Employing Gamification-Incentive-Feedback (GIF) Model in Enhancing Classroom Learning Experience

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This action research aimed to study the use the Gamification-Incentive-Feedback (GIF) Model in enhancing the classroom learning experience of Grade 9 students in a private school in Cagayan de Oro, Philippines. The research used convenience sampling and used a combination of Likert scale pre-intervention and post-intervention survey questionnaires as well as focus group discussion (FGD) to gather data and responses. The results were analyzed through the Wilcoxon Signed Rank Test and interview responses from the FGD through thematic analysis. Results reveal a significant difference in students' classroom learning experience in terms of motivation. Further, the participants' responses to the FGD revealed that the GIF Model encourages participation and teamwork; that it promotes competition; that it is motivating, fun, exciting, and interesting; that it encourages learning retention; and that the GIF Model should be implemented face to face; among others. It is concluded that the use of GIF Model is a promising approach for the students in the classroom to create an engaging, motivating, and rewarding experience. Educators are encouraged to adapt the GIF Model in their teaching practice but should make sure that it is properly and fairly organized to avoid student frustration.

Keywords: gamification, incentive, feedback, motivation, classroom learning experience

INTRODUCTION

The COVID-19 pandemic significantly influenced teachers' instructional approaches and remodeled the landscape of our education sector. With the major shift to online and modular learning modalities, students' classroom learning experiences were unfavorably impacted, which resulted in changes in their interaction patterns and a decline in their overall learning satisfaction. This was a problem because if students did not feel fulfilled with their learning experiences, they were unlikely to be motivated to exert effort, which had implications on their focus, participation, and achievement. It was important to note that while interaction between teachers and students still occurs in distant learning, it is vastly mediated by technology, and the interaction is distinct from the actual classroom learning

setup of the pre-pandemic time. Local and international studies, such as those of Barrot, Llenares, & Del Rosario (2021) and Hu (2021), reveal that not only did the pandemic affect educational conditions, but it also affected the quality of the students' learning experiences. The Glossary of Education Reform (2013) defined a learning experience as "any interaction, course, program, or other experience in which learning takes place". Thus, interaction is very important in any given learning context. The learners' environment and context should be appropriately conditioned to ensure maximum interaction in the classroom. Alawadhi and Abu-Ayyash (2020) also mention how the student learning experience could be assessed through the areas of Interaction and Engagement, Attention and Focus, Motivation and Competition, Learning and Knowledge Retention, and Fun and Enjoyment. Therefore, this action research considered the following areas in creating their instrument.

During the researchers' classroom observation, it is noticed that the students did not do well when asked to recall their previous lesson. The students either refused to answer or gave insufficient or incorrect answers to the questions. They also responded passively to the questions. It even took repeated calls from the teacher before the students finally gave gestures of response. In this instance, the researchers noted a lack of interaction which is one area of the classroom learning experience as mentioned by Alawadhi and Abu-Ayyash (2020).

This is alarming because the learners were showing an indication of a poor classroom learning experience. Hence, the researchers came up with an intervention in response to the observed phenomenon. The sudden shift back to the face-to-face classroom setup has an apparent impact on the students' class performance. The students' lack of participation could also be an indicator of poor knowledge retention. Knowledge retention is one area of student learning experience and is equally necessary for academic achievement. Bloom's Revised Taxonomy (2002) provided a framework for students to achieve higher-order thinking. The first level of thinking—Knowledge is the retrieval of information from long-term memory. Student knowledge retention is pivotal for the students to master this level, before proceeding to the next level of Bloom's Revised Taxonomy—Comprehension. This implies that when a student experiences difficulties in knowledge retention, then the student could not determine meaning from texts because comprehension required retrieval of knowledge. Therefore, students experiencing this problem due to poor learning experiences do not feel encouraged to participate.

