen et al (2022) added that most students learn best when taught with pictures or videos. This is because images are more appealing than plain words, especially to young minds that are imaginative and observant. In the digital age, audiovisual learning is an effective method for content acquisition and instruction delivery. This is because learners perceive and retain information more readily when it is presented visually (Tabura and Marcia, 2025). In the article "Using Comics to Teach History," Arnold (2017) notes that some of the best comics utilize powerful storytelling and illustrations to teach us about our past. Comics themselves can be helpful for teaching civics and social studies, while also serving as historical artifacts. The Knilt Project (2021) also stated that students can see and experience historical events and perspectives from a more diverse population and from various viewpoints through graphic books.

In Vietnam, education has historically emphasized adherence to textbooks, which may impact students' ability to develop an understanding of historical events (Tran and Nguyen, 2022). This suggests that history instruction must be revised to become more relevant and engaging, with an emphasis on interactive approaches to teaching and a focus on deep understanding, the researchers argue (Levstik and Barton, 2022).

In the Philippines, the education system remains teacher-dominated, which explains the country's low performance in large-scale assessments, such as PISA (Dizon, 2020). This calls for using various teaching approaches to help students develop historical thinking skills and strengthen their memory mastery. It suggests that students' low memory level in learning World History is caused not only by their inability to acquire the necessary skills but also by the ineffectiveness of the instructional materials used by teachers (Novikov, 2020).

Locally, the researchers observed that the Grade 8 students in Maragusan National High School have a low retention level in learning history. As a result, they have low grades and performance. The researchers are particularly interested in conducting this investigation to bridge the gap in retention and effective teaching and learning strategies. The researcher employed contextualized animation in every lesson to see if there was an improvement in the memory stability of the history lesson.

This study investigated the retention levels of Grade 8 students in history classes at Maragusan National High School, focusing on both a controlled and an experimental group. It aimed to assess and compare the students' retention before and after an educational intervention. Specifically, the study aimed to determine the initial retention levels of both groups, measure any changes following the intervention, and identify whether there was a significant difference between the pre-test and post-test results for each group.

Theoretical/ Conceptual Framework

This study was grounded in Dual Coding Theory (DCT), proposed by Allan Paivio (1971), which suggests that students' learning and memory retention are improved when verbal information is integrated with nonverbal cues, such as pictures or visuals. The theory emphasizes the concept that information is represented and processed through two interrelated systems: verbal and nonverbal. The verbal system is defined by the word logogens, which store linguistic data, such as text and sounds. The nonverbal system is represented by the phrase "imagens," which processes visual information, such as pictures or graphics.

Furthermore, this theory develops a principle that states recall and recognition are enhanced by presenting information in both visual and verbal forms. According to Casiano and Palacio (2022), the use of comic strips in education is based on the idea of enhancing student engagement and motivation. The incorporation of comic books into history classes has become a popular and effective method of engaging students in their learning. These visually appealing stories combine historical information with artistic elements, creating an engaging learning environment that captures students' interest.

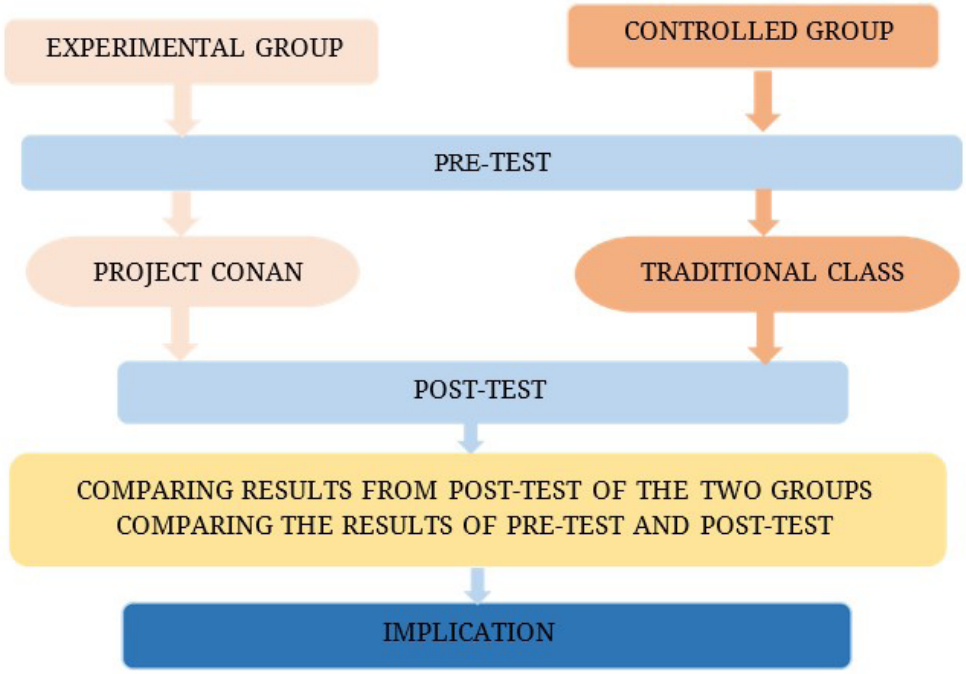

Figure 1. Conceptual framework of the study.

