

Integration of Games in Teaching English and Performance of Students in Learning Parts of Speech

Mr. Regz E. Guiral¹, Dr. Annabelle A. Gordonas², Dr. Froilan E. Guiral³

Mariano Espina Memorial Central Elem School¹

Polytechnic University of the Philippines²

Surigao State College of Technology³

Abstract

This project focused on the Integration of Games in English and performance of students in the parts of speech. It delved on the level of performance of the control and experimental groups in pretest and posttest in the parts of speech as to: Naming Words, Modifying, and Connecting and significant difference between the pretest and posttest scores of the control and experimental groups and significant difference in the increase from the pretest and posttest scores between the control and experimental groups. The study utilized the quasi-experimental design to determine the effectiveness in integrating games in teaching English to college students by employing Wilcoxon Singed Rank Test and Mann Whitney U Test.

The study revealed the following major findings: The students were not really competent from the parts of speech, particularly, nouns and prepositions in the pretest. While in the posttest, they improved with satisfactory and outstanding performances. The rest of the parts of speech were consistent in control group. Interestingly, the experimental group was competent. They were consistent in pronoun and adjective with outstanding performance while the rest got satisfactory and very satisfactory performances. Hence, employing games in teaching the parts of speech significantly improved the performance of the students. Further, there was no significant difference between the pretest and posttest performance in terms of pronoun and adjective from the control group. However, there was a significant difference between the pretest-posttest scores in the parts of speech as to noun, pronoun, adjective, adverb, preposition, and conjunction of the students in the experimental group. Conventional and game-based methods were both effective in teaching the parts of speech. Finally, there was a significant difference from the gained scores between the control and the experimental group in terms of learning adjective. Thus, learning noun, pronoun, adverb, preposition and conjunction, conventional method alone or application with games were equally effective. Hence, the students manifested creative and critical thinking skills.

Keywords: Integration of Games, Teaching English, performance, parts of speech, Philippine school, experimental

INTRODUCTION

The educational sector was one of the hardest damaged institutions when Covid 19 began causing havoc on individuals around the world during the previous few months. According to the United Nations Educational, Scientific, and Cultural Organization (UNESCO), such an emergency affected 1 billion students. It has led to the adoption of remote learning as a substitute for in-person education in a number of schools around the world. Inexorably, schools and other learning environments were forced to make the move to a fully online world. The phrase “online learning” refers to a learning environment that includes the use of synchronous and asynchronous instructional technology devices and tools as well as the Internet. Administration and delivery of academic programs (Usher & Barak, 2020; Huang, 2020).

Covid’s deluging effects have created huge disruption across the world. These developments, according to Barrot (2020), ushered in education’s digital transformation and put its ability to adapt rapidly and efficiently to the test. Schools have put in place appropriate technologies, prepared materials for students and faculty, and established systems. New infrastructure was put in place, as well as new teaching protocols and curriculum. However, some schools found the transition to be simple, while others, particularly those from developing countries with limited infrastructure, found it challenging.

According to Wit (2012), games have considerable instructional value and may be used in the classroom to encourage students to use the language rather than memorizing the correct forms. Learners are often very competitive and want to engage in activities; they desire to play games. To participate, students must be able to understand and communicate in the target language. Additionally, games encourage students to remain interested in their studies, and instructors may use them to create circumstances that require the use of the language. Huyen (2003) offers a similar point, saying that games provide recreational and enjoyable activities while also including friendly competition, which keeps students interested and motivated.

The study of Alea et al. (2020) suggests that the teachers were aware of the COVID-19 pandemic’s presence and repercussions. Their investigation delved on the association between the demographic profiles of teachers and their awareness of COVID-19. It was disclosed that the length of teaching experience and expertise were both highly connected to distance learning education preparation. Simultaneously, the geographic location of the teachers was significantly linked to their readiness to adapt to distant learning instruction. However, in the investigation of Tarrayo et al. (2021) on the shift to flexible learning experienced by language teachers, significant issues and concerns emerged like student engagement, comprehension of the learning content, and internet connectivity came out as disadvantages of flexible learning, affecting the teaching learning process.