However, other factors also affect students' participation and one of them is motivation. According to Sahar & Nyazi (2022), the way students are motivated nowadays is very different. Instruction should be done in more than one mode; in other words, the reinforcements should be carried out in three modes, namely student-instructor, student-student, and student-content. With the restrictions of the pandemic, the students were deprived of the ability to be with the teachers and other students. Hence, less interaction led to less motivation and less participation. In a recent study by Nguyen et al. (2021) active learning methods are said to have a correlation with "more positive student perceptions." It was also concluded that students who prefer on-site sessions desire to interact socially with their classmates and teachers.

Additionally, according to the results of the Programme for International Student Assessment (PISA) in 2018, over 80 percent of Filipino students did not reach a minimum level of proficiency in reading—this result suggests that Filipino students are one of the lowest performers among all countries and economies participating in PISA. With the new normal emerged different innovative learning modalities such as full online classes, modular learning, and hybrid learning. However, in these aforementioned learning modalities, teachers have little to no supervision of students' learning. As a result, students now are easily distracted. As Amadora (2020) puts it, students of today have a short attention span, and domestic factors enable trivial distractions such as sleeping, multi-tasking, parcel deliveries, pets, and household chores. As a result, students have trouble in storing and

recalling relevant information (classroom learning experience) due to its highly unconducive environment.

Furthermore, the pandemic caused a significant change in each student's learning environment, which had a negative impact on their involvement in class. The rapid and abrupt COVID-19 pandemic's entrance raised many questions about the future of education, forcing both teachers and students to adjust to a new normal in order to survive in the new educational environment. According to Mostafa et al. (2022), The method of delivery of the course mattered significantly as did the student's drive, maturity, and time management abilities on their performance. So, both intrinsic qualities and the student's prior experiences may have had a role in how well a student did in a learning environment.

Literature Review

Gamification, Incentive, and Feedback

The Gamification-Incentive-Feedback (GIF) Model was originally devised by the researchers to provide a better classroom learning experience for the students. This model was a by-product of the researchers' collective observation on how classroom experiences of Grade 9 students could be improved, specifically addressing the lack of result of participation and scarce response from students during class discussions. The Gamification-Incentive-Feedback (GIF) Model was the proposed intervention in this action research. It was a positive reinforcement model that integrated classroom learning experience, respectively: Gamification, Incentive, and Feedback.

Gamification was the use of game-design elements in non-game situations or contexts often for pedagogical purposes (Yilmaz et al., 2022). In this action research, this referred to the gamified retention activities which took place during the three-day intervention. These activities came in three varieties and were substantiated more later. Now, incentive, by definition, refers to tangible and intangible rewards which were given to reinforce a desired behavior (Collins et al, 2008). This could be used in the context of education given a strict adherence to ethical guidelines. In this study, incentive pertained to the points the students gathered in the gamified retention activities which were added to their effort marks only; thus, not affecting the participants' overall academic standing. Feedback was generally the information given by a teacher to his or her students about their performance which influenced their learning experience satisfaction (Gan et al., 2021). In this study, feedback is realized when the teacher provides the students with a combination of objective and motivational feedback on their classroom performance using a checklist at the end of the intervention time.

The researchers devised this framework as a novel model inspired by a number of studies in the field of Education. Although there was no similarly fashioned framework that was generally known by most educational practitioners, this intervention hoped to understand how the intermingling of the three elements promoted a better classroom learning experience for the students. According to Gee (2003, as highlighted by Lin, 2022) interactive curriculum design such as game-based learning, which served great influence on cognition development, motivation improvement, and decision making, facilitated students to gain attention, memory, and motivation through intensive interactions.

The aforementioned model was a three-part process. Firstly, a gamified retention activity was facilitated by a partner English teacher. To avoid duplicity of activities, three (3) different games were employed namely: Jeopardy, Boards up, and Emoji. Jeopardy was facilitated through a Powerpoint Presentation wherein several categories served as the choices of the students. Each category bore different points which were equivalent to what they received if they answered the question that corresponded to the point correctly. Boards Up was a group activity in which students were divided into groups of 4 where each group was given one small board where they wrote their answers. Each question bore different points which were equivalent to what they received if they answered the

question that corresponded to the point correctly. (3) Emojify was a gamified activity in which an emoji or several emojis were placed in the blank space of a statement or phrase. This served as a hint for the students in filling in incomplete phrases or sentences. Each question bore different points which were equivalent to what they received if they answered the question correctly. The type of game may have differed each day, but the process of the implementation, as well as the format of constructing the questions, was the same. The purpose of the varied gamified activities was to give the students a different experience. The questions in the games were constructed using the Gestalt Principle of Closure. The process of implementing the intervention.