The conceptual framework highlighted the entire roadmap of the study. Two separate groups must be chosen: the experimental group and the control group. The first phase consists of a pre-test assessment designed to determine the participants' initial level of comprehension of the material. The controlled group was guided by traditional instruction, while the experimental group received contextualized content on the topic through Project CONAN. Both groups took a post-test assessment after the instructional interventions. To identify learning outcomes, the researchers examined the post-test results of the two groups. This study aims to provide evidence on how students absorb material when taught using contextualized animation.

MATERIALS AND METHOD

The Maragusan National High School served as the study's location. Barangay Poblacion, Maragusan, Davao de Oro, roughly located at 7.3170, 126.1257 on the island of Mindanao, where the school is situated. Therefore, it was estimated that the elevation coordinates are 674.8 meters or 2,213.2 meters above mean sea level. This was bounded by the west district of Maragusan, situated at Talisay Street, Poblacion, Maragusan, Davao de Oro, and was the only mega school in the local area. Maragusan National High School, the only mega school in the local area, likely serves a diverse student body with various backgrounds and learning requirements. The school's implementation enhances the study's success across a diverse student body, which also contributes to the greater generalizability of the findings. The eighth grade is a crucial time in a student's academic career since it introduces them to increasingly complex ideas in various courses, including history. They are, therefore, a perfect target population for interventions aimed at improving knowledge recall, such as contextualized learning materials like Project CONAN, because evaluating the intervention's efficacy at this grade level is highly relevant to its intended application and impact.

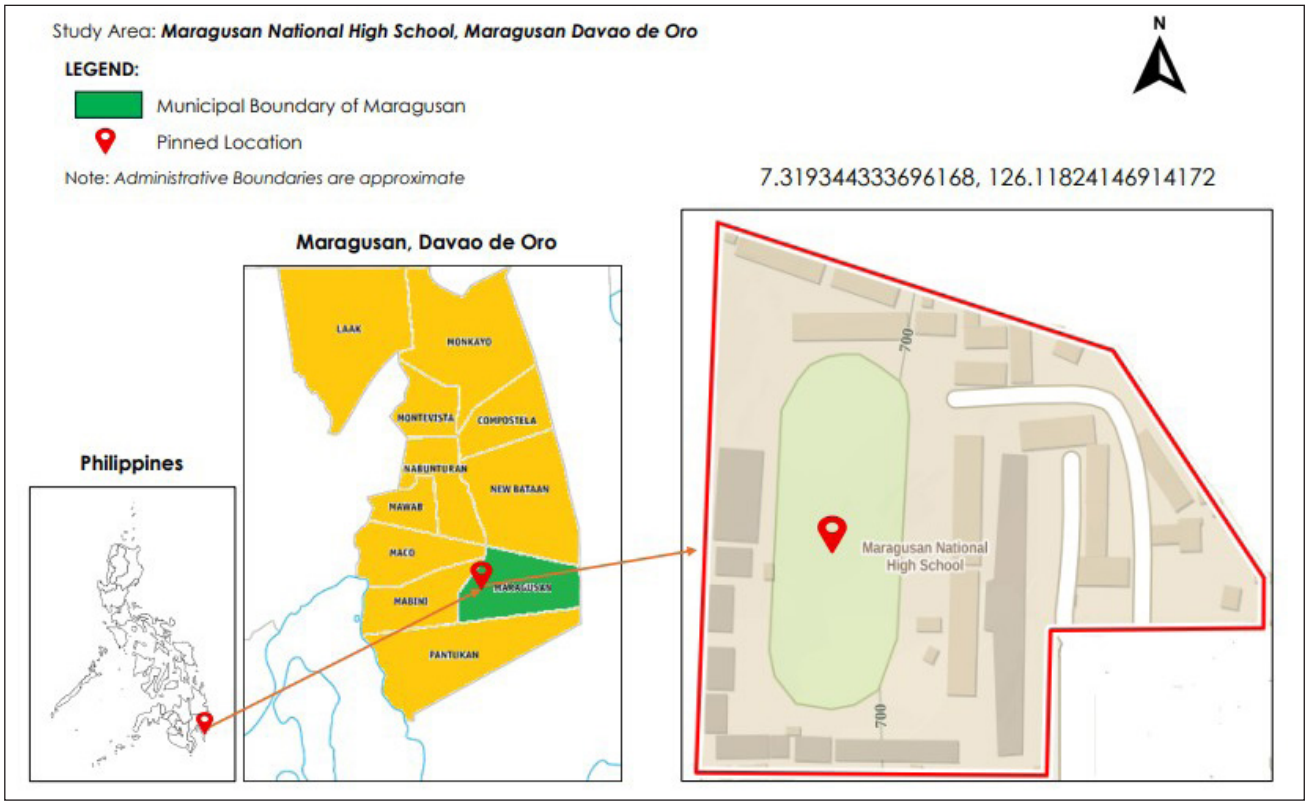

Figure 2. Maragusan National High School Map.

Data collection

Students in Grade 8 of Maragusan National High School are the main subject of this action research project. Section Gmelina is the control group, and Section Acacia is the experimental group. This study aims to compare and evaluate how the effectiveness of CONAN, an intervention, works in enhancing students' retention in Section Acacia versus Section Gmelina in the experimental group. For Project CONAN, Section Acacia, with 39 students, is purposefully selected to directly investigate the effects of the intervention in a particular classroom setting. This experimental group offers a comprehensive explanation of how the intervention impacts students' mastery of concepts. In contrast, Section Gmelina, with 39 students, serves as the control group, providing a baseline against which the experimental group's outcomes can be compared.