The researchers have observed that traditional or the brick-and-mortar games were being neglected as a result of digitalization. Numerous games were popular and existing in today's culture, where majority of students are adept to incorporate technology in their cyberspace undertakings. Students utilize games to interact, cooperate, and express themselves creatively and spontaneously in their language usage. It is therefore the aim of this study to discover what kind of English teaching and learning experiences is more effective: conventional/traditional instruction or game-based learning. When it comes to games, students have been found to be more open to learning and engagement. Additionally, this study addresses issues pertaining to the extent to which critical thinking skills are demonstrated and the integration of games into English instruction, as well as the performance of students in learning the parts of speech, specifically for college students enrolled in a Higher Education Institution.

The Spectrum of Traditional/Conventional Method

Education is critical for every nation's social, political, and economic growth, and therefore good teaching is critical. Effective teaching is important because it is focused on assisting children in progressing from one level to the next in a more social, interactive atmosphere and on developing students into autonomous learners. Effectiveness does not imply perfection or a flawless performance, but rather bringing out the best in pupils.

Reynolds (2013) emphasized the importance of successful teaching and the importance of a teacher adopting an effective approach. When it comes to selecting a teaching style, a teacher has many choices. The instructor may copy lesson plans from other teachers or seek for lesson ideas online or in books. When choosing on a teaching technique, a teacher must take into account the pupils' history, prior knowledge, surroundings, and learning objectives. Teachers are aware that pupils acquire knowledge in a variety of methods. Students acquire knowledge in a variety of ways, including through absorbing material and showing their understanding. Teachers often use methods that appeal to a variety of different learning styles to aid pupils in retaining knowledge and strengthening comprehension. To guarantee that all students have an equal opportunity to learn, several techniques and approaches are utilized.

The traditional technique is heavily reliant on textbooks, while the contemporary method is heavily reliant on hands-on materials. While the conventional technique begins with the parts and progresses to the whole, the contemporary approach begins with the whole and progresses to the components. The traditional approach places an emphasis on fundamental abilities, while the contemporary method places an emphasis on large concepts. Assessment is seen as a distinct activity in conventional teaching and happens via testing, while in contemporary teaching, assessment is viewed as an integrated part of teaching and learning and occurs through portfolios and observation (Brooks, 2009).

Learning through integrated games improves the educational experience by allowing students to express themselves. Learners' creativity, critical thinking, and cognitive skills related to technology use improve with game-based learning. Learners respond strongly to game-based learning, according to a previous study. Satriol et al. (2021) investigated the effectiveness of playing games in the classroom in terms of improving student learning outcomes. The study found out that game-based learning through E-CrowdWar was helpful in boosting students' academic performance, despite the fact that the mean score varied. According to the findings, game-based learning significantly improves learning outcomes and should be implemented, particularly in the economic field.

The Realm of Traditional Game/Game-Based Method

According to Favre (2009), learning should include physical activity to absorb novel and challenging knowledge. Occasionally, memorization alone, without the utilization of motions, will be ineffective. We tend to forget information quickly when there is no action involved.

To Nugroho (2014), game-based learning promotes the learners' creativity and their critical thinking related to technology use. The utilization of mobile learning covers from the inquiry model to the use of the mobile game in the learning process that could offer learning experiences and develop learners' cognitive skills better compared to the conventional learning (Chang, et al., 2017).

A key issue regarding the use of games for teaching is whether the cognitive or psychomotor skills or attitudes gained during game play transfer to nongame settings such as school, job, or daily life. It is claimed that if there is no transfer of learning, games are ineffective as instructional tools. A significant consequence is the enhancement of cognitive functions. Certain studies have shown indications of improvement in such processes because computer game play. It may overcome concerns about transfer or overlapping cognitive processes by using games and external activities as the foundation for both kinds of transfer for learning (Anderson & Bavelier, 2011).