Gestalt Principles aim to understand how the human mind works in gaining perceptions from stimuli that are found in the surroundings. These principles argue that the mind perceives individual elements by sending information to the eyes. It describes how humans group elements that are similar or alike. In this study, the researchers utilized the principle of Closure in formulating questions for all gamified activities. Through this, students are prompted to fill in the blanks of the given sentences, phrases, and paragraphs. The principle of Closure was chosen by the researchers because it requires learners to recall specific information in their minds to be able to show that they have retained the previous lessons taught to them. This principle is an important aspect to assess the participants' retention of the previous lesson. The principle of Closure asserts that humans tend to fill in blanks to arrive at a complete idea whenever an external stimulus matches the incomplete idea (Joyce, 2021). This is done through a gamified retention activity.

Secondly, after all the gamified activities, the teacher tallied the scores gained by each student through a scoreboard that tracks the participation and accumulated points. These points will then be attributed to the student's effort mark. Incentive, therefore, is defined operationally in this paper as the teacher recognizing students who earned points during all the gamified retention activities. Indeed, employing an incentive or reward system significantly increases student performance. The results of a recent study by Le (2020) entitled Do Student-Level Incentives Increase Student Achievement? A Review of the Effect of Monetary Incentives on Test Performance reveals that employing monetary incentives in the classroom has a positive impact on the overall performance of students. However, in this study, employing incentives in the form of money and/or any differential treatment of students for academic advantage is not practiced. The researchers assert that the effort mark that they will receive will have no bearing on their respective academic mark Lastly, written feedback will be given to each student individually. This is in the form of a checklist that was given to students after all the gamified activities are employed. Each student will receive feedback on the following areas: (1) Interaction and Engagement, (2) Attention and Focus, (3) Motivation and Competition, (4) Learning and Knowledge Retention, (5) Incentive, and (6) Feedback. These areas were the focus of the checklist that will be utilized by the partner teacher in providing individual feedback for each student based on their performance and participation during the intervention period.

The Gamification-Incentive-Feedback (GIF) Model is a timely intervention aiming to enhance students' learning experiences, thus as a result, students are expected to perform better in the classroom learning experience on both sides (before and after the intervention). With gamified retention activity, the researchers will likewise look at the motivation of the learners before and after intervention through the survey questionnaires. As mentioned earlier, only the effort mark of the participants will be merited as they garner points from the gamified retention activities.

METHOD

This research employed convenience sampling. The researchers gathered data from a private junior high school in Cagayan de Oro, Philippines with a population of 1,952. The sample consisted of one class which consisted of twenty-seven (27) students. Out of the twenty-seven (27), twenty (20) students signed consent forms to be included in the study.

This action research utilized the qualitative and quantitative methods in the data collection and analysis. Quantitative research is the gathering and analysis of numerical data to find correlations between numbers (Jose, 2022). Two instruments in the form of survey questionnaires and focus group discussion questions were employed.

The first instrument used the Likert scale in addressing Research Questions 1, 2, and 3. Basic analysis of the data is employed here. In terms of Research Questions 1 and 2, descriptive statistics were used to analyze the responses across the five descriptors in the survey questionnaires: Strongly Agree, Agree, Not Sure, Disagree, and Strongly Disagree. In terms of Research Question 3, the Wilcoxon Signed Rank test was used as a statistical tool to determine whether there is a significant difference between the participants' pre-survey and post-survey responses in terms of each item. The same strategy can be observed in the inquiry of Alawadhi and Abu-Ayyash (2020). Data gathered by this instrument are presented in tables. Meanwhile, Research Question 4 is addressed through the Focus Group Discussion. With these instruments, the researchers determined whether the GIF Model can help improve the participants' classroom learning experience. The researchers worked together with the partner English teacher in implementing the intervention.