This research design enables a rigorous evaluation of the intervention's impact by minimizing external variables and isolating the specific influence of the educational strategy on students' retention and learning outcomes within the Grade 8 level. The respondents of this study are a total of 78 students.

This study utilized a quasi-experimental design. The quasi-experimental approach serves as the method of evaluating the underlying effect of an intervention on a target population without random assignment (Thomas, 2023). This study aimed to determine the importance of contextualized materials in the student's knowledge stability in learning history. In experimental research, units are assigned to treatment and control groups. The basis of the sampling method is the theory of retrospective pre-test and post-test design by Koele and Hoogstraten (1987), which pertains to the non-randomization sampling method. In this method, a particular group is selected to receive the intervention,

designated as the experimental group. The study is strategically divided into two sections: Gmelina (control group, n = 39) and Acacia (experimental group, n = 39).

The treatment group, also known as the experimental group, received the treatment in the Grade 8 section of Acacia, which the researcher was studying. Conversely, the control group received a placebo or no treatment at all, which is the Grade 8 section Gmelina. It aimed to identify the cause-and-effect relationship between the implementation of Project CONAN and student retention in history learning.

Respondents typically fall within a specific age range, usually aligned with the age range of Grade 8 students, which generally is around 13 to 14 years old. Moreover, respondents should have a regular attendance record in classes to ensure they receive consistent exposure to the intervention and assessments.

However, to ensure uniformity and comparability between the experimental and control groups, participants must be in the 8th grade. The research aims may not be intellectually or developmentally appropriate for students in other grades. Furthermore, to ensure that the effects of the intervention are assessed in a suitable academic setting, students who fall or rise notably above or below the expected cognitive level for Grade 8 may be excluded.

Respondents may voluntarily withdraw from the study for personal reasons, lack of interest, or other reasons. Their data may then be excluded from the analysis to maintain the study's integrity. Additionally, respondents may need to be withdrawn from the study due to unforeseen circumstances such as illness, relocation, or other factors that prevent their continued participation. To avoid bias, their data might not be included in the analysis.

To further uphold fairness, incentives such as a set of ballpens were provided equally to all groups to ensure that these did not unduly influence participation. Additionally, documentation was undertaken to validate and establish the reliability of the diagnostic instruments, thereby enhancing transparency and strengthening the credibility of the findings.

The researchers conducted pre-tests and post-tests on the two selected sections, which served as the control and experimental groups. The researchers evaluated whether Project CONAN is an effective and efficient learning material through this approach.

In this study, researchers created diagnostic test questionnaires during the pre-implementation phase. Afterward, during the post-implementation phase, the researchers utilized the prepared questionnaires based on the topics covered throughout the implementation.

In the first session, the controlled and experimental groups of the study took the pre-test. The experimental group integrated the formulated contextualized animation in every topic from the second session to the ninth session. Subsequently, the control group received the traditional method of instruction. The pre-test results served as the basis for the researchers to identify the level of the students' retention in learning history, whether it is poor, average, good, or excellent.

Table 1. Parameter Limits of scores of the 40-item tests.

Range of Scores	Level	Interpretation
1.00 – 9.00	Very Low	Never observed
9.01 – 17.00	Low	Rarely observed
17.01 – 25.00	Moderate	Sometimes observed
25.01 – 33.00	High	Often observed

Lastly, to determine the significant difference between the pre-test and post-test scores of the controlled and experimental groups, and to determine if Project CONAN, as an intervention, improves the students' retention of the respondents in learning history. The researchers utilized the paired t-test to test.

Data analysis

This study employed a pre-test and post-test to measure the level of memory of grade 8 students in learning history over a 10-session period. The researchers analyzed, tabulated, tallied, and interpreted the data results. The results of the pre-test and post-test from the experimental group and control group were computed and compared to determine if the result of the post-test is higher than the pre-test; then, there is significant progress.

Mean. This pertains to the mean value of the score within each respective category. The computation of the mean shall be performed utilizing the formula. The mean represents the average scores of both our controlled and experimental groups, providing insight into the overall performance of each group.

Standard Deviation. This was a statistical tool, calculated as the square root of the variance, that assessed the dispersion or deviation of data from the mean. This statistical measure provides valuable insights into the distribution of scores and the degree of variability present in our data, which is essential for drawing meaningful conclusions from this study.

Paired t-test. This is used to test whether the mean average from the two sections is significantly different within 10 sessions that the researchers conducted to determine if the intervention used is effective or not.

RESULTS

The findings of this study revealed the retention level of Grade 8 students. Raw scores were tabulated to determine the mean score and standard deviation. The outcome was then described and interpreted in accordance with the Statement of the Problem (SOP) presented in the previous chapter.

Level of students' retention in learning history before the implementation of the intervention and traditional method

Before integrating Project CONAN as an intervention for the experimental group and the traditional method of teaching for the control group, the respondents were given a 40-item pre-test to be administered before the session.

Table 2. Level of Student's Retention in Learning History Before the Implementation of the Intervention and Traditional Method.