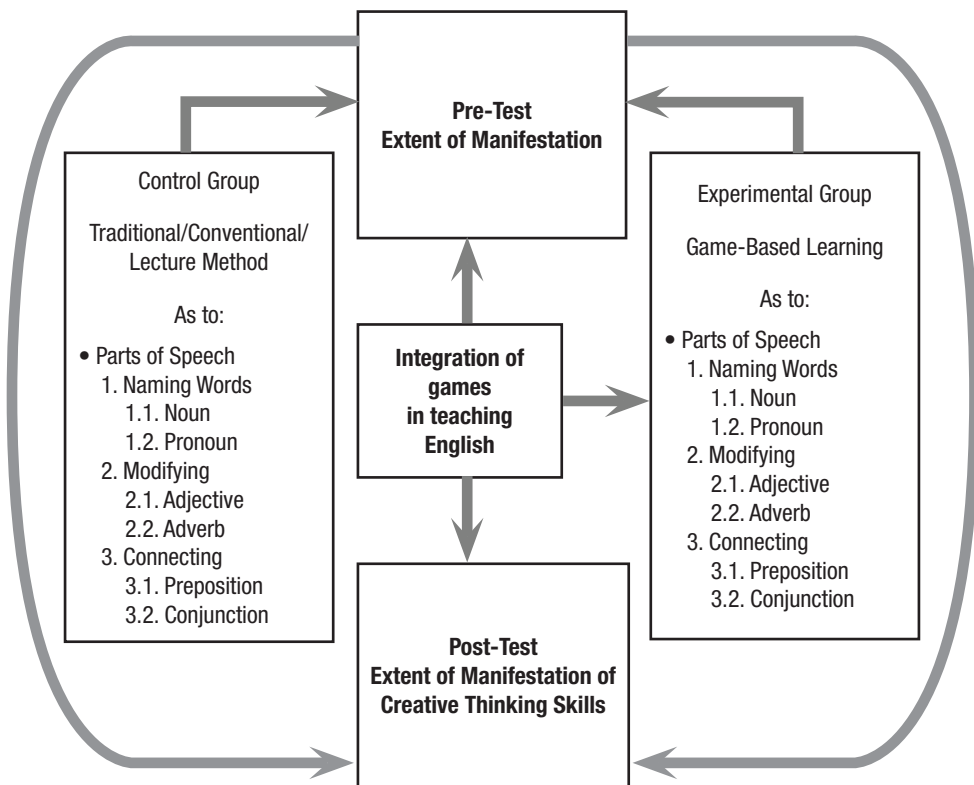
Cheung (2021) has extrapolated in his study that the teacher's pedagogical principles, the setting, and professional development were identified as factors that influenced the extent of technological integration in her Zoom classes, according to the study. According to her findings, ESL teachers with proper professional development and school support may need to embrace process-oriented pedagogies to achieve a better level of technology integration.

Conceptual Framework

This study is anchored on Clark Abt's Game-Based Learning (GBL) Theory (1970), which defines and reflects the integration of games and student performance in learning the elements of speech. He believes that these games have declared and well-considered educational goal and are not meant to be played just for amusement. Presented in the Figure 1 is the research paradigm of the study. The box in the control group contains the parts of speech as to naming words, modifying words, and connecting words while the box in the experimental group consists the game-based learning as to naming words, modifying words, and connecting words. Meanwhile, the box in the pretest contains the extent of manifestation of critical thinking skills and finally, the box in the posttest shows the extent of manifestation of creative thinking skills.

Traditional/Conventional/Lecture Method is a method in which the discussion is done through the chalk talk. While the game-based learning is a method in which the discussion is done through the integration of games.

Figure 1
The Research Paradigm of the Study



Research Questions

This project examined the performance of students using game based in teaching English in the parts of speech with the following questions:

1. At what level is the performance of the control and experimental group in pretest and posttests in the parts of speech

1. Naming Words;
 - 1.1. Noun;
 - 1.2. Pronoun;
2. Modifying;
 - 2.1. Adjective;
 - 2.2. Adverb;
3. Connecting;
 - 3.1. Preposition; and
 - 3.2. Conjunction?

2. Is there a significant difference between the pretest and posttest scores of the control and experimental groups?

3. Is there a significant difference in the increase from the pretest and posttest scores between the control and experimental groups?

