Issue 1(1), 34-49.
Research Journal Publications Unit, Research and Innovation Office, Bulacan State University, Philippines

*Research Article*
**Division III: Education, Language, Social Science and Humanities**

# Rewarding learners' online classroom recitations: The use of star effort points as digital badge system

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## Abstract
This action research investigated the impact of a Digital Badge System (DBS) as an incentive mechanism to enhance oral recitation engagement among Grade 8 students in an English language classroom. The intervention was implemented in response to observed low student motivation to participate in oral recitations, identified through classroom observations and interviews. The study aimed to improve oral recitation engagement by employing the DBS, with specific objectives to: (1) assess students' engagement levels based on self-reported and cooperating teacher assessments; (2) compare engagement levels before and after the intervention; and (3) evaluate the perceptions of both students and the teacher regarding the DBS. A mixed-methods approach was utilized, incorporating quantitative data collected via surveys and qualitative data from open-ended questionnaires. Data analysis included descriptive and inferential statistics alongside thematic analysis. Results demonstrated a statistically significant increase in oral recitation engagement following the implementation of DBS. Additionally, findings indicate that DBS contributed to increased student motivation, self-confidence, competitiveness, and a sense of reward. The study recommends adapting the DBS framework to suit diverse educational contexts and subject areas within basic education.

**Keywords:** digital badge system, oral recitation, student engagement

Received: 05/14/25 Revision: 06/17/25 Accepted: 07/31/25
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Recommended Citation:
Blas, A. J., Buenavista, J. E. R., Bagaoisan, C. J. D., Queja, Z. M. F., & Ulit, R. G. (2025). Rewarding learners' online classroom recitations: The use of star effort points as digital badge system. *Sidhaya: The Official Research Journal of Bulacan State University*, *1*(1), 34-49.



## Introduction
### *Background of the Study*

Class participation is a broad concept that encompasses various forms of student involvement in classroom activities, from simple attendance to active engagement and performance. However, it is often poorly defined and difficult to measure accurately (Aziz et al., 2018). In this study, class participation specifically refers to students' oral recitations, mainly focusing on how frequently they respond, their level of activity when called upon, and

their willingness to participate, particularly when motivated by reward systems. Oral recitation has been identified as an effective strategy for improving oral English skills among English as a Second Language (ESL) learners, as it helps develop vocabulary retention, logical reasoning, and language output, contributing to deeper understanding and enhanced speaking and writing abilities (Ferrer, 2017). Moreover, active student participation in class discussions, through motivations, fosters critical thinking and personal growth.

Student motivation, however, is influenced by numerous factors, including class and curriculum design, teacher behavior, parental involvement, peer relationships, and the learning environment. The shift to online learning has introduced additional challenges, such as limited teacher monitoring due to students turning off cameras and unstable internet connections, which negatively affect oral participation and motivation (Renard, 2017). The studies of Shernof et al. (2017), Basar et al. (2021), and Adnan, (2020), show that students' attitudes toward e-learning significantly impact their engagement, with positive and passionate learners adapting better to online modalities. Despite attempts to increase participation through rewards such as monetary incentives or additional points, motivation remains a critical barrier. Often, students know the answers but lack the drive to recite. Reward systems that offer meaningful incentives, such as extra points or exemptions from assessments have been deemed more successful in encouraging participation, especially during interactive discussion phases. Nevertheless, consistent motivation for oral recitation remains a challenge, underscoring the need for well-designed motivational interventions to enhance student engagement in both traditional and online learning environments.

## *Analysis of the problem*

According to Petress (2006), active student participation is essential for optimal class management and efficacy, as learning is fundamentally an active process where engagement, especially through oral recitations, serves as a key indicator of student involvement and learning (Onge & Eitel, 2017). Additionally, motivation is essential for supporting student learning (Feng & Xiao, 2024).

Anent to this, motivation towards recitation is widely recognized as a necessary practice for promoting deeper learning, making it imperative to explore ways to enhance this aspect in literature classrooms. Motivation that allows student engagement with parents, peers, and instructors or teachers is crucial for success, as supported by the Community of Inquiry framework and research emphasizing frequent, quality interactions and active learning (Dixson, 2015).

In online settings, recitation becomes virtual, but participation does not always guarantee engagement, as students often lack motivation to share responses, even when technical issues are not a barrier. Observations and interviews with teachers reveal that the main challenge is motivating students to participate orally, not just overcoming technical difficulties. The constructivist teaching paradigm highlights the importance of active involvement for motivation and learning, and incentives or reward systems can help sustain student engagement (Chen, 2023). Rewarding participation can boost academic success (Collins et al., 2008), but incentives must be age-appropriate, relevant, and fairly administered (van Eerde, 2015).

