

Modified Snake and Ladder Board Game for Features of Academic Writing in English 7

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Abstract

This research study evaluated the effectiveness of a Modified Snake and Ladder Board game in selected writing and composition learning competencies of Grade 7 students. The performance of the respondents in identified learning competencies in 7th grade English were also identified. This study was conducted in Basak Community High School, Cabreros St., Basak San Nicolas, Cebu City in School Year 2022-2023. There were 227 respondents. The study used the one group pretest-posttest design in which the selected non-random group was measured before and after the intervention's implementation to determine its effectiveness for the first two competencies. For the third competency which is the actual writing, the students were engaged with the intervention and their writing performance was obtained and interpreted. The study also sought the students' learning experiences on the application of the modified snake and ladder board game in terms of learning achievement, engagement and collaboration. Statistically, this study revealed that the Modified Snake and Ladder Board game improved students' performance in the identified writing and composition learning competencies. The respondents had successfully distinguished the features of academic writing, differentiated academic writing from literary writing through sample texts, and composed simple academic texts. In conclusion, the integration of the Modified Snake and Ladder Board game to identified writing and composition learning competencies was commendable for future use.

Keywords: English Teaching, board game, gamification, modified snake and ladder, writing and composition, Cebu City, Philippines

Introduction

Writing is always a significant skill to learn because it plays a major role in expressing one's ideas, thoughts, and attitudes (Sumardi & Tarjana, 2018). Effective academic writing requires students to develop skills such as organizing ideas, maintaining objectivity, using formal language, and structuring sentences cohesively. However, many students struggle with academic writing due to a lack of engagement, limited exposure to formal writing styles, and difficulty in distinguishing between different forms of writing.

In the Philippines, writing proficiency among students has been a persistent challenge. According to the Philippine Institute for Development Studies (2020), students at both elementary and high school levels demonstrate difficulties in constructing grammatically correct and coherent sentences. Traditional methods of teaching writing, such as lectures, board work, and paper-pencil assessments, have often been ineffective in fostering student engagement and mastery of writing competencies (Beglar & Hunt, 2011).

One innovative approach to addressing these challenges is gamification—the integration of game mechanics in educational settings to enhance learning motivation and engagement. Board games have been widely recognized as effective tools in educational contexts, offering opportunities for interactive learning, collaboration, and critical thinking (Gee, 2007). This study focuses on a modified Snake and Ladder board game as a learning tool for improving students' academic writing competencies.

Research Questions

This study aimed to evaluate the effectiveness of a modified Snake and Ladder board game in enhancing the academic writing competencies of Grade 7 students. Specifically, the study sought to answer the following research questions:

1. What is the pretest performance of Grade 7 students in writing and composition concerning the following learning competencies?
 - 1.1 Distinguishing the features of academic writing

- 1.2 Differentiating literary and academic writing through sample texts
2. What is the posttest performance of the Grade 7 students in these competencies after using the board game intervention?
3. How well do students perform in composing simple academic texts after engaging with the game?
4. Is there a significant difference between pretest and posttest performance?
5. What are the students' learning experiences regarding the use of the modified Snake and Ladder board game in terms of:
 - 5.1 Learning achievement
 - 5.2 Engagement
 - 5.3 Collaboration
6. Based on the findings, what lesson exemplars can be designed?

Methodology

Research Design

This study employed a one-group pretest-posttest design, measuring students' performance before and after the intervention to determine the board game's effectiveness.

Participants and Setting

The study was conducted at Basak Community High School, Cebu City, involving Grade 7 students.

Intervention

A modified Snake and Ladder board game was designed to incorporate academic writing exercises. Students played the game in groups, answering writing-related questions and tasks to advance on the board.

Instrument

This study used adapted questionnaires and a survey to collect data. The pretest and posttest questionnaires were taken from the English 7 Quarter 4 Self-Learning Modules (SLMs) of the Department of Education – Cebu City Division. These multiple-choice tests assessed students' ability to distinguish the features of academic writing (items 1-15) and differentiate academic and literary writing (items 16-30). To evaluate students' writing performance, a 15-item writing task was conducted during the third application of the modified Snake and Ladder board game.

Additionally, a survey questionnaire, adapted from Alabbasi (2017), was used to assess students' learning experiences in terms of achievement, engagement, and collaboration. The survey followed a 4-point Likert scale with response options: (1) Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree. These instruments ensured a reliable assessment of students' performance and the effectiveness of the intervention.

Procedure

This study followed three phases: pre-gathering, during-gathering, and post-gathering. In the pre-gathering phase, a letter request was sent to the principal for approval. Once granted, the researcher conducted an orientation for Grade 7 students to explain the study and their rights.