Group	Mean	SD	Descriptive equivalent
Controlled	11.49	3.15	Low
Experimental	11.97	2.71	Low

Table 2 presents the scores of the Grade 8 students during the pre-test conducted by the researchers. Pre-test findings show that neither the experimental nor the control groups retained much information about their past experiences. The pre-test was administered before any intervention was implemented. Both groups were classified in the same descriptive way, even though their average mean scores were marginally different, with the experimental group scoring slightly higher (11.97) than the control group (11.49). The results indicate that Grade 8 students have a baseline level of historical information retention, highlighting the need for effective intervention measures to enhance learning outcomes.

Level of students' retention in learning history after the implementation

After the ten sessions on the controlled group using the traditional method and implementing the PROJECT CONAN to the experimental group of the study as an intervention, the respondents were given a 40-item post-test after the last session.

Table 3. Level of Student's Retention in Learning History After the Implementation.

Group	Mean	SD	Descriptive Equivalent
Controlled	17.19	3.62	Low
Experimental	36.22	3.01	Very High

Table 3 presents the scores of the Grade 8 students during the post-test conducted by the researchers. The post-test results following the intervention reveal a substantial difference in the performance of Grade 8 students between the controlled group, which adhered to traditional teaching methods, and the experimental group, which received the intervention. The controlled group exhibited an average mean score of 17.19, with a standard deviation of 3.62, categorizing their performance as rarely observed, suggesting poor retention following the implementation of traditional teaching methods.

In contrast, the experimental group displayed a remarkable average mean score of 36.22, accompanied by a standard deviation of 3.01, categorizing their performance as always observed. This striking difference suggested that the intervention implemented with the experimental group had a substantial impact on their learning outcomes in history. The considerable increase in both the average mean score and the standard deviation within the experimental group implied not only an overall improvement in performance but also a higher level of consistency among students' scores.

The descriptive equivalent of very high for the experimental group's performance underscores the effectiveness and strong memory stability after undergoing the Project CONAN intervention. The controlled group's low knowledge recall level stemmed from a lack of engagement and interest in the teaching method utilized. In contrast, the experimental group's notably high retention level was attributed to the effective intervention, which substantially enhanced their performance in history learning.

Differences between the pre-test and post-test scores of the controlled group and experimental group

The correlation coefficient indicated the strength of the relationship between two different variables. In this study, the two variables are the pre-test and post-test scores of the controlled and experimental groups.

Table 4. Differences between the pre-test and post-test scores of the Controlled Group and Experimental Group.

Before intervention	*t*-value	Df	*p*-value	Decision
Controlled Group Experimental Group	-7.07	35	.000	Significant
After Intervention Controlled Group Experimental Group	-32.95	35	**.000**	Significant

The results, as shown in Table 4, revealed a remarkable level of significance with a *p*-value of .000 for both the pre-test and post-test scores of both groups, indicating a substantial and meaningful impact of the intervention. Before the intervention, both groups exhibited negative *t*-values, indicating a decrease in scores from the pre-test to the post-test.

However, after the intervention, there was a significant shift in *t*-values, with the experimental group demonstrating a more pronounced improvement compared to the control group. These findings underscore the effectiveness of the intervention, Project CONAN, in enhancing historical knowledge retention among Grade 8 students.

DISCUSSIONS

This study followed a detailed action plan designed to guide the entire research process, from setting objectives to assessing outcomes, with the primary goal of testing the

effectiveness of Project CONAN in improving students' retention in history. The project was developed as an engaging alternative to traditional, text-heavy Araling Panlipunan materials, using a comic-style format with animations, contextual stories, activities, and colorful graphics to capture student interest.

Moreover, the researchers prepared validated lesson plans and assessment tools, secured approval from the school principal, advisers, and the Research Ethics Committee, and obtained informed consent from participants. Implementation included an orientation, distribution of PROJECT CONAN materials, and a structured ten-session sequence with pre-tests, eight lessons, and a final post-test to measure learning retention.

The findings of this study indicate that active learning methodologies, in contrast to the prevalent passive, lecture-centric methods in conventional classrooms, meaningfully improve retention in learning history among students (Boedeker et al, 2025). This investigation demonstrates that when students engage actively with historical content, such as contextualized animations, they are more likely to understand and retain it (Ginting et al., 2024). This differs from prior studies that focused on passive content dissemination and mechanical memorization.

This corresponds with Wright et al. (2019), who identified the drawbacks of passive learning; nonetheless, Project Conan advances by offering a tangible, classroom-validated framework that surpasses previous methodologies. The enhanced outcomes also contest the presumption that recall problems are exclusively attributable to student motivation or cognitive constraints, instead emphasizing instructional design as a pivotal factor (Halil and Muhammet,2024)

Moreover, this study situates its findings within the context of prior research. It highlights their practical applicability in the classroom, providing not only validation of existing ideas but also advancing instructional innovation in social studies education. The following are key discussions based on the findings of this study.

In this study, it became evident that the traditional teaching methods employed were ineffective in facilitating meaningful retention among students in both the control and experimental groups. The descriptive level of 'low' indicates a significant gap in understanding and recall, underscoring the need for a pedagogical shift.

