Animated Comics with Genyo Integration: A Digitized Approach to Learning El Filibusterismo Among Grade 10 Students

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ARTICLE INFO	ABSTRACT
	Several studies have shown a notable discrepancy between the academic level of learners and their comprehension of various literary works in both the English and Filipino languages. Therefore, educators must consistently enhance their teaching methodologies and curricula. To address these problems, the researcher conducted a study that specifically examined the application of an intervention utilizing animated comics and Diwa Publishing's Genyo Learning Management System. This paper used a quasi-experimental research design to compare the respondents' scores before and after the experiment. As a result, the researcher discovered that using animated comics, aided by the learning management system (LMS), successfully improved students' understanding of literature. The significant disparity in student performance between the intervention and control groups confirms this finding. Nevertheless, it is essential to acknowledge that while this approach to instruction was successful, conventional instructional approaches also influenced the students' knowledge acquisition. These findings indicate that both modern and traditional teaching approaches can yield positive outcomes in the classroom when they enable appropriate instruction and/or discussion. **Keywords:** Animated Comics, Genyo Learning Management System, El Filibusterismo, Digitization, Pedagogical Approach

INTRODUCTION

Numerous studies have addressed the difficulties of comprehending and mastering literature. A study stressed that despite the government's best attempts to raise literacy rates in the Philippines, Filipino students still struggle with reading comprehension, vocabulary growth, and critical thinking [4]. Furthermore, it has been noted that students perceive literature learning as challenging due to the need to fulfill assigned tasks, engage in group discussions, and demonstrate to their instructors a clear comprehension of the literature [10]. It was further clarified that there is a clear literature gap on the planning and executing differentiated learning-based lessons in teaching literacy skills in the Philippines [3].

Despite all of these challenges, the researcher cannot deny the significance and opportunities that pieces of literature can provide, especially in the expression of student's feelings and in learning with appreciation and critical analysis [2]; hence, it emphasizes the importance of contextualizing the learning experience, drawing on students' existing knowledge and interests [11]. Another study deepened this idea, proving that effective use of multimedia-based collaborative learning enhanced students' language skills in Junior High School, serving as an alternative teaching medium for vocabulary [1]. Hence, in this modernized age, new digital formats and genres have transformed reading and writing practices, requiring a reconceptualization of reading and the reader's role [17].

Furthermore, it was emphasized that incorporating educational methodologies and utilizing new technology in the educational setting creates novel opportunities for teachers and students to engage in active interrelation and interaction [18]. Similarly, in the contemporary era of technology and the internet, instructing through a Learning Management System (LMS), teleconferencing, direct messaging, and digital-online games are advantageous methods of teaching [13]. Conversely, it has been identified that acquiring digital literacy skills is crucial for cultivating self-reliant learners in the digital age [16].

Given these factors, it is reasonable to agree that the emergence of the digital era and information and communication technology has led to a paradigm shift in knowledge acquisition over time [14]. Likewise, an earlier study reinforced this notion, concluding that combining animation with experiential learning can enhance student involvement in the learning process [15]. Moreover, in a different study, at least 93% of participants felt that digital comics may be useful in classrooms teaching second language (L2) reading [12]. This also aligns with other findings, which demonstrated that comics can be a valuable tool for students with limited vocabulary, as their narrative and visual aids make reading comics engaging and facilitate students' understanding of word meanings [7].

Based on the information acquired from various studies, the researcher recognized the significance of implementing an intervention to teach Rizal's second novel, El Filibusterismo. This intervention involves the utilization of animated comics and the integration of the Genyo Learning Management System. Similarly, the researcher's goal in this paper is to evaluate how well the intervention helped the students understand and appreciate El Filibusterismo.

RESEARCH QUESTIONS

This study analyzed Grade 10 learners' grasp of Jose Rizal's second novel, El Filibusterismo, using animated comics integrated with the Genyo Learning Management System to enhance their overall skills. Likewise, this study would like to address these particular inquiries:

(1.) What are students' pretest scores in the control and intervention groups?

(2.) What are the posttest scores of students in the control and intervention groups?

(3.) Is there a significant difference in the pretest and posttest scores of students in the control group?

(4.) Is there a significant difference in the pretest and posttest scores of students in the intervention group?

(5.) Is there a significant difference in the posttest scores of students in the control and intervention groups?

HYPOTHESES

a. There is no significant difference between the pretest scores of the control and intervention group participants.

b. There is no significant difference between the posttest scores of the participants in the control and intervention groups.

c. There is no significant difference in the pretest and posttest scores of the control and intervention group participants.