Hypothesis

HO1. There is no significant difference between the pretest and posttest scores of the control and experimental groups.

HO2. There is no significant difference in the increase from the pretest and posttest scores between the control and experimental groups.

METHODS

The study utilized the quasi-experimental design to determine the effectiveness in integrating games in teaching English particularly in the parts of speech to college students during pandemic times. The researcher used pretest and posttest to determine the learning outcome of the student respondents after the integration of games.

In terms of content, the instruments were validated. A trial pretest and posttest were administered to a sample of respondents. After receiving a positive result from this stage, the instrument's reliability was tested. After the content legitimacy had been determined,

this step was carried out. The researcher employed the test-retest procedure, in which the same instrument was administered twice to the same respondents at an interval of one day. The Pearson product-moment correlation coefficient was used to examine and compare the results to demonstrate the reliability. Further, this project involved 40 first-year college students in a Higher Education Institution. Purposive sampling employed as a selecting sample because this type of research design is the most effective one in terms of certain domain used for experimental techniques based on the character of the population and objectives of the study. The researcher conducted a dry run to First Year students to determine the scores of the students. The students who got the highest scores were selected to be the respondents of the study. The same with the other section.

The following statistical tools were used by the researchers in analyzing the data of the study: (a) Wilcoxon Signed Rank Test was conducted to examine the significant difference in the pretest-posttest performance in the experimental group and Mann Whitney U Test was performed to determine significant difference in mean gain scores in the part of speech between the control and experimental group.

The researcher guarantees that the data acquired from the respondents would only be used for academic purposes. They were contacted by Messenger and given letters and consent papers to tell them about the procedure. Participants were also advised of their rights and ensured that their identities would be kept private by in accordance with the Data Privacy Act of 2012.

RESULTS AND DISCUSSION

Table 1

Level of Performance of the Control Group in the Parts of Speech

Parts of Speech	Pre-test			Post-test		
	Mean	Percent	QD	Mean	Percent	QD
Noun (5 pts)	2.8	56	Poor	3.85	77	Satisfactory
Pronoun (5 pts)	4.75	95	Outstanding	4.85	97	Outstanding
Adjective (5 pts)	4.9	98	Outstanding	4.9	98	Outstanding
Adverb (5 pts)	3.5	70	Satisfactory	4.1	82	Very Satisfactory
Preposition (5 pts)	2.65	53	Poor	3.95	79	Satisfactory
Conjunction (5 pts)	3.85	77	Satisfactory	4.35	87	Very Satisfactory

Table 1 presents the level of performance of the control group on the parts of speech. Concerning the noun, the participants obtained an average score of 2.5 equivalent to a grade scale percent of 56% described qualitatively as having poor performance. Meanwhile, in the posttest, they got a mean score of 3.85(77%) described qualitatively as satisfactory performance. It follows that the performance of the control group in noun has improved.

In Pronoun, the group got a mean score of 4.75(95%) in the pretest described as outstanding performance and got a mean score of 4.85(97%) in the posttest which is also equivalent to outstanding. By the pretest result, it can be noted that the participants of the group already have good foundation about pronoun and maintained after employing the conventional teaching method.

As to adjective, the participants obtained an average score of 4.9(98%) both in the pretest and posttest described qualitatively as an outstanding performance. This would imply that the participants are proficient from the start and no longer improve in their performance but were able to maintain the outstanding performance.

As to adverb, the control group scored 3.5(70%) on the average, in the pretest qualitatively described as satisfactory performance and have increased to 4.1(82%) in the posttest equivalently described as very satisfactory performance. This would mean that the participants improved their competency in adverb after the conventional way of teaching was employed.

With regard to preposition, the participants got an average score of 2.65(53%) in the pretest described as poor and level up to satisfactory in the posttest with the mean score of 3.95(79%). The results showed that at the beginning, the students have poor background in preposition. With the aid of conventional teaching method, they have improved and become satisfactory.