Even as online learning evolves, digital reward systems are increasingly used to encourage participation and appropriate behavior (Renard, 2017). Studies show that reward systems enhance motivation, participation, and academic performance (Hoffman & Secord, 2021). The implementation of a Digital Badge System was proposed as an effective intervention for improving Grade 8 students' oral recitation, as digital badges serve as visible markers of achievement, skills, and effort (Raj & Divya, 2024), provided their mechanics are clearly defined (Iwata et al., 2017). In today's digital educational landscape, digital badges

offer a structured way to recognize and celebrate student accomplishments, motivating learners and supporting their growth (Gibson et al., 2015; Sousa-Vieira et al., 2021).

### *Statement of the Problem*

Taking the identified problems into account, this study generally aimed to enhance the oral recitation engagement of Grade 8 English classes through the Digital Badge system (DBS) as an intervention. Specifically, it sought to provide comprehensive answers to the following research questions:

1. What is the level of recitation engagement among Grade 8 students in the English class before the implementation of the intervention based on their self-reported assessment?
2. Is there a significant difference in the oral recitation engagement of Grade 8 students before and after implementing the digital badge system based on their self-reported assessment?
3. What is the level of recitation engagement among Grade 8 students in the English class before the implementation of the intervention based on the cooperating teacher's assessment?
4. Is there a significant change in the oral recitation engagement of Grade 8 students before and after implementing the digital badge system based on the cooperating teacher's assessment?
5. What are the Cooperating Teacher's, and the Grade 8 students' perceptions as regards the effectiveness and use of the digital badge system in their English class?

### *Significance of action research*

This study was expected to provide new perspectives on improving the oral recitation engagements of English classes through the Digital Badge System (DBS). Specifically, this research will benefit the following:

Students would be encouraged to engage and recite in class by implementing the reward system. This research would also help the students, who would be encouraged to participate actively in class. Students who participate in class can learn from one another, thereby boosting cooperation. In turn, this can improve relationships between the teacher and the pupils.

Through this study, teachers could adjust and implement the reward system in their classrooms, particularly during the current pandemic. Not only may the badge system be implemented in English and literature classes, but also in other disciplines such as science and others. A minor modification to the theme is required to make it pertinent to the subject specialization. Providing extrinsic rewards can be an effective technique for encouraging students to participate in classroom discussions and recitations. The system of digital badges encourages students to be alert and engaged during oral recitation.

This study examined reward systems as an intervention to encourage classroom involvement among students. Thus, the findings of this study can be applied by future researchers who aim to enhance students' engagement in recitations, incorporating a different technique into the reward system, and examining the same issue with different factors.

## Methods

### *Research Design*

This classroom-based action research employed a mixed methods approach, integrating both quantitative and qualitative data to comprehensively evaluate the effectiveness of the intervention. Quantitative data provided measurable evidence of changes in student engagement, while qualitative data offered deeper insights into the experiences and perceptions of participants. This combination allowed for triangulation, enhancing the validity and reliability of the findings and providing a richer understanding of the intervention's impact.

Furthermore, mixed methods supported the iterative and reflective nature of action research by informing each phase of planning, implementation, and evaluation, ensuring that the intervention was evidence-based and contextually relevant (Ivankova, 2015).

### *Classroom strategy*

The intervention, the Digital Badge System (DBS) was designed to promote active learning and enhance oral recitation among Grade 8 students, particularly in online classes. The Digital Badge System is grounded in Self-Determination Theory (SDT) as the intervention aimed at addressing its three core psychological needs: autonomy, competence, and relatedness (Deci & Ryan, 1985; Ryan & Deci, 2000). It fosters autonomy by allowing students to actively choose how they participate in oral recitations and earn badges based on their engagement and performance levels. Competence is supported through the structured point system linked to Bloom's Taxonomy, which provides clear feedback and recognition of students' growing skills, enhancing their sense of efficacy. Relatedness is promoted by making achievements visible on a digital leaderboard, creating social recognition and a sense of belonging within the learning community. By integrating badges as meaningful rewards that acknowledge effort and mastery rather than just extrinsic incentives, the system nurtures intrinsic motivation, making learning more engaging and fulfilling in line with SDT principles.