The researchers floated the pre-intervention survey questionnaires to the participants one day before the intervention. After three days, the researchers then administered the post-intervention survey. The intervention had three elements: Gamification, Incentive, and Feedback. Gamification transpired as the gamified retention activities during the on-site and online sessions of the students during the three-day intervention. Three gamified activities were used for variation in each day respectively.

First, the Jeopardy gamified retention activity consisted of five statements with blanks varying in difficulty. Each question was embedded and hidden inside different canvases or albums all displayed in PowerPoint presentation slides. These canvases or albums looked like posters or infographics of different categories, they may be movies familiar to the students, movie characters, artists, or books—each bearing a specific number of points ranging from one to six points. In the game proper, the teacher played a fragment or portion of a song to the class. Whoever guessed the song title and the artist correctly was acknowledged by the teacher. For instance, the teacher played a portion of "Anti-hero" by Taylor Swift, the first student to raise his or her hand had to correctly guess the title and the artist. If he or she did so, he or she proceeded by choosing among the canvases or albums. It was for the student to decide which canvas or album to choose that bears the points they wish to achieve. The student is then given the chance to pick among the canvases. For example, the student chooses a canvas worth five points, the statement was revealed. The teacher gave the students ten seconds of thinking time. When thinking time was over, the students read the entire statement supplying the words in the blanks. The researchers are the ones who created the PowerPoint presentation slides—the medium for this gamified retention activity.

Boards Up is the second gamified retention activity that was utilized in implementing the intervention. In this gamified activity, the students were grouped with four members in each circle. They were seated together with their assigned groups. The teacher then flashed an incomplete statement or phrase, and the students were given 15 seconds to write their answers on the small board provided by the partner teacher. The point system for this gamified activity is the same as the Jeopardy game. Even though the students were grouped, the total accumulated score that their group gained at the end of the activity was recorded as their individual scores on the leaderboard.

The third gamified retention activity that was utilized is Emojify. According to Kendall (2022), an emoji is a digital pictogram that is widely used throughout social media. These digital pictograms were designed to express certain emotions and expressions through digital platforms. In the Emojify activity, an emoji or several emojis were placed in the blank space of a statement or phrase. This served as a hint for the students in filling in incomplete phrases or sentences. The point system of this

gamified retention activity is the same as the other two activities. These techniques draw upon the Gestalt Principle of Closure. This principle advances that "people will fill in blanks to perceive a complete object whenever an external stimulus partially matches that object" (Joyce, 2021). As an application, the students did not answer open-ended questions; instead, they made incomplete statements complete by filling in the blanks. As earlier mentioned, the principle of Closure was chosen by the researchers because it requires learners to recall specific information in their mind to be able to show that they have retained the previous lessons taught to them with less chance of guessing as compared to multiple-choice-type questions.

Students' points were accumulated daily and were monitored through a leaderboard which was prepared by the partner teacher. This leaderboard showed all the scores of the students in the given week from highest to lowest. The incentive comes in when the teacher determines the "Students of the Week". These are the students who are in the top five of the leaderboards. They were called and verbally recognized by the teacher in front and earned points to be credited to their effort marks. At the end of the week, each student received feedback on the following areas: Interaction and Engagement, Attention and Focus, Motivation and Competition, Learning and Knowledge Retention, Incentive, and Communication. The teacher's notes on the following areas were handled directly by the teacher to the students. The students' scores in the gamified activities did not affect their achievement marks and were only credited to their effort marks. All students in the classroom, regardless of if they are part of legitimate participants or not, received the intervention in the same manner as the others would. In the English Language classroom, the content of the gamified activity was based on the previous lesson given ahead of time by the partner English teacher. For example, the previous lesson was about poetry. The researchers made six incomplete statements out of the provided content where the participants were able to connect their prior knowledge in forming a correct answer out of the given incomplete statement. The researchers then administered the post-intervention survey and the Focus Group Discussion to see whether the implementation of the intervention improved the students' overall classroom experience using the GIF Model.