During the gathering phase, students took a pretest to assess their initial writing skills. The modified Snake and Ladder board game was then used as an intervention to teach writing competencies. In the third game session, students' writing performance was evaluated using a 1-point scoring rubric. After the intervention, students took a posttest, followed by a Likert scale survey to assess their learning experiences in terms of achievement, engagement, and collaboration.

For the post-gathering phase, the results of the pretest, posttest, and writing performance were analyzed using statistical tools such as mean, frequency, percentage, and standard deviation. A paired t-test determined if there was a significant difference between pretest and posttest scores, while survey results were analyzed using mean and standard deviation.

Data Analysis

The data collected from the pretest, posttest, writing tasks, and survey were analyzed using various statistical methods to evaluate the effectiveness of the Modified Snake and Ladder Board Game as a learning tool. Descriptive statistics such as mean, frequency, percentage, and standard deviation were used to summarize students' performance in the pretest, posttest, and writing tasks. To determine the significance of the difference between

pretest and posttest scores, a paired t-test was conducted, measuring whether the intervention had a meaningful impact on students' learning.

For the Likert scale survey, the responses were analyzed using the average mean and standard deviation to assess students' learning experiences in terms of achievement, engagement, and collaboration. The results helped determine whether students found the game-based learning approach effective and engaging. By applying these statistical tools, the study provided a clear understanding of how the intervention influenced students' writing skills and overall learning experience.

Results and Discussion

The results of this study highlight the effectiveness of the Modified Snake and Ladder Board Game in improving students' learning competencies. The upper portion is the pretest results for the 1st competency which is Distinguishing the Features of Academic Writing. Furthermore, the lower table is for the second competency Differentiating Academic Writing from Literary Writing through Sample Texts.

Table 1. Pretest Results for the First and Second Learning Competencies

Distinguishing the Features of Academic Writing					
Range	f	%	Standard Deviation	Mean Performance	Category
90-100	0	0	3.17	67.02	Beginning
85-89	0	0			
80-84	1	0.4			
75-79	3	1.3			
74 & below	223	98.3			
Total	227	100			
Differentiating Academic Writing from Literary Writing through Sample Texts					
Range	f	%	Standard Deviation	Mean Performance	Category
90-100	1	0.4	4.67	67.35	Beginning
85-89	0	0.0			
80-84	1	0.4			
75-79	16	7.1			
74 & below	209	92.12			
Total	227	100			

Legend:

90-100- Advanced

80-84-Approaching Proficiency

74 and below-Beginning

85-89-Proficient

75-79-Developing

Table 1 revealed that the majority of students performed poorly in distinguishing features of academic writing and differentiating academic and literary writing. Specifically, 98.3% of students scored below the passing grade for the first competency, and 92.1% for the second competency. The mean pretest scores of 67.02 and 67.35 respectively classified students in the Beginning category, indicating a lack of prior knowledge on the topic

After using the board game, there was a notable increase in students' test scores, suggesting an improvement in their understanding of academic writing.

Table 2. Posttest Results for the First and Second Learning Competencies

Distinguishing the Features of Academic Writing					
Range	f	%	Standard Deviation	Mean Performance	Category
90-100	31	13.7	7.39	80.71	Approaching Proficiency
85-89	29	12.8			
80-84	45	19.8			
75-79	75	33.0			
74 & below	47	20.7			
Total	227	100			
Differentiating Academic Writing from Literary Writing through Sample Texts					
Range	f	%	Standard Deviation	Mean Performance	Category

90-100	78	34.4			
85-89	22	9.7	10.07	84.25	Approaching Proficiency
80-84	33	14.5			
75-79	46	20.3			
74 & below	48	21.1			
Total	227	100			

Legend:

90-100- Advanced

85-89-Proficient

80-84-Approaching Proficiency

75-79-Developing

74 and below-Beginning

Table 2 showed mean posttest scores for distinguishing academic writing features increasing to 80.71, and for differentiating academic and literary writing, the scores rose to 84.25, both reaching the Approaching Proficiency category. This improvement suggests that the board game effectively engaged students and reinforced learning concepts.

The third one to be measured was the competency: composing simple academic texts. This competency is already the actual writing process and the application of the knowledge obtained in the previous lessons. For this competency, all 6 sections were grouped into 7 as they played the modified snake and ladder board game for the 3rd time. Hence, in this writing activity, there were 42 group respondents that were assessed in the writing and composition learning competency: composing simple academic texts.