### *Instrument*

This study utilized a 4-point Likert Scale survey questionnaire, accompanied with an adapted open-ended questionnaire for data gathering. A survey was used as the primary data-gathering method to measure the Grade 8 students' oral recitation engagement in English class, employing a research instrument adapted from multiple validated scales such as the Online Student Engagement Scale, Motivation to Learn Online Questionnaire, and Student Course Engagement Scale, adapted from the studies of Drexler (2010) and Pacheco et al. (2018). The pre-survey was administered online via Google Forms, while the post-survey was conducted face-to-face. Additionally, the cooperating teacher's perceptions before and after the intervention were captured through a Likert-scale survey adapted from studies on teacher attitudes toward reward systems. Both students and the teacher responded to statements regarding behavioral and motivational engagement, participation, interaction, and reward effectiveness, with responses ranging from strongly agree to strongly disagree. An open-ended survey was also used to explore the perceptions of both students and the teacher concerning the effectiveness and use of the digital badge system in the English class.

### *Sources of data*

The primary sources of data for this study were Grade 8 students who completed the required surveys and open-ended questionnaires after consenting through a combined parent-student form. Additionally, the Cooperating Teacher served as a key data source by providing observations on student performance in oral recitation, sharing perceptions and expectations regarding the intervention, and contributing valuable insights. The teacher also played a crucial role in supporting and guiding the successful implementation of the intervention, particularly in assessing any changes or improvements following its application.

### *Procedures*

Figure 1 features the data gathering procedure that followed in this study. The data gathering procedure in this study began with obtaining consent from the principal, parents, and student participants through detailed letters explaining the study's purpose, privacy, risks, and benefits. After securing consent, a pre-survey was administered to both students and the Cooperating Teacher to assess the current level of students' oral recitation engagement and

attitudes toward the reward system. The teaching intervention, which involved implementing the Digital Badge System to motivate participation, was then conducted, with student engagement tracked through observation sheets. Weekly small-group discussions were held to review and analyze ongoing findings using statistical methods such as Likert Scale Mean computation and T-Test. Following the intervention, a post-survey was given to evaluate the effectiveness of the Digital Badge System, and an open-ended questionnaire was administered to gather detailed perceptions from both students and the teacher, with responses categorized into themes to assess the impact of the intervention.