This result can be anchored in the study by Novikov (2020), who concluded that students' low level of memory in learning World History is caused not only by their inability to learn the skills, but also by the ineffectiveness of the instructional materials used by teachers. Furthermore, it emphasizes that it's not solely the students' inability to grasp the subject matter that leads to low mental recall levels (Kose, 2022). Instead, the study highlights the importance of examining the teaching methods and materials used by educators (Apdelmi and Sodjo, 2025). Moreover, the study by Wright et al. (2019) suggests that a decreased memory level results from a lack of active learning, instructional methods that require students to engage in m eaningful learning activities and think critically about what they are doing, in contrast to traditional lecture methods where students passively receive information. Without opportunities for active participation and reflection, students may struggle to retain the information presented during lectures (Agtang and Patriarca, 2025).

To ensure that educational resources are engaging and relevant to the interests and learning preferences of students, this reform should involve curriculum enhancement initiatives (Galicia, 2023). Additionally, providing educators with access to professional development opportunities can equip them with the knowledge and tools necessary to effectively employ cutting-edge teaching techniques (Malunes and Narcilla, 2025). These implications highlight how crucial it is to implement student-centered teaching and learning strategies, encourage participation, and offer the required assistance to improve retention and academic achievement (Balasabas, 2024)

According to Crosby (2023), Contextualized Animation may be used more effectively to engage all students and improve their assimilation of the subject, as well as to generate a sense of achievement and engagement among them. The interactive and visually stimulating nature of animated content can captivate students' attention and foster a deeper connection with the subject matter (Knapp et al, 2022). As students interact with animated scenarios that reflect real-world applications of the concepts being taught, they are more likely to feel a sense of accomplishment and motivation to explore further and understand the material, as stated in the Dual Code Theory (Albus et al, 2021).

Furthermore, for Zagkotas (2019), the narrative formula of comics, an element which should, no doubt, be borne in mind, is another way of narrating the past which is closely linked with the narrative discourse of the historian. By utilizing the narrative formula of comics, historians can bring historical events to life through engaging visual storytelling (Ashkenazi and Ditmar, 2021). This approach enables a more immersive experience, allowing students to connect emotionally with the characters and events depicted. Additionally, the visual nature of comics facilitates the communication of nuanced historical details and interpretations, enriching the narrative and enhancing understanding (Barbre et al, 2022)

Thus, the findings of the post-test and the related studies point to several important implications for enhancing history instruction. To effectively engage students and improve their mastery of historical knowledge, educators should prioritize integrating creative teaching approaches, such as contextualized animation and narrative comics (Moreno-Vera et al., 2021).

Additionally, customized interventions, such as the Project CONAN intervention, should be designed to target specific learning needs and challenges, accommodating a range of student preferences and skill levels. A deeper comprehension and emotional bond with historical narratives can be fostered by emphasizing involvement and immersion through interactive and visually captivating teaching materials (Borromeo and Idul, 2024).

However, after the intervention, there was a significant shift in *t*-values, with the experimental group demonstrating a more pronounced improvement compared to the control group. These findings underscore the effectiveness of Project CONAN in enhancing historical knowledge retention among eighth-grade students.

Based on the results, as reported in the study by Casiano and Palacio (2022), the use of comic strips in education is grounded in the concept of enhancing student engagement and motivation. The incorporation of comic books into history classes has become a popular and effective way to engage students in their learning (Perlas, 2021).

Having said that, these visually appealing stories offer a unique blend of historical information and artistic elements, creating an engaging learning environment that captures students' interest. Teachers have discovered that comic books can effectively bridge the gap between traditional teaching techniques and the evolving interests of modern students by visually presenting historical events (Barbre et al., 2022).

Finally, this concurs with the study by Rabuya (2024), which found that engaged students demonstrate higher levels of motivation and interest in the subject matter. When students are genuinely interested in what they are learning, they are more likely to invest greater effort and focus in their academic endeavors (Daguplo and Paglinawan, 2025). This heightened

motivation often translates into improved academic performance, as engaged students are more likely to participate actively in class discussions, complete assignments diligently, and seek out opportunities for further learning (Fuertes et al, 2023).

CONCLUSIONS

The study's supporting findings, along with the comparison of pre- and post-test results, have several substantial implications for instructional strategies. First off, the experimental group's notable improvement in post-test scores highlights the crucial role that successful interventions play in education.

With that, Teachers should give priority to initiatives like Project CONAN that have been shown to improve student learning outcomes, particularly in subjects like history, where memory retention is crucial. Second, the use of engaging teaching strategies, such as comic strips, can significantly increase motivation and engagement levels in the classroom. Teachers should explore creative ways to present material that piques students' attention and fosters a deeper connection to the subject.

Beyond individual classrooms, the findings suggest broader implications for education policy and curriculum development. The Department of Education is encouraged to adopt Project CONAN to address long-standing issues with poor historical mental recall, especially in underperforming areas. This intervention aligns with DepEd's goals by making learning more interactive, relevant, and adaptable to students' needs.

Furthermore, Project CONAN sets a precedent that can be used as a model for other subjects and grade levels, making it a scalable and adaptable solution. Its success in Maragusan National High School suggests it can be replicated in similar educational contexts nationwide. The project presents a compelling case for innovation in history education, offering a fresh path forward for both teaching and learning.