SIGNIFICANCE OF THE STUDY

This study aims to offer useful support to educators teaching El Filibusterismo by providing essential facts that can facilitate the development of their teaching methods and enhance their students' understanding of the subject matter. Moreover, this study has the capacity to function as a tool for literary instructors to evaluate the areas they should give importance to, sustain, and improve upon when developing their teaching methods and educational resources.

Furthermore, the results of this study will be highly valuable for administrators as they strive to enhance existing curricula, programs, and student services. These findings can help improve services to strengthen the comprehension level of students and teachers in Filipino and/or English.

This research will play a crucial role in evaluating students' ongoing development in comprehending various literary works and enhancing their level of understanding by implementing diverse, digital, and enhanced teaching methods. However, it is essential to obtain professional assistance and feedback when using individualized instruction for teaching and learning literature to assess and enhance its instructional effectiveness.

Likewise, through this study, the teachers may further understand the significance of adaptability in improving students' comprehension skills by using different methods that align with 21st-century learning standards. Similarly, this research can be a significant reference for future scholars.

METHODS

Research Design

The researcher utilized a quasi-experimental research approach, incorporating pretests and posttests, to assess the effectiveness of an animated comic integrated into the Genyo Learning Management System for learning El Filibusterismo.

Participants of the Study

The researcher selected 80 participants, comprising both male and female students, who were enrolled in the Junior High School Unit for the academic year 2023–'24. The researcher chose 40 students from Grade 10 Mabini to constitute the control group and an additional 40 students from Grade 10 Del Pilar to comprise the intervention group. The researcher employed purposive sampling, using the students' attendance during the intervention as a criterion to decide their inclusion or exclusion.

Locale of the Study

The study was conducted at the University of Saint Louis Tuguegarao – Basic Education School, Junior High School Unit.

Research Instrument

The researcher implemented the intervention in three separate sessions, utilizing animated comics created by C&E Publishing House and the Genyo Learning Management System of Diwa Publishing. In addition, the researcher conducted a pretest of 30 items before the start of the study to gauge the student's level of comprehension. After completing the study, they conducted a posttest with the same number of items as their pretest to assess the progress of the control and intervention groups. However, the researcher developed a dynamic lesson plan to ensure effective and well-structured instruction in conventional and intervention contexts, which other Filipino subject teachers validated.

Data Gathering Procedure

Three phases were observed in this study for data gathering, which were as follows:

a. Pre-treatment Phase.

The researcher and the Filipino Area Head of the Junior High School Unit had a discussion regarding the study's implementation and methodology. The group prepared, developed, and verified several instructional tools, such as the dynamic lesson plan, PowerPoint presentation, pretest, posttest, and other study-related activities required for the research. The researcher took this action to ensure the lessons were appropriate and stimulating.

Following the preparation and validation of the relevant tools, the lead researcher administered a pretest to the selected classes before the intervention. The pretest aimed to gauge the student's understanding of the upcoming topic. After the intervention, the pretest result will serve as a fundamental factor for the comparison.

b. Treatment Phase

The researcher selected a colleague to spearhead the intervention for the selected class in the intervention group, while the control group received traditional teaching. Similarly, the lead facilitator conducted the intervention using animated comics of El Filibusterismo and the Genyo Learning Management System while providing the intervention group with additional activities. Conversely, the teacher uploaded a PowerPoint presentation of El Filibusterismo to the Genyo Learning Management System for use in the traditional teaching of the control group. However, the facilitator encourages the students to participate formally and actively in both the traditional teaching and the intervention.

c. Post-Treatment Phase.

After the intervention was conducted, the lead facilitator administered the developed and validated posttest, which is similar to the pretest given. The researcher tabulated the results of the pretest and posttest using frequency and percentage calculations. A statistician utilized a paired sample t-test and an independent sample t-test to analyze the pretest and posttest scores of the students, both within their own group and in comparison to another group. The researcher conducted this to assess the impact of the intervention on the individual learners.

Data Analysis

The researcher used the Frequency Count and Percentage for tabulation, while an Independent Sample T-test, and Paired Sample T-test were utilized to analyze data.

Frequency Count and Percentages: These statistical tools were employed to ascertain each group's total number of respondents and compute their relative means. Furthermore, the following range of values and qualitative descriptions were employed for better representation of the results:

Range Values	Qualitative Description
25 − 30	Very High
19 − 24	High
13 − 18	Moderate
7 − 12	Low
0 − 6	Very Low

Independent Sample T-test: As described in the academe [9], this test compares two sample means from unrelated groups to ascertain if the samples exhibit differences. Hence, this statistical tool is crucial in ascertaining the relevance of the participants' scores in both the pretest and posttest scores of the control and intervention groups.