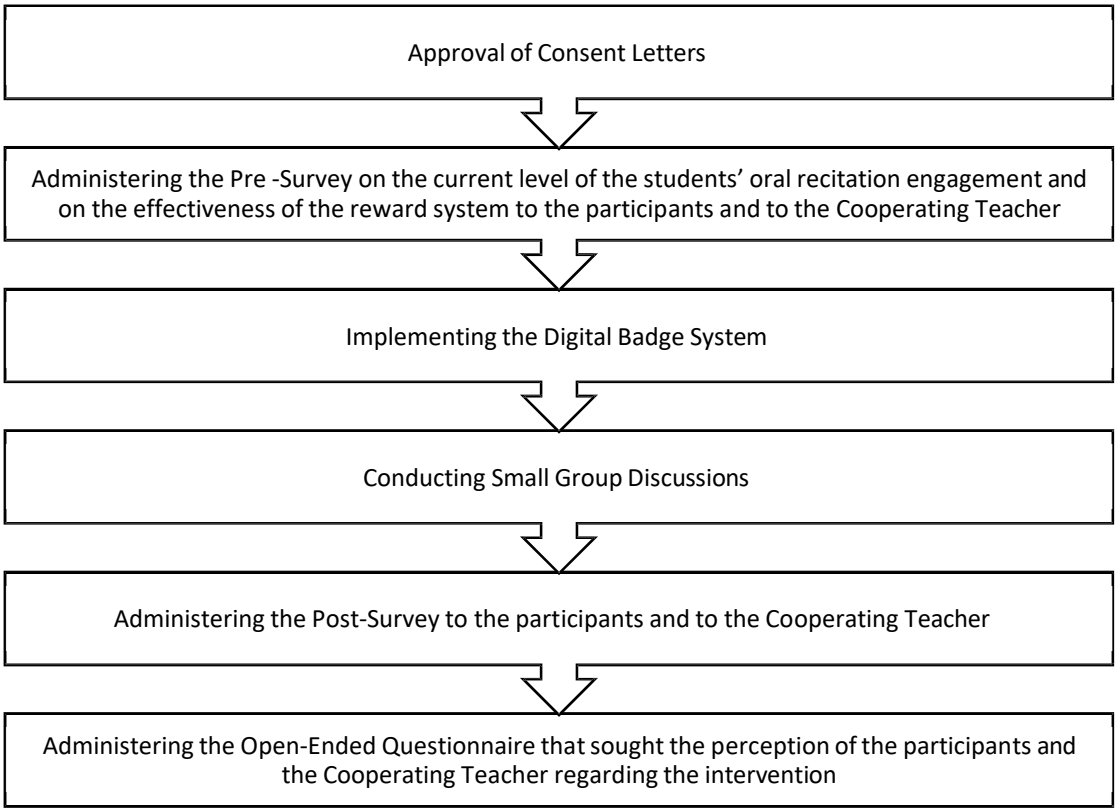


**Figure 1.** Data Gathering Procedure

## *Data analysis*

This study employed a mixed-methods approach, combining quantitative and qualitative data analysis to comprehensively address the research questions. Quantitative data related to research questions 1 and 2 were analyzed using descriptive and inferential statistics, including frequency counts, mean scores, percentages, and dependent samples t-tests. For research question 3, thematic analysis was conducted on qualitative responses by examining raw participant excerpts to identify categories and themes reflecting their perceptions of the intervention. This integration of both methods enriched the findings, allowing for triangulation and a more thorough evaluation of the intervention's effectiveness in resolving the classroom issue.

### *Descriptive data analysis*

Also known as Descriptive analysis, is a key type of data analysis which involves using statistical techniques to summarize and describe data, making complex information more accessible and understandable. In this study, descriptive analysis was applied to the data

collected from pre-surveys, post-surveys, and open-ended questionnaires to evaluate the perception and effectiveness of the digital badge system.

### *Inferential statistics for the t-test of dependent samples*

Inferential statistics enables one to make descriptions of data and draw inferences and conclusions from the respective data. A t-test, as part of the inferential statistics, was used in this study to compare the means of two dependent samples. T-test was utilized in the hypothesis testing which determined whether the intervention has an effect on the determine population. In this case, the data gathered from the pre- and post-survey of the students' self-reported assessment was used to determine if there was a significant change brought by the use of Digital Badge System in enhancing Grade 8 students' oral recitation engagements. Further, inferential statistics was used to analyze the connections between mean scores, significance levels, mean differences, and other variables.

### *Thematic analysis*

Thematic analysis was used to examine qualitative data from the open-ended questionnaire by identifying recurring themes and patterns. The process involved being familiar with the responses, coding the data, grouping codes into categories, and then forming broader themes relevant to the study's focus.

## Results and Discussion

This study involved 20 Grade 8 students who completed the required combined student-parent consent form and participated in both pre- and post-surveys. Students without completed consent forms were excluded, and thus, not represented in the findings. The researchers used descriptive and inferential statistics alongside thematic analysis to examine the data. The study tested the null hypothesis that the implementation of a digital badge system (DBS) would not significantly change student engagement in oral recitations. Given the small sample size of 20 out of 75 students, the results do not claim consistent effectiveness of the DBS across all participants. Despite the limited sample, notable findings emerged that could positively influence teaching strategies to improve learner participation in oral recitations. The presentation and discussion of results were organized according to the research questions, dividing the section into three parts to comprehensively address each specific problem the study aimed at investigating. This structured approach allowed for a detailed exploration of how the DBS impacted student engagement within the scope of the study.

### *Grade 8 Students' Level of Recitation Engagement based on their Self-Reported Assessment before the Intervention*

Among the 20 participants, the pre-survey results revealed a mean Behavioral Engagement rating of 2.52, indicating poor behavioral engagement, while the mean Motivational Engagement rating was 2.5, reflecting a moderate level of engagement. These self-reported ratings address the first research question regarding the level of recitation engagement among Grade 8 students before the intervention. Students perceived themselves as only fairly engaged behaviorally, such as with attending classes, paying attention, taking notes, and following rules, but poorly engaged motivationally, with low participation in discussions, class activities, competition, and responsibility in other classroom tasks.

Table 1 further illustrates that prior to the intervention, students' recitation engagement was generally poor, suggesting a low likelihood of active participation in oral recitations. Descriptive interpretations highlight their minimal involvement in academic tasks, lack of drive for excellence in learning, reduced effort, and overall lower performance that would typically encourage interaction. The cooperating teacher also noted that students were less likely to participate, especially when unfamiliar with the teacher or the teaching style. Observations during the initial demonstration teaching confirmed this hesitancy, as many students only recited when directly called upon, and some did not respond at all despite being named.

**Table 1.** Level of recitation engagement among Grade 8 students based on self-reported assessments ($n$ = 20)

| Indicator | Pre-survey Mean rating | DI |
|---|---|---|
| **Behavioral Engagement** | | |
| 1. I attend online class discussion regularly. | 2.30 | ME |
| 2. I follow the rules in online discussion. | 2.40 | ME |
| 3. I raise my hand in class. | 2.10 | HE |
| 4. I participate actively during class discussions. | 2.40 | ME |
| 5. I pay attention in classes. | 2.20 | ME |
| 6. I listen carefully during discussion. | 2.60 | PE |
| 7. I take note of class lectures. | 2.35 | ME |
| 8. Looking over class notes between classes to make sure I understand the Material. | 2.50 | ME |
| 9. Putting forth effort in learning the lecture. | 2.50 | ME |
| 10. I don't get distracted in class. | 2.80 | PE |
| 11. I don't keep things to myself and have a lot of interactions in online discussion. | 2.75 | PE |
| 12. I volunteer during class recitation. | 2.60 | PE |
| 13. I pay attention all throughout class. | 3.25 | PE |
| **Composite Mean** | **2.52** | **PE** |
| **Motivational Engagement** | | |
| 14. I like participating in online discussion | 2.35 | ME |
| 15. Online discussion is a fun activity to participate. | 2.35 | ME |
| 16. I am interested in participating in online discussion. | 2.2 | ME |
| 17. I feel excited in online discussion. | 2.25 | ME |
| 18. I do not feel bored in online discussion. | 2.85 | PE |
| 19. I enjoy class discussion. | 2.4 | ME |
| 20. I believe being placed in competition with other students in the classroom increases my motivation to participate better. | 2.65 | PE |
| 21. I believe being placed in group competition increases my motivation to do better. | 2.5. | ME |
| 22. I feel more responsible in my learning when I am in group. | 2.6 | PE |
| 23. I participate better when the classroom environment is competitive. | 2.85 | PE |
| **Composite Mean** | **2.50** | **ME** |
| **General Weighted Mean** | **2.51** | **PE** |

Note: 1.00-1.75 – Highly Engaged; 1.76-2.50 – Moderately Engaged; 2.51-3.25 – Poorly Engaged; 3.26-4.00 – No Engagement

## *Effects of the Digital Badge System on Grade 8 Students' Level of Recitation Engagement based on Their Self-Reported Assessment*

Issue 1(1), 34-49.
Research Journal Publications Unit, Research and Innovation Office, Bulacan State University, Philippines

Table 2 compares the means of students' self-reported behavioral and motivational engagement before and after the intervention. Behavioral engagement had a pre-survey mean of 2.52, categorized as poorly engaged, which improved to a post-survey mean of 1.89, indicating moderate engagement. Motivational engagement showed a pre-survey mean of 2.50 and a post-survey mean of 1.92, both within the moderately engaged range. The overall general weighted mean for the pre-survey was 2.51 (Moderately Engaged), while the post-survey mean was 1.90 (also Moderately Engaged). Although both surveys reflect moderate engagement, the mean difference of 0.61 signifies a positive increase in engagement following the implementation of the digital badge system (DBS).

Observations during the intervention confirmed this improvement, as students became noticeably more participative when points were awarded by the teacher. The introduction of a leaderboard further motivated students, leading to increased effort and engagement in class activities. These findings suggest that the DBS effectively enhanced student participation and motivation in oral recitations, marking a clear difference in behavior before and after the intervention.

**Table 2.** Mean comparison of Grade 8 students' self-reported assessment relating to oral recitation engagement ($n$ = 20)

| Indicator | Pre-survey Mean Rating | DI | Post-survey Mean Rating | DI | Result |
|---|---|---|---|---|---|
| **Behavioral Engagement** | | | | | |
| 1. I attend online class discussion regularly. | 2.30 | ME | 1.25 | HE | + |
| 2. I follow the rules in online discussion. | 2.40 | ME | 1.35 | HE | + |
| 3. I raise my hand in class. | 2.10 | HE | 1.75 | HE | + |
| 4. I participate actively during class discussions. | 2.40 | ME | 1.65 | HE | + |
| 5. I pay attention in classes. | 2.20 | ME | 1.55 | HE | + |
| 6. I listen carefully during discussion. | 2.60 | PE | 1.6 | HE | + |
| 7. I take note of class