Concerning conjunction, the control group has satisfactory performance in the pretest with a mean score of 3.85(77%). In the posttest, the group's average score increases to 4.35(87%) described as very satisfactory. Evidently, the participants performance in conjunction level up with the conventional teaching method.

Table 2

Level of Performance of the Experimental Group in the Parts of Speech

Parts of Speech	Pre-test			Post-test		
	Mean	Percent	QD	Mean	Percent	QD
Noun (5 pts)	3.65	73	Satisfactory	4.8	96	Outstanding
Pronoun (5 pts)	4.55	91	Outstanding	4.95	99	Outstanding
Adjective (5 pts)	4.55	91	Outstanding	4.9	98	Outstanding
Adverb (5 pts)	3.8	76	Satisfactory	4.6	92	Outstanding
Preposition (5 pts)	3.5	70	Satisfactory	4.6	92	Outstanding
Conjunction (5 pts)	4.45	89	Very Satisfactory	4.75	95	Outstanding

The level of performance of the experimental group in the parts of speech is summarized in Table 3. As to noun, experimental group got an average score of 3.65 in the pretest equivalent to a grade scale percent of 73% and described qualitatively as satisfactory performance. In the posttest, the group got scored 4.8 with transmuted grade scale percent of 96% described as outstanding performance. It can be seen that there was an improvement in the performance of the group in noun when game was applied in teaching.

However, pronoun got an average mean of 4.55 in pretest equivalent to a grade scale of 91% which means outstanding and 4.95 in posttest with transmuted grade scale percent of 99% described as an outstanding performance. There was an improvement in the performance of the group in pronoun when game was applied in teaching.

Also, adjective got 4.55 in pretest equivalent to a grade scale of 91% which means outstanding performance and 4.9 in posttest equivalent to 98%. It can be observed that there was an improvement in the performance of the group when game was applied.

Concerning adverb, it got 3.8 in pretest equivalent to a grade scale of 76% which is satisfactory performance while in the posttest, the group got the score of 4.6 that is 92% outstanding performance. It can be observed that there was an improvement in the performance of the group when game was applied.

Furthermore, preposition got an average score of 3.5 equivalent to a grade scale of 70% satisfactory performance and 4.6 in the posttest with 92% outstanding performance. It can be observed that there was an improvement in the performance of the group when game was applied.

The last is conjunction, experimental group got an average score of 4.45 in the pretest equivalent to a grade scale percent of 89% and described qualitatively as very satisfactory performance. In the posttest, the group got scored 4.75 with transmuted grade scale percent of 95% described as outstanding performance. It can be seen that there was an improvement in the performance of the group in conjunction when game was applied in teaching.

Learning through integrated games improves the educational experience by allowing students to express themselves. Learners' creativity, critical thinking, and cognitive skills related to technology use improve with game-based learning. Learners respond strongly to game-based learning, according to a previous study. Satriol et al. (2021) study on the effectiveness of playing games in the classroom in terms of improving student learning outcomes found that game-based learning through E-CrowdWar was helpful in boosting students' academic performance, despite the fact that the mean score varied. According to the findings, game-based learning significantly improves learning outcomes and should be implemented, particularly in the economic field.

Since pretest and posttest scores go against normal distribution. Wilcoxon Signed Rank Test was conducted to investigate significant difference in the pretest-posttest performance in the parts of speech of the control group.

Table 3
Difference between the Pretest and Posttest Scores of the Control Group

Performance	Z	p	Decision on Ho	Interpretation
Noun	-3.402	0.001	Rejected	Significant
Pronoun	-1.414	0.157	Not Rejected	Not Significant
Adjective	0	1	Not Rejected	Not Significant
Adverb	-2.588	0.01	Rejected	Significant
Preposition	-3.601	0	Rejected	Significant
Conjunction	-2.887	0.004	Rejected	Significant

Table 3 highlights the difference between the pretest and posttest scores in the control group. As an examination of the findings in Table 3, it shows that there is no significant difference between the pretest and posttest performance of the in pronoun ($Z=-1.414$ at $p=0.157 > 0.05$) and in adjective ($Z=0$ at $p=1 > 0.05$) in the control group. On the other hand, the performance of the group in noun ($Z=-3.402$ at $p=0.001 < 0.05$), adverb (-2.588 at $p=0.01 < 0.05$), preposition ($Z=-3.601$ at $p=0.0 < 0.05$) and in conjunction ($Z=-2.887$ at $p=0.004 < 0.05$) significantly differ between pretest and posttest. With recall in the

average scores of the control group in Table 2, the performance of the group in the posttest is significantly higher than in the pretest.