Paired Sample T-test: Alternatively, the researcher utilized this statistical method to assess if there are noteworthy variations in the comprehension and acquisition of knowledge across students when comparing an individual to a group that employs the same teaching style.

RESULTS AND DISCUSSION

Pretest Scores of the Participants in the Control and Intervention Groups

Table 1. Pretest Scores of the Participants in the Control and Intervention Groups

SCORES	CONTROL GROUP		INTERVENTION GROUP	
	f	%	f	%
25 − 30 (Very High)	0	0.00	0	0.00
19 − 24 (High)	0	0.00	2	5.00
13 − 18 (Moderate)	22	55.00	22	55.00
7 − 12	18	45.00	16	40.00

(Low)				
0 − 6 (Very Low)	0	0.00	0	0.00
Mean Score	12.50 (Moderate)		13.68 (Moderate)	

Table 1 displays the students' score ranges in the control and intervention groups during the pretest assessment for the lesson on El Filibusterismo. According to the table, 22 students, who account for 55% of the total students in the control group, obtained a score ranging from 13 to 18 points. This suggests that the majority of the students had descriptions of moderate quality. In addition, 18 out of the 40 students, or 45% in the control group, obtained a score ranging from 7 to 12 points, achieving a low score. However, it is crucial to emphasize that none of the individuals in the control group achieved scores classified as very low, high, or very high.

In contrast, among the 40 participants in the intervention group, just two individuals, representing 5% of the total, attained a high score ranging from 19 to 24 points. It is important to mention that both the control and intervention groups obtained an equal number of students with moderate score ranges. Specifically, 55% of the students in the intervention group fell into this category. Furthermore, only 16 learners, representing 40% of the participants in the intervention group, achieved a low score, ranging from 7 to 12 points. Like the control group, none of the 40 students in the intervention group achieved scores classified as very high or very low.

Consequently, the average scores of both the control and intervention groups are classified as moderate. Specifically, the control group has a mean score of 12.50, while the intervention group has a mean score of 13.68. It is important to acknowledge that while both groups have a moderate mean score, it is undeniable that the intervention group had a higher average compared to the other group.

Posttest Scores of the Participants in the Control and Intervention Groups

Table 2. Posttest Scores of the Participants in the Control and Intervention Groups

SCORES	CONTROL GROUP		INTERVENTION GROUP	
	f	**%**	**f**	**%**
25 − 30 (Very High)	0	0.00	6	15.00
19 − 24 (High)	21	52.50	27	67.50
13 − 18 (Moderate)	16	40.00	7	17.50
7 − 12 (Low)	3	7.50	0	0.00
0 − 6 (Very Low)	0	0.00	0	0.00
Mean Score	18.10 (High)		21.58 (High)	

Following the results of this assessment, Table 2 provides the posttest scores of both the control and intervention groups. The control group, consisting of 21 students, or 52.50% of the total respondents, attained a high score of 19 to 24 points. Furthermore, 16 students, representing 40% of the control group, achieved a moderate score quality, with scores ranging from 13 to 18 points. However, three students, representing 7.50% of the control group, received a low score, falling between 7 and 12 points. Nonetheless, none of the learners in the control group obtained scores that were considered very low or very high.

In contrast, six students, or 15% of the total number in the intervention group, scored between 25 and 30 points, which is classified as a very high score. Moreover, a significant majority of the students in the intervention group, specifically 67.50%, or 27 individuals, achieved a score ranging from 19 to 24 points, indicating a high level of quality. Therefore, it can be stated that a substantial proportion of the students in the intervention group obtained a

high score. However, the data presented also indicates that although most students in the intervention group attained scores ranging from high to very high, a notable portion of 7 students, or 17.50% of the total respondents, obtained a moderate score of 13 to 18 points. However, it is important to recognize that none of the participants had a score that was considered low or very low.

Considering all of these aspects, it is important to mention that both the control and intervention groups attained a notably high average score. Specifically, the control group earned a mean score of 18.10, while the intervention group achieved a mean score of 21.58. It is worth mentioning that while the posttest scores of both groups are of high quality, the researcher cannot ignore that the mean score of the intervention group is greater than that of the control group.