Table 3. Writing Performance on the Use of Modified Snake and Ladder Board Game

Composing Simple Academic Texts					
Range	f	%	Standard Deviation	Mean Performance	Category
90-100	10	34.4			Approaching Proficiency
85-89	9	9.7	6.90	84.26	
80-84	9	14.5			
75-79	14	20.3			
74 & below	0	21.1			
Total	42	100			

Legend:

90-100- Advanced

85-89-Proficient

80-84-Approaching Proficiency

75-79-Developing

74 and below-Beginning

Table 3 revealed a mean writing performance score of 84.26, falling within the Approaching Proficiency level. The findings align with previous studies, such as those by Gaudet (2010) and Dobao (2012), which emphasize that collaborative learning enhances academic performance.

In addition, to determine the statistical significance, the tables that follow illustrate the results of the paired t-test, using the pretest and posttest performances of the Grade 7 students in the first and second learning competencies.

Table 4. Significant Differences of the Pretest and Posttest Performances in the First and Second Learning Competencies

Learning Competency	Mean		Mean Difference	Paired T-test		Decision	Interpretation
	Pretest	Posttest		T	P-value		
Distinguishing Features of Academic Writing	67.02	80.75	13.73	32.40	0.000	Reject Ho	There is a significant difference.

Differentiating Academic Writing from Literary Writing through Sample Texts	67.35	84.25	16.90	29.89	0.000	Reject Ho	There is a significant difference.
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Legend:

90-100- Advanced

80-84-Approaching Proficiency

74 and below-Beginning

85-89-Proficient

75-79-Developing

For the first competency, Table 4 showed the mean pretest score was 67.02, which was below the minimum passing grade of 75 set by the Department of Education. After the intervention, the mean posttest score increased to 80.75, reflecting a 13.73-point improvement. The paired t-test value was 32.40, with a p-value of 0.000, indicating a statistically significant difference between the pretest and posttest scores. These findings suggest that students significantly benefited from the board game, reinforcing the importance of interactive learning and engagement (Richardson & Swan, 2003).

Similarly, for the second competency, which involved differentiating academic writing from literary writing through sample texts, students had a mean pretest score of 67.35, also below the passing mark. After the intervention, their mean posttest score rose to 84.25, resulting in a 16.90-point improvement. The paired t-test value was 29.89, with a p-value of 0.000, confirming that the difference was statistically significant. This indicates that the game-based learning strategy effectively enhanced students' ability to distinguish between academic and literary writing.

Additionally, students' learning experiences were assessed through a Likert scale survey. Tables 5, 6, and 7 revealed the results for Learning Achievement, Engagement and Collaboration.

Table 5. Learning Achievement

Modified Snake and Ladder Board Game for Features of Academic Writing in Grade 7		Average Mean	SD	Category
A. Learning Achievement				
1	I understood the topic using the board game intervention.	3.68	0.63	Strongly Agree
2	I found the board game improving my concentration skills in learning.	3.64	0.00	Strongly Agree
3	The board game allowed me to achieve mastery of the topics to be learned.	3.72	0.00	Strongly Agree
4	The board game allowed me to prove how much I know.	4.00	0.00	Strongly Agree
5	The intervention also highlighted the areas I need to improve on.	4.00	0.32	Strongly Agree
6	The game allowed me to understand complex concepts.	3.56	0.26	Strongly Agree
7	The game allowed me to compare my level of knowledge to other students.	4.00	0.33	Strongly Agree

8	The board game activity allowed me retain the pieces of information for a long period of time.	3.77	0.38	Strongly Agree
Total		3.80	0.39	Strongly Agree

Legend:

1-1.75- Strongly Disagree
2.51-3.25-Agree

1.76-2.50-Disagree
3.26-4.00-Strongly Agree

As shown in Table 5, all 8 indicators under learning achievement have mean scores under the Strongly Agree category. Overall, the average mean result in terms of learning achievement is 3.80 as assessed by the Grade 7 students. This is interpreted as Strongly Agree with the verbal description The student obtains high learning achievement with the help of the given intervention. This means that the Legend: 1-1.75- Strongly Disagree 1.76-2.50-Disagree 2.51-3.25-Agree 3.26-4.00-Strongly Agree 56 intervention contributed greatly to students' learning achievement in understanding the 3 identified learning competencies for the lesson Features of Academic Writing.