On the basis of the results obtained, it could be argued that the use of conventional teaching method in the parts of speech significantly increased the academic performance of the control group students.

Wilcoxon Singed Rank Test was also conducted to examine the significant difference in the pretest-posttest performance in the experimental group.

Table 4
Difference between the Pretest and Posttest Scores of the Experimental Group

Performance	Z	p	Decision on Ho	Interpretation
Noun	-3.451	0.001	Rejected	Significant
Pronoun	-2.271	0.023	Rejected	Significant
Adjective	-2.111	0.035	Rejected	Significant
Adverb	-2.859	0.004	Rejected	Significant
Preposition	-2.855	0.004	Rejected	Significant
Conjunction	-1.897	0.06	Rejected	Significant

Table 4 shows the difference between the pretest and posttest scores in the experimental group. As revealed by an analysis of the findings in Table 5, there is significant difference between the pretest-posttest scores in the parts of speech as to noun ($Z=-3.451$ at $p=0.001 < 0.05$), pronoun ($Z=-2.271$ at $p=0.023 < 0.05$), adjective ($Z=-2.111$ at $p=0.035$), adverb ($Z=-2.859$ at $p=0.004 < 0.05$), preposition ($Z=-2.855$ at $p=0.004 < 0.05$) and conjunction ($Z=-1.897$ at $p=0.06 < 0.05$) of the students in the experimental group. As reflected by the higher average scores in the posttest than in the pretest of the experimental group, it can be inferred that the performance of the said group is significantly higher in the posttest. Based on the obtained results, it could be argued that employing game in teaching in the parts of speech significantly improve the performance of the students.

The findings above are in consonance to the study of Nugruho (2014) which revealed that the learners' creativity and critical thinking skills in relation to technology use are enhanced through the integration of games. In comparison to traditional learning, mobile learning encompasses everything from the inquiry model to the use of a mobile game in the learning process, all of which can provide learning experiences and improve learners' cognitive skills (Chang, et al., 2017).

Table 5
Significant Difference between the Control and Experimental Groups in the Mean Gain

Performance	Mann-Whitney U	Z	p	Decision on Ho	Interpretation
Noun	182	-0.52	0.603	Not Rejected	Not Significant
Pronoun	158	-1.632	0.103	Not Rejected	Not Significant
Adjective	140	-2.331	0.02	Rejected	Significant
Adverb	176	-0.719	0.472	Not Rejected	Not Significant
Preposition	171.5	-0.799	0.424	Not Rejected	Not Significant
Conjunction	166	-1.062	0.288	Not Rejected	Not Significant

Table 5 determines significant difference in mean gain scores in the parts of speech between the control and experimental group. The findings from the tabular values revealed that the gain scores of the students in the experimental and control group in noun ($Z=0.52$ at $p=0.603 > 0.05$), pronoun ($Z=-1.632$ at $p=0.103 > 0.05$), adverb ($Z=-0.719$ at $p=0.472 > 0.05$), preposition ($Z=-0.799$ at $p=0.424 > 0.05$) and conjunction ($Z=-1.062$ at $p=0.288 > 0.05$) did not show any statistical difference. However, there is significant difference in the gain scores between the control and the experimental group in terms of learning adjective ($Z=-2.331$ at $0.02 < 0.05$). Moreover, the rank average of scores gained of the control group was 17.5 while in the experimental group was 23.5 (see Table 7). The said scores demonstrate that the students in the experimental group had higher performance in adjective than those in the experimental group. This indicates that the experimental group students obtained higher success in learning adjective when game is employed in teaching than conventional teaching method alone. Thus, employing game in teaching adjective is more effective than the conventional teaching method alone. On the contrary, in learning noun, pronoun, adverb, preposition and conjunction, conventional method alone or applied with game is equally effective.