Significant Difference in the Pretest Scores of the Participants in the Control and Intervention Group

Table 3. Significant Difference in the Pretest Scores of the Participants in the Control and Intervention Group

Group	Mean Scores	df	T-value	P-value	Decision
Control	12.50	78	-1.86	0.067	Accept H_o
Intervention	13.68				

Significant at 0.05 level

Table 3 indicates whether there is a significant difference in the pretest results of the students in the control and intervention groups. The results indicate that the intervention group attained a mean score of 13.68, surpassing the control group's score of 12.50. Despite the disparity in their average score, the independent t-test's outcome indicates that the student's scores before the intervention are not statistically significant, leading to acceptance of the first null hypothesis. The p-value of 0.067, which exceeds the significance level of 0.05, provides evidence to support this conclusion. Hence, it is reasonable to deduce that both the individuals in the control and intervention groups possessed a limited comprehension of the topic prior to the discussion and implementation of the intervention. These findings were supported by a previous study, which identified three significant factors contributing to poor reading comprehension: lack of enthusiasm, low prior knowledge, and inadequate vocabulary [8].

Significant Difference in the Posttest Scores of the Participants in the Control and Intervention Group

Table 4. Significant Difference in the Posttest Scores of the Participants in the Control and Intervention Group

Group	Mean Scores	df	T-value	P-value	Decision
Control	18.10	78	-4.89	0.001	Reject H_o
Intervention	21.58				

Significant at 0.05 level

Table 4 displays the significant difference in the posttest scores between the students in the control and intervention groups. The data shows that with a p-value of 0.001, the outcome of the posttest scores is statistically significant, leading to the acceptance of the second null hypothesis. The intervention group exhibits a considerably higher mean score of 21.58, in contrast to the control group's mean score of 18.10. Moreover, the substantial disparity in the t-value of -4.89 indicates that the participants in the intervention group had significantly superior performance during the intervention compared to the control group's traditional approach. The outcome is further supported by a finding stating that using technology and innovative pedagogical methods can enhance significant and situational learning encounters [6].

Significant Difference in the Pretest and Posttest Scores of the Participants in the Control and Intervention groups

Table 5. Significant Difference in the Pretest and Posttest Scores of the Participants in the Control and Intervention Groups

Groups	Test	Mean Scores	df	T-value	P-value	Decision
Control	Pretest	12.50	39	-11.4	.001	Reject H_o
	Posttest	18.10				
Intervention	Pretest	13.68	39	-18.30	.001	Reject H_o
	Posttest	21.58				

Significant at 0.05 level

Table 5 displays the significant difference between the pretest and posttest scores of participants in the control and intervention groups. The paired sample t-test conducted on the control and intervention groups yielded a p-value of 0.001, indicating that both conventional and modern methods of teaching literature have a statistically significant impact on students' comprehension. Therefore, the researcher rejects the third null hypothesis. It is important to emphasize that the intervention group's t-value of -18.30 significantly exceeds the control group's t-value of -11.41, explaining the students' progress through animated comics and the Genyo Learning Management System. The table shows that both the control and intervention groups have shown a substantial improvement in their posttest mean scores, with values of 18.10 and 21.58, respectively. This clearly illustrates that, even without receiving an intervention similar to the intervention group, the control group's comprehensive discussion-based learning of El Filibusterismo had a major impact on their progress. The findings in another study also confirmed this outcome, demonstrating the effectiveness of both traditional and digital teaching methods in the instruction of literature [5].

CONCLUSION

The outcome of this study suggests that including animated comics and using Diwa Publishing's Genyo Learning Management System significantly influenced Grade 10 learners' appreciation and comprehension of the novel El Filibusterismo. Nevertheless, the researcher acknowledges the substantial influence of conventional teaching methods used in the education of the selected control group.

RECOMMENDATIONS

Based on the obtained results, the researcher recommended that other literature subject teachers incorporate digital literary readings and tools during the learning process, as these substantially influenced the students' comprehension level. Nevertheless, educators should not exclusively depend on these technologies but also incorporate thorough discussion and assistance.

Similarly, a school should consistently employ the animated comic strip of El Filibusterismo with the learning management system (LMS). Nevertheless, it is imperative for a school to carry out a yearly assessment to evaluate and improve the program's strengths and weaknesses.

In addition, the researcher recommended that other grade levels in Junior High School utilize animated comics, if accessible, to actively involve students in the curriculum discussion of the Obra Maestras.

To promote the use of modern educational methods both in and out of the classroom, it is important for school administrators and leaders to acquire or use a learning management system (LMS) that offers outstanding features and capabilities. Nevertheless, to guarantee the advantages, the leaders must consistently monitor the execution and utilization of the selected Learning Management System (LMS).

Ultimately, other grade levels that utilize literature as an introduction or instructional tool may carry out an identical study to determine whether they may obtain parallel findings.

DATA AVAILABILITY

No new data were created after the accomplishment of this study. Data sharing does not apply to this research.