FINDINGS

Research Question 1. What are the students' perceptions toward their classroom learning experience before the intervention?

The pre-intervention survey elicited generally high rank scores from the participants. In order to determine the centrality of responses to each item, mean was used. That is, the average of the rank scores in each item was calculated and interpreted using the ranges.

Table 1.1
Frequency distribution of rank means (Pre-intervention Survey)

Value	Interpretation	Range	Frequency
1	Strongly Disagree	1.00 - 1.80	0
2	Disagree	1.81 - 2.60	0
3	Not Sure	2.61 - 3.40	0
4	Agree	3.41- 4.20	6
5	Strongly Agree	4.21 - 5.00	14
Number of Items			20

In the table above, six (6) items have mean rank scores interpreted as 'agree' and fourteen (14) interpreted as 'strongly agree'. The range is computed using the anchoring method accepted in Likert scale data interpretation, using the formula introduced by the team's research instructor in the first semester of the academic year 2022-2023. Table 1.2 shows all items in the survey and the corresponding interpretations with respect to their means and the range presented in Table 1.1.

Table 1.2
Interpretation of participants' pre-intervention survey responses

Item	Statement	Mean	Interpretation
1	I think that having games in class is interesting.	4.88	Strongly Agree
2	I see the importance of playing well in gamified activities.	4.29	Strongly Agree
3	It is fun to play games in class with my classmates.	4.59	Strongly Agree
4	I try to get a higher score when I play games.	4.12	Agree
5	Having games motivates me to participate in our class discussions.	4.47	Strongly Agree
6	I am motivated to exert effort when I play games.	4.12	Agree
7	I look forward to participating in different kinds of games.	4.59	Strongly Agree
8	My teacher's incentives are fair.	4.53	Strongly Agree
9	I find the value of having incentives in class.	4.53	Strongly Agree
10	Incentives are essential for my learning experience.	4.65	Strongly Agree
11	Incentives keep me motivated to participate more in class.	4.24	Strongly Agree
12	I am aware of how I will receive incentives in class.	4.06	Agree
13	Having incentives helps me gain interest in class.	4.47	Strongly Agree
14	I receive relevant feedback about my participation in class.	3.82	Agree
15	I receive organized feedback about my participation in class.	4.12	Agree.
16	I am told of the things that I do well in class.	3.82	Agree
17	I am told of what I can do better in class.	4.29	Strongly Agree
18	I appreciate receiving comments on my class participation.	4.29	Strongly Agree
19	I look forward to knowing my teacher's feedback about my performance in class.	4.35	Strongly Agree
20	Teacher feedback helps me decide how to improve in class.	4.65	Strongly Agree

The majority of the items have mean rank scores which are higher than 4.20, thus are interpreted to be 'strongly agree'. Items 4, 6, 12, 14, 15, and 16, however, are lower, falling under the interpretation of 'agree'. Since the aim of this research was to gain insight into the specific perception of the participants in several areas, the overall mean rank was considered irrelevant and was no longer computed. More so that the mean rank can misleadingly undermine the differences of perceptions measured in all items.

Research Question 2. What are the students' perceptions toward their classroom learning experience after the intervention?

As in the pre-intervention survey, the post-intervention survey likewise showed high rank scores from the participants, though a difference is statistically apparent.

Table 2.1
Frequency distribution of rank means (Post-intervention Survey)

Value	Interpretation	Range	Frequency
1	Strongly Disagree	1.00 - 1.80	0
2	Disagree	1.81 - 2.60	0
3	Not Sure	2.61 - 3.40	0
4	Agree	3.41- 4.20	2
5	Strongly Agree	4.21 - 5.00	18
Number of Items			20

Two (2) items have mean ranks interpreted as 'agree' and eighteen (18) interpreted as 'strongly agree'. In terms of each item, the mean rank scores do not differ significantly from the pre-intervention survey responses, as can be seen in Table 2.2.