CONCLUSIONS

1. The students were not really competent in noun and preposition of the parts of speech in the pretest. While in the posttest, they improved with satisfactory and outstanding performances. The rest of the parts of speech were consistent in the control group. However, in experimental group, the students were competent. They were consistent in pronoun and adjective with outstanding performance and the rest got satisfactory and very satisfactory performances. Hence, employing games in teaching the parts of speech significantly improved the performance of the students.

2. There was no significant difference between the pretest and posttest performance in terms of pronoun and adjective in the control group. However, there is a significant difference between the pretest-posttest scores in the parts of speech as to noun, pronoun, adjective, adverb, preposition, and conjunction of the students in the experimental group. Conventional method and game-based methods are both effective in teaching the parts of speech.

3. There was a significant difference in the gain scores between the control and the experimental group in terms of learning adjective. On the contrary, in learning noun, pronoun, adverb, preposition and conjunction, conventional method alone or applied with game are equally effective. Hence, the students manifest creative and critical thinking skills.

RECOMMENDATIONS

1. The administrators should continuously extend support to the English teachers for a faculty development program to sustain the demand of a high-level teaching competencies and performance especially in the integration of games in the classroom or cyberspaces.

2. Teachers may retool the pivotal role of interactive games designed for the purpose of making the lessons engaging and meaningful for students specifically those who are not under this major. They may also cross skill their competencies in terms of learning interactive tools significant in reverberating a digital landscape driven classroom.

3. Students may be able to demonstrate understanding in discovering interactive English games in the classrooms with high level of performance thereby, leading them to the pathway of attaining their ownership of learning, unparalleled creativity and critical thinking skills.

4. Future researchers may find out which among the two methods amplify effectiveness in terms of delivering quality teaching and learning. This would help them improve their performance and broaden their knowledge about the parts of speech in English and help them become globally competitive individuals.

ABOUT THE AUTHORS

Mr. Regz Espuerta Guiral is currently connected at Marian Espina Memorial Central Elementary School handling Science, English and Mathematics subjects. He has been a Montessori Teacher in Surigao Education Center, Surigao City for 2 years prior to his regular appointment in the Department of Education. He obtained his Bachelor in Elementary Education (2015) and Master of Arts in Education major in English (2018) at Surigao State College of Technology, Surigao City.

Dr. Annabelle A. Gordonas is presently a faculty member at the Department of English, Foreign Languages and Linguistics and College of Education in PUP, Manila, Philippines. She teaches languages, research, and various subjects in linguistics and education. She finished her degree, Bachelor of Secondary Education major in English at St. Paul University, Surigao; Master of Arts in English Language Teaching at PNU, Mindanao; Master of Educational Leadership and Management at The University of Sydney, Australia and Doctor of Philosophy major in Education at Father Saturnino Urios University. Her research interests include Language, Assessment, and Teaching Strategies in English. Aside from that, she also caters public speaking engagements on topics like leadership, management, education, ethics, research, business writing and the like.

Dr. Froilan Jay Espuerta Guiral a.k.a *Dakilang Guro* hails from Bucas Grande Island, Socorro, Surigao del Norte, Philippines. He obtained his 2-year Computer Technology (2001) and BS Computer Science (2004) at St. Paul University-Surigao, Surigao City. He also took units in BS Secondary Education at Bucas Grande Foundation College, Socorro, Surigao del Norte and successfully passed the Licensure Examination for Teachers major in TLE in March 2012. He graduated Master in Information Technology (2013), Doctor of Philosophy in Education (2017) and MA – English (2021) at Surigao State College of Technology, Surigao City. He is a poem enthusiast and a prolific contributor in various school papers. He is one of the members of Surigaonon Manunuyat and has the heart and passion through writing poetry, haiku, and sonnet during his leisure time. He is now the School Paper Adviser and ICT Head in SSCT-Malimono Campus, Surigao del Norte.

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