This work has significant potential for future scholarly citation in various domains, including culturally responsive teaching, educational technology, and history education. It offers a valuable approach for engaged learning that can guide both theoretical discussions and classroom applications by incorporating contextualized animations that utilize Dual Coding Theory.

Ultimately, the Philippine classroom context enriches research on global education, particularly for academics who study innovative teaching practices in developing nations. As a result, this study advances both local practice and the larger scholarly discussion on practical and fair education.

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AUTHOR CONTRIBUTIONS

V. C. C. G.: Conceptualization, design of the study, drafted the initial manuscript, and data collection process. S. B. E.: Research framework, helped administer the intervention, and data analysis. J. B. B.: Review of related literature, organized documentation, and editing and revising the manuscript. R. A. T.: Research adviser, critical guidance, research process, data interpretation and finalization. All authors reviewed and approved the final manuscript for submission.

DECLARATION

Informed consent statement

This study was conducted with strict adherence to ethical standards, ensuring no conflict of interest and prioritizing the well-being of respondents. Participation was entirely voluntary, with informed consent and assent obtained through both verbal and written agreements, emphasizing the right to refuse or withdraw without consequences. Respect, beneficence, and confidentiality were central, with respondents' privacy protected through coding and anonymity, and their safety safeguarded throughout. Moreover, recruitment was non-coercive, focusing on Grade 8 students who were fully informed of the study's goals, methods, risks, and benefits. Researchers minimized risks, avoided offensive language, and maintained transparency by granting participants access to their own data. As a gesture of appreciation, participants received free snacks, reflecting the researchers' commitment to respect and gratitude.

Conflict of interest

None.

AI Desclosure

The authors declare that no Artificial Intelligence (AI) or AI-assisted technologies were used in the preparatin of this manuscript.

REFERENCES

Agot Ranin Alcober, Jomar Cobacha Cabuquin, Gadaingan, G. B., Mae, K., Santillan, M. B., Joy, E., Aleja, M., Caroline, M., and Peñafiel, J. P. (2025). Do Positive Perceptions of Student-Centered Learning Translate to Achievement? Insights from Sixth-Grade Mathematics Students. *European Journal of Education and Pedagogy*, 6(4), 15–21. https://doi.org/10.24018/ejedu.2025.6.4.961

Agtang, D. and Patriarca, Y. (2025). Engagement of Learners in Active Learning Strategies and their Learning Efficacy. *Psychology and Education: A Multidisciplinary Journal*, 39(3), 354-365. https://doi.org/10.70838/pemj.390306

Akengin, H., and Cendek, M. E. (2017). A study of students' opinions about history subjects in the social studies curriculum. *Journal of Literature and Art Studies*, 7(10), 1347-1353.

Albus, P., Vogt, A., and Seufert, T. (2021). Signaling in virtual reality influences learning outcome and cognitive load. Computers and Education, 166, 104154. https://doi.org/10.1016/j.compedu.2021.104154

Apdelmi, Sutimin, L. A., and Djono. (2025). Interactive Local Wisdom Based History Teaching Material: Enhancing Cultural Understanding Among Senior High School

Students in Kerinci. *Educational Process: International Journal*, 15, e2025159. https://doi.org/10.22521/edupij.2025.15.159

Aprilia, A., and Aminatun, D. (2022). Investigating memory loss: How depression affects students' memory endurance. *Journal of English Language Teaching and Learning*, 3(1).

Azhimia, F. (2023). Animated Stories: It's Effect on Students' Scores in Reading Comprehension Scores. *Journal Corner of Education, Linguistics,and Literature*, Vol. 3, 10–16.

Bangroo, I. S., and Amir, S. (2023). QUAVER: Quantum Unfoldment through Visual Engagement and Storytelling Resources. arXiv preprint arXiv:2309.11511. Retrieved on November 28, 2023 from https://arxiv.org/abs/2309.11511

Balasabas, R. M. (2024). Teachers' Methods of Instructions and Learners' Instructional Preference: Predictors of Students' Academic Performance in English 8. *Journal of Interdisciplinary Perspectives*, 2(7), 299-315. https://doi.org/10.69569/jip.2024.0185

Bangroo, I. S., and Amir, S. (2023). QUAVER: Quantum Unfoldment through Visual Engagement and Storytelling Resources. arXiv preprint arXiv:2309.11511. Retrieved on November 28, 2023 from https://arxiv.org/abs/2309.11511

Barbre, James O. III; Carroll, Justin; and Tolbert, Joshua (2022) " Comic Literature and Graphic Novel Uses in History, Literature, Math, and Science," SANE journal: Sequential Art Narrative in Education: Vol. 2: Iss. 7, Article 3. Available at: https://digitalcommons.unl.edu/sane/vol2/iss7/3

Barotas, C. P. and Daza, S. (2025). Chemistry Learning and Inquiry through Real-World Exploration (CLAIRE) Approach and Grade 9 Critical Thinking Skills and Knowledge Retention. *Journal of Interdisciplinary Perspectives*, 3(8), 97-105. https://doi.org/10.69569/jip.2025.351

Bhardwaj, V., Zhang, S., Tan, Y. Q., and Pandey, V. (2025). Redefining learning: student-centered strategies for academic and personal growth. Frontiers in Education, 10 (1). https://doi.org/10.3389/feduc.2025.1518602