Table 2.2
Interpretation of Participants' Pre-intervention Survey Responses

Item	Statement	Mean	Interpretation
1	I think that having games in class is interesting.	5.00	Strongly Agree
2	I see the importance of playing well in gamified activities.	4.88	Strongly Agree
3	It is fun to play games in class with my classmates.	4.88	Strongly Agree
4	I try to get a higher score when I play games.	4.59	Strongly Agree
5	Having games motivates me to participate in our class discussions.	4.82	Strongly Agree
6	I am motivated to exert effort when I play games.	4.82	Agree
7	I look forward to participating in different kinds of games.	4.65	Strongly Agree
8	My teacher's incentives are fair.	4.47	Strongly Agree
9	I find the value of having incentives in class.	4.53	Strongly Agree
10	Incentives are essential for my learning experience.	4.71	Strongly Agree
11	Incentives keep me motivated to participate more in class.	4.71	Strongly Agree
12	I am aware of how I will receive incentives in class.	4.53	Strongly Agree
13	Having incentives helps me gain interest in class.	4.65	Strongly Agree
14	I receive relevant feedback about my participation in class.	4.24	Strongly Agree
15	I receive organized feedback about my participation in class.	4.41	Strongly Agree
16	I am told of the things that I do well in class.	4.18	Agree
17	I am told of what I can do better in class.	4.18	Agree
18	I appreciate receiving comments on my class participation.	4.47	Strongly Agree
19	I look forward to knowing my teacher's feedback about my performance in class.	4.53	Strongly Agree
20	Teacher feedback helps me decide how to improve in class.	4.65	Strongly Agree

The majority of the items, except for items 16 and 17, can be interpreted as 'strongly agree', with means higher than 4.20. There is an improvement in the responses of the participants, as observed in Table 2.2.

Research Question 3. Is there a significant difference between the students' perceptions before and after the intervention?

The Wilcoxon Signed Rank test was used by the researchers to determine whether there is a significant difference between the pre-intervention survey responses and post-intervention survey responses of the participants through the Jamovi 2.3.21 software. A p-value lower than 0.05 means that there is a significant difference, given a significance level of 5%.

Table 3.1
Summary of the p-values and interpretation (Wilcoxon Signed Rank Test)

Item	Statement	Statistic	P-value	Interpretation
1	I think that having games in class is interesting.	0.0	0.346	No Significant Difference
2	I see the importance of playing well in gamified activities.	0.0	0.005	Significant Difference
3	It is fun to play games in class with my classmates.	6.50	0.219	No Significant Difference
4	I try to get a higher score when I play games.	9.00	0.025	No Significant Difference
5	Having games motivates me to participate in our class discussions.	0.00	0.048	Significant Difference
6	I am motivated to exert effort when I play games.	0.00	0.010	Significant Difference
7	I look forward to participating in different kinds of games.	2.00	0.773	No Significant Difference
8	My teacher's incentives are fair.	9.00	0.766	No Significant Difference
9	I find the value of having incentives in class.	10.50	1.000	No Significant Difference
10	Incentives are essential for my learning experience.	6.00	0.766	No Significant Difference
11	Incentives keep me motivated to participate more in class.	0.00	0.015	Significant Difference
12	I am aware of how I will receive incentives in class.	7.00	0.066	No Significant Difference
13	Having incentives helps me gain interest in class.	3.00	0.233	No Significant Difference
14	I receive relevant feedback about my participation in class.	5.00	0.143	No Significant Difference
15	I receive organized feedback about my participation in class.	3.00	0.120	No Significant Difference
16	I am told of the things that I do well in class.	11.00	0.066	No Significant Difference
17	I am told of what I can do better in class.	33.00	0.565	No Significant Difference
18	I appreciate receiving comments on my class participation.	16.00	0.454	No Significant Difference
19	I look forward to knowing my teacher's feedback about my performance in class.	6.00	0.374	No Significant Difference
20	Teacher feedback helps me decide how to improve in class.	5.00	1.000	No Significant Difference

In terms of the Wilcoxon Signed Rank Test, 16 items showed no significant difference, while the other four (item 2, 5, 6 and 11) showed a significant difference. Item 2 got a p-value of 0.005, then item 5 has 0.048, item 6 has 0.01, and item 11 has 0.015. Table 3.2 shows all the statements in these items.