CONFLICT OF INTEREST

The researcher declares that there is no conflict of interest in this study. However, the researcher wants to declare that they do not own the animated comics used during the study; hence, it was availed through the C & E Publishing House. Likewise, the Genyo Learning Management System is owned by Diwa Publishing, Inc., and the University of Saint Louis Tuguegerao – Basic Education School is just one of the schools that availed the said LMS.

REFERENCES

[1] Budiyani, W., & Sujarwo, S. (2020). Interactive Learning Multimedia: Enhancing Vocabulary Mastery for Junior High School Students. Jurnal Kependidikan: Penelitian Inovasi Pembelajaran.

[2] Bustamante, J.A. (2022). The Teaching of Literature: Voices and Lenses. International Journal of Learning, Teaching and Educational Research.

[3] Hatmanto, E.D., & Rahmawati, F. (2023). Crafting Dynamic Lesson Plans: Designing Differentiated Learning Approaches for Teaching Reading Skills in the Philippines. Proceeding International Conference of Community Service.

[4] Idulog, M.V., Gadiano, R., Toledo, E., Hermosada, M., Casaldon, H., Mariposa, M., Geron, C., Dequito, E., Genanda, J., Malipot, M.A., Pentang, J.T., & Bautista, R.M. (2023). Filipino Students' Reading Abilities: A Note on the Challenges and Potential Areas for Improvement. International Journal of Education and Teaching Zone.

[5] Kellerová, Nina & Reid, Eva. (2021). Teaching English Via Literature in the Digital Age. 459-470. 10.46793/NNU21.459K.

[6] León Cueva , W. P., Montaguano Jiménez, J. E., Blacio Toro, S. E., Ortiz Moya, N. G., & León Cueva, R. V. (2023). TIC TAC TEP En Educación: Estrategias y Beneficios de su Implementación. Ciencia Latina Revista Científica Multidisciplinar, 7(5), 8917-8938. https://doi.org/10.37811/cl_rcm.v7i5.8462.

[7] Nafisa, Z., Safitri, A., Amin, M.A., Rakhmawati, R., & Mukhayatin, Y. (2021). Using Comics as a Learning Media to Improve EFL Vocabulary: MAN 1 Lamongan Students' Perspectives. Edulitics (Education, Literature, and Linguistics) Journal.

[8] Nanda, D.W., & Azmy, K. (2020). Poor Reading Comprehension Issue in Efl Classroom Among Indonesian Secondary School Students: Scrutinizing the Causes, Impacts and Possible Solutions.

[9] National University Academic Success Center (2024). Statistics Resources: Independent Sample T-test. https://resources.nu.edu/statsresources/IndependentSamples

[10] Rido, Akhyar & Hary, Bagus & Kuswoyo, Heri. (2023). 'Thank You Very Much': Feedback Strategies in University English Literature Lecture Interaction. European Journal of Educational Research. 12. 29-40. 10.12973/eu-jer.12.1.29.

[11] Sanches, A.P., Lueders, J., & Da Silva, J. (2024). Las Contribuciones de Paulo Freire A La Práctica del Lenguaje Portugués de Una Manera Contextualizada. Revista Foco.

[12] Saputri, A.D., Sunardi, S., & Musadad, A. (2021). Digital Comics as a Media in EFL Reading Classrooms. AL-ISHLAH: Jurnal Pendidikan.

[13] Suputra, D. (2021). Teaching English Through Online Learning (A Literature Review). The Art of Teaching English as a Foreign Language.

[14] Susanti, R., Saha, S., & Mallya, D. (2024). Exploring Pedagogical Approaches for Teaching English to Generation Z: A Bibliometric Analysis. Asian Journal of Education and Social Studies, 50(5), 442–451. https://doi.org/10.9734/ajess/2024/v50i51374

[15] Tan, S.M., & Abdullah, Z.B. (2020). Integrating Animation with Experiential Learning Approach to Enhance Students' Engagement in the Learning Process. International Journal of Academic Research in Progressive Education and Development.

[16] Tohara, A.J. (2021). Exploring Digital Literacy Strategies for Students with Special Educational Needs in the Digital Age. Turkish Journal of Computer and Mathematics Education (TURCOMAT).

[17] Tosi, C. (2020). Lectura y Oralidad En La Escuela del Siglo XXI. Materiales de Enseñanza Para Las Prácticas de Lengua y Literatura En El Mundo Digital. Contextos Educativos: Revista de Educación, 127-143.

[18] Vargas-Murillo, G. (2020). Estrategias Educativas y Tecnología Digital en El Proceso Enseñanza Aprendizaje. Cuadernos Hospital de Clínicas, 61(1), 114-129. Recuperado en 19 de junio de 2024, de http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid =S1652-67762020000100010&lng=es&tlng=es.