Boedeker, P., Schlingmann, T., Kailin, J., Nair, A., Foldes, C., Rowley, D., Salciccioli, K., Maag, R., Moreno, N., and Ismail, N. (2025). Correction to: Active Versus Passive Learning in Large-Group Sessions in Medical School: A Randomized Cross-Over Trial Investigating Effects on Learning and the Feeling of Learning. Medical science educator, 35(2), 1159. https://doi.org/10.1007/s40670-025-02299-7

Borromeo, W. and Idul, M. (2024). Use of Interactive Instruction in Teaching English in Alternative Learning System: A Quasi-Experimental Inquiry. *Psychology and Education: A Multidisciplinary Journal*, 23(2), 215-219. https://doi.org/10.5281/zenodo.13240723

Casiano, S.B and Palacio, V. (2022). Comic strips in ELT: Revisiting "the when and how". Getsempena English Education Journal, 7(2), 269-281. Retrieved on Novemeber 30, 2023 from https://wou.omeka.net/s/repository/item?full-text_search=%22theses/96/%22

Castro, M. (2023). Comics Strips, Short Stories and Pupils' Reading Comprehension. *Psychology and Education: A Multidisciplinary Journal*, 14(3), 1-6. https://doi.org/10.5281/zenodo.8412852

Crosby, R. (2023). The Use of Comic Books as a Teaching Tool: A Descriptive Study. Outside the Box: A Multi- Lingual, 37. Retrieved on November 27, 2023.

Daguplo, C. M., and Paglinawan, J. L. (2025). Exploring the Relationship between Students' Interest and Research Writing Performance among Grade 12 Students. *International Journal of Research and Innovation in Social Science*, IX(V), 4836–4845. https://doi.org/10.47772/IJRISS.2025.905000371

Dalagan Jr., S., and Atugan, M. K. (2021). Capability level and development priority of learning environment and diversity of learners' domain. *Davao Research Journal*, 12(4), 27-39. https://doi.org/10.59120/drj.v12i4.108

De Chavez, L. (2022). Banking the Jargon as an intervention to enhance conceptual understanding of Grade 9 Science-Earth and Space. *Davao Research Journal*, 13(2), 56-66. https://doi.org/10.59120/drj.v13i2.97

Dizon, A. G. (2020). Content analysis of K to 12 World History teaching guides in terms of teaching approaches. The Normal Lights, 14(2). Retrieved on November 30, 2023 from https://po.pnuresearchportal.org/ejournal/index.php/normallights/article/view/1654

Enario, J., Glinogo, J., Salmeron, G., Salmeron, G., Ocaña, M., Ocaña, J., Yong, J., Villarubia, M., Lobrino, H., Gedorio, M., Barazona, G., Ambrad, L., Dinopol, A., Torino, C., Esparaguera, J., Mendez, D., Tabanao, R., Villanueva, M., Taneo, J. D., Perez, Z. O., Cabello, C. and Minyamin, A. (2022). Enriching the Teaching of the Appropriate Use of Graphic Organizer through Guided Visual-Imagery. *Psychology and Education: A Multidisciplinary Journal*, 4(2), 1-8. https://doi.org/10.5281/zenodo.7038030

Fahruddin Fahruddin, Moh. Imron Rosidi, Ismaul Fitroh, Darsono Darsono, and Arif Saefudin. (2024). Transforming History Education: Enhancing Student Engagement and Literacy through Interactive Methods. *SAR Journal - Science and Research*, 396–403. https://doi.org/10.18421/SAR74-14

Fuertes, H. G., Evangelista, I. A., Jay, I., and Bacatan, J. R. (2023). Student engagement, academic motivation, and academic performance of intermediate level students. Zenodo (CERN European Organization for Nuclear Research), 10 (3). https://doi.org/10.5281/zenodo.8037103

Galera, I. (2023). The coming-of-age story in Smile: using the graphic novel to boost students' critical thinking in the EFL classroom. Retrieved on November 28, 2023 from https://repositori.uic.es/handle/20.500.12328/3732

Galicia, J. (2023). Lifelong Learning Initiatives and Professional Development of Public Elementary School Teachers in Jomalig District. *Psychology and Education: A Multidisciplinary Journal*, 10 (5), 1-16. http://doi.org/10.5281/zenodo.8127250

Ginting, D., Woods, R. M., Barella, Y., Limanta, L. S., Madkur, A., and How, H. E. (2024). The effects of digital storytelling on the retention and transferability of student knowledge. SAGE Open, 14(3). https://doi.org/10.1177/21582440241271267

Halil Taş, and Muhammet Baki Minaz. (2024). The Effects of Learning Style-Based Differentiated Instructional Activities on Academic Achievement and Learning Retention in the Social Studies Course. SAGE Open, 14(2). https://doi.org/10.1177/21582440241249290

Kawasaki, H., Yamasaki, S., Fukita, S., Iwasa, M., and Iki, T. (2022). Nursing students' retention of knowledge by basic knowledge type: an exploratory study. Retrieved on November 28, 2023, https://doi.org/10.3390/ijerph19095461.

Klein, K., Calabrese, J., Aguiar, A., Mathew, S., Ajani, K., Almajid, R., and Aarons, J. (2023). Evaluating active lecture and traditional lecture in higher education. *Journal on Empowering Teaching Excellence*, 7(2), 6.