Table 6. Engagement

Modified Snake and Ladder Board Game for Features of Academic Writing in Grade 7		Average Mean	SD	Category
B. Engagement				
1	I listened to the lesson and the board game's mechanics when the activity was used in class.	4.00	0.00	Strongly Agree
2	I followed the rules of the game as I played with my fellow groupmates.	4.00	0.00	Strongly Agree
3	I was more focused on learning and playing the game, for there was no stress on academic scores.	4.00	0.00	Strongly Agree
4	I participated in the activity in both answering and game-play portions.	4.00	0.00	Strongly Agree
5	Competing with my classmates on a game makes learning fun and engaging.	3.89	0.32	Strongly Agree
6	Points and reward system can engage me to learn the lesson.	3.93	0.26	Strongly Agree
7	I partook on the board game, for it has the element of chance and unexpectedness which makes it thrilling and exciting.	3.87	0.33	Strongly Agree
8	I exerted adequate effort to master the competencies in order to perform well in the activity.	3.82	0.38	Strongly Agree

Total 3.94 0.16 Strongly Agree

Legend:

1-1.75- Strongly Disagree
2.51-3.25-Agree

1.76-2.50-Disagree
3.26-4.00-Strongly Agree

Table 6 showed that all 8 indicators for engagement have mean scores that fall under the Strongly Agree category. In totality, the average mean result of the Grade 7 students on the use of the modified snake and ladder board game in terms of engagement is 3.94. This is interpreted as Strongly Agree with the verbal description The student is highly engaged in the given intervention. This means that the students perceived that the intervention greatly promoted their engagement in learning the 3 competencies.

Collaboration gives students the opportunity to work and collaborate together to learn and grow from each other. It does not only develop the cognitive aspect, but also the social aspect of the learners (Gates, 2018). As a group game involving different individuals, the intervention was then evaluated in the collaborative aspect. Table 7 presented the overall evaluation of the Grade 7 students under such category.

Table 7. Collaboration

Modified Snake and Ladder Board Game for Features of Academic Writing in Grade 7		Average Mean	SD	Category
C. Collaboration				
1	Working in groups promotes easier achievement of tasks, ranging from easy to complex levels.	4.00	0.00	Strongly Agree
2	My groupmates and I communicate our opinions in a respectful manner, focusing on "What can we learn?" " as opposed to "Who is to blame?"	3.89	0.31	Strongly Agree
3	Everyone exemplifies team loyalty by cheering on the group as a whole and assisting members who are having difficulties.	3.94	0.24	Strongly Agree
4	Everyone in the group agrees on what needs to be done and who should do it. We determine what needs to be done and accept responsibility for completing the tasks.	3.87	0.33	Strongly Agree
5	Working in groups bring people together, especially those with diverse interests and backgrounds.	3.93	0.26	Strongly Agree
6	Group members assist the group in developing and implementing strategies central to the group's goals and help groups make decisions and deal with conflict in a productive way.	3.83	0.37	Strongly Agree
7	Members of a group are aware of which roles can be filled within a group and willing to switch roles to maximize both our own and others' group learning experiences.	3.87	0.34	Strongly Agree
My groupmates and I have enough trust in one				

8	another to share our own thoughts and ideas which are actively listened to by the group members.	3.85	0.36	Strongly Agree
Total		3.90	0.28	Strongly Agree

Legend:

1-1.75- Strongly Disagree
2.51-3.25-Agree

1.76-2.50-Disagree
3.26-4.00-Strongly Agree

Table 7 showed that the mean result of the Grade 7 students on the use of the modified snake and ladder board game in terms of collaboration is 3.90. This is interpreted as Strongly Agree with the verbal description The student highly displayed collaboration in the conducted intervention. This means that the students perceived that the intervention significantly promoted their collaboration skills as they learn the needed competencies.

With the following obtained data, it can be said that students' performance had indeed increased as they used the intervention modified snake and ladder board game in terms of the 3 aforementioned learning competencies.

Conclusion

The findings of this study confirm that the Modified Snake and Ladder Board Game is an effective instructional tool for enhancing students' academic writing skills, as evidenced by the significant improvement in posttest scores compared to pretest results. Students who initially struggled with distinguishing academic writing features and differentiating academic from literary writing showed notable progress after engaging with the game-based intervention. Additionally, their writing performance improved, demonstrating better structure and coherence in composing academic texts. Survey results further indicate that students found the board game engaging, interactive, and beneficial for collaborative learning, reinforcing the effectiveness of active learning strategies. The statistical significance of the results, confirmed by the paired t-test analysis, highlights the game's role in increasing students' understanding of academic writing, supporting the idea that gamified learning enhances retention, motivation, and participation. In conclusion, the Modified Snake and Ladder Board Game offers an innovative, interactive, and student-centered approach to improving academic writing competencies among Grade 7 students. The study recommends further exploration of gamified learning strategies across different subject areas to maximize their educational potential.

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