Table 3.2
Items with significant difference

Item	Statement
2	I see the importance of playing well in gamified activities.
5	Having games motivates me to participate in our class discussions.
6	I am motivated to exert effort when I play games.
11	Incentives keep me motivated to participate more in class.

Research Question 4. What were the participants' experiences with the Gamification - Incentive - Feedback (GIF) Model?

The focus group discussion was conducted involving both the participants and the researchers. Three questions were asked: (1) What do you think about the GIF Model? (What they liked, what they didn't like, what should be changed) (2) What significant changes have you noticed in your learning experience upon the implementation of the intervention? and (3) What do you think about the way the intervention was implemented?

Coding was done with the use of transcripts. Two themes were discovered: (1) GIF Model has a positive impact on the learning experience of the learners and (2) GIF Model needs to be adjusted according to the needs and preferences of the students.

Seven codes were identified: (1) GIF Model encourages participation and teamwork; (2) GIF Model promotes competition; (3) GIF Model is motivating, fun, and exciting; (4) GIF Model is interesting; (5) GIF Model encourages learning retention; (6) GIF Model should be implemented face to face; and (7) Games in the GIF Model can be unfair.

DISCUSSIONS

In the first research question, the participants have an overall positive perception toward their learning experience before the intervention. Before the intervention was introduced, the participants already thought that having games in class is interesting and had generally good perception on the statements included in the instrument. This confirms the study by Gee (2003, as mentioned by Lin, 2022) on how game-based learning serves as a great influence on motivation improvement. However, this should not necessarily be attributed to the lack of the identified problem in the school community because the participants are a different group from the ones observed by the research team in the preceding semester. It is important to take note that the results of the pre-intervention survey may not be generalizable to other groups or class sections in the junior high school.

Post-intervention, the participants also have an overall positive perception toward their learning experience after the intervention. Although, it can be noticed that the mean ranks are slightly higher. The fact that the post-intervention rank scores are slightly higher than the pre-intervention rank scores implies that the intervention may have had a statistically small but measurable impact on the participants' perceptions regarding their learning experience.

In research question 3, the findings indicate that the intervention had a stronger impact on the constructs measured or contained by the four survey items which yielded a significant difference. The gamification element of the intervention motivated participants to perform well in gamified activities and exert more effort, as gauged by items 2, 5, and 6. This is supported by a study by Kohn (2004, cited by Tangkui & Keong, 2023) which mentions that students are more likely to be engaged and

motivated in a class when they are interested in it and enjoying it. This promotes efficient memory processing and long-term memory storage. Additionally, the incentive component of the intervention had a stronger effect on participants' motivation to participate in class, as measured by item 11. This confirms research from Eide and Showalter (2020) which mentioned that, when faced with the prospect of rewards for high performance, students will exert more focus and effort to obtain said rewards. With regard to the items which did not have significant difference, it is possible that the Gamification-Incentive-Feedback Model had a lesser measurable effect on those constructs. It can therefore be suggested that such constructs were already well-established in the school prior to the intervention, thus were not significantly impacted by the Gamification-Incentive-Feedback Model. In other words, the participants may have already enjoyed playing games, perceived the incentives as fair, and appreciated feedback on their performance in class. Especially on feedbacking, it is a practice that is not new to the participants. The constructs related to motivation, effort, and perceived importance of playing well in gamified activities were the ones more directly impacted by the intervention.

With the statements in Table 3.2 however, the findings suggest that Gamification-Incentive-Feedback Model can be an effective means for enhancing student motivation and, thus, engagement in the classroom. The participants see the importance of playing well in gamified activities better. Having games also motivates them more and makes them exert more effort. With item 11, it can be implied that the intervention made the participants more motivated in class when there is an incentive provided by the teacher.

The results, with respect to Research Question 3, revealed that, after the intervention, students thought that their motivation was higher when they play games in the classroom. This implies that the GIF Model is a promising approach for educators if they wish to target students' participation in their classes. According to Yilmaz et al. (2017), motivation is understood as a "force that stimulates, directs and sustains behavior." It can be inferred that the GIF Model is one framework that can be used in order to direct and sustain desirable behavior of students. When the students are motivated, their class participation is generally high, and the learning outcomes are coherent with the lesson objectives.

Based on the codes identified from the focus group discussion, the participants have a positive perception of the Gamification-Incentive-Feedback (GIF) Model. They find it to be a motivating, fun, and exciting way to encourage participation, teamwork, and learning retention. Participant 8, for example, mentioned in the Focus Group Discussion that the intervention made her learning experience fun and engaging. The participants also appreciate the competitive aspect of the GIF Model, which can provide additional motivation for students to perform their best. However, there are also some potential limitations to the intervention that should be considered. The participants noted that some of the games within the GIF Model can be unfair, which could lead to frustration or feelings of injustice among some students. This confirms literature from DeVries (2015) which mentions that competition can only truly exist when players understand and implement rules, even when it doesn't favor them in the end. Additionally, there is a suggestion from the participants that the GIF Model may be best implemented face-to-face, as opposed to online where not everyone gets a good internet connection.

Despite these limitations, the overall positive perception of the GIF Model among the participants suggests that it is a useful tool for enhancing classroom learning experience. Widowati, Siswanto & Wakid (2023) mention the importance of digital literacy and engagement in fostering self-efficacy and achieving academic success, thus activities like GIF which helps target both are helpful in maximizing the classroom learning experience. To maximize the effectiveness of the intervention, it may be important to consider ways to address the concerns raised by the participants. For example, additional steps could be taken to ensure that the games within the GIF Model are designed in a fair and equitable manner. Additionally, alternative delivery methods could be explored to make the intervention more accessible in situations where face-to-face implementation is not feasible. The

findings from the focus group discussion suggest that the GIF Model has the potential to be an effective intervention for enhancing classroom learning experiences. Further research could be conducted to explore the intervention's impact on learning outcomes and to identify additional strategies for maximizing its effectiveness.

CONCLUSION AND RECOMMENDATION

This study sought to examine the experiences of students before and after the use of the GIF (Gamification-Incentive-Feedback) Model and whether the use of the model leads to and enhancement of classroom learning experiences. The findings of this action research suggest that the intervention has a positive impact on students' classroom learning experience. The Gamification-Incentive-Feedback Model is an effective way to enhance student motivation and engagement in the classroom. The participants had a positive perception toward their learning experience before and after the intervention, with the post-intervention mean ranks showing an increase, indicating that the intervention had a measurable impact on their perceptions. The focus group discussion also indicate that the participants found the GIF Model to be motivating, fun, and exciting. It also encourages participation, teamwork, and retention. However, as mentioned above, the games within the gamification can be perceived as unfair by the students. This poses a challenge for the teachers to implement them with the greatest thought and care so that students do not feel left out or frustrated. GIF Model should be adapted to the needs and preferences of the learners.

The researchers therefore recommend the continued use of GIF Model as it is a promising approach for the students in the classroom. When teachers combine elements of gamification, incentive, and feedback, they create an engaging and rewarding experience. By incorporating game-like elements such as points, badges, and leaderboards, the GIF Model seeks to tap into the intrinsic motivation of students to participate and engage in learning activities and further enhance their classroom learning experience. The use of incentives and feedback mechanisms can encourage students to participate actively in the learning process, which can lead to better learning experience. This research is also helpful for future researchers and teachers who wish to adapt and/or replicate the GIF model and those who are finding literature on gamification, incentives, and feedback.

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