Knapp, P., Benhebil, N., Evans, E., and Moe-Byrne, T. (2022). The effectiveness of video animations in the education of healthcare practitioners and student practitioners: a systematic review of trials. Perspectives on medical education, 11(6), 309–315. https://doi.org/10.1007/s40037-022-00736-6

KÖSE, M. (2022). Factors that reduce motivation to learn history according to high school student. Ulusoy Egitim Danismanlik Yayincilik Ve Organizasyon, (7).

Levstik, L. S., and Barton, K. C. (2022). Doing history: Investigating with children in elementary and middle schools. Routledge.

Li, J., and Xue, E. (2023). Dynamic Interaction between Student Learning Behaviour and Learning Environment: Meta-Analysis of Student Engagement and Its Influencing Factors. Behavioral sciences (Basel, Switzerland), 13(1), 59. https://doi.org/10.3390/bs13010059

López-García, A. (2023). Effectiveness of a teaching methodology based on the theory of historical thinking through active methods and digital resources in Spanish adolescents. Frontiers in Education, 8. https://doi.org/10.3389/feduc.2023.1175123

Lumor, G. M. D., Orgada , F. J. D., and Mendez, M. L. S. P. (2025). The Magic of Multi-Sensorial Learning: Enhancing the Letter Formation among Kindergarten through Rainbow Writing. *Davao Research Journal*, 16(1), 18-28. https://doi.org/10.59120/drj.v16i1.295

Malunes, R. L. and Narcilla, R. C. (2025). Revolutionizing Education: Developing and Assessing Cutting-edge Instructional Materials for Lamp/s Controlled in Varied Locations. *International Journal of Multidisciplinary Educational Research and Innovation*, 3(2), 128-146. https://doi.org/10.17613/4qzpm-04k31

Malvic, J. (2020). Learning style preferences among older adults. Educational gerontology, 25(3), 221-236.

Moreno-Vera, J. R., Ponsoda-López de Atalaya, S., and Blanes-Mora, R. (2021). By Toutatis! Trainee Teachers' Motivation When Using Comics to Learn History. Frontiers in psychology, 12, 778792. https://doi.org/10.3389/fpsyg.2021.778792

Norh, S. B. D. (2024). Enhancing nurse retention in private hospitals in the new normal: A comprehensive approach for post-pandemic healthcare stability. *Davao Research Journal*, 15(4), 149–160. https://doi.org/10.59120/drj.v15i4.285

Novikov, P. (2020). Impact of COVID-19 emergency transition to on-line learning onto the international students' perceptions of educational process at Russian university. *Journal of Social Studies Education Research*, 11(3), 270- 302. Retrieved on November 30, 2023 from https://www.learntechlib.org/p/217752/

Olsen, B. (2019). Teaching what they learn, learning what they live: How teachers' personal histories shape their professional development. Routledge.

Perlas, S. M. (2021). Development of Romblomanon Legends in Comic Book Form as Mother Tongue-Based Online S upplementary Learning Resource Material in Asi, Onhan and Ini Languages. *Romblon State University Research Journal*, 3(2)

Rabuka, R. L. (2024). Motivational climate and academic achievement of student athletes: Basis for development program. *Davao Research Journal*, 15(3), 90-99. https://doi.org/10.59120/drj.v15i3.249

Rogers, B. D.(2022). Null Hypothesis Statistical Testing: A Survey of the History, Critiques, and Alternative Methodologies. (Doctoral dissertation). Retrieved from https://scholarcommons.sc.edu/etd/7004

Sivarajah, R. T., Curci, N. E., Johnson, E. M., Lam, D. L., Lee, J. T., and Richardson, M. L. (2019). A review of innovative teaching methods. Academic radiology, 26(1), 101-113. Retrieved on November 27, 2023 from https://www.sciencedirect.com/science/article/abs/pii/S1076633218301387

Tabujara, D. and Marcia, A. (2025). Perception on Learning Attitude of Learners in the Integration of Multi-Media Learning and their Academic Achievement in Araling Panlipunan. *Psychology and Education: A Multidisciplinary Journal*, 38(2), 204-210. https://doi.org/10.700838/pemj.380208

Thomas, L. (2023). Quasi-Experimental Design. Retrieved on November 30, 2023 from https://www.scribbr.com/methodology/quasi-experimental-design/

Tran, T. L., and Nguyen, T. P. T. (2022). Overview of education in Vietnam. In International handbook on education in South East Asia (pp. 1-33). Singapore: Springer Nature Singapore. Retrieved on December 10, 2023 from https://www.frontiersin.org/articles/10.3389/fpsyg.2021.778792/full

Ugbamen, J., Acruz, E., Causin, S. and Cabello, C. (2022). Enriching the Discussion of Convergent Plate Boundary by Utilizing the Video Instructional Support: An Action Research. *Psychology and Education: A Multidisciplinary Journal*, 4(9), 2-11. https://10.5281/zenodo.7161817

Wright, M. C., Bergom, I., and Bartholomew, T. (2019). Decreased class size, increased active learning? Intended and enacted teaching strategies in smaller classes. Active learning in higher education, 20(1), 51-62. Retrieved on November 27, 2023 from https://journals.sagepub.com/doi/full/10.1177/1469787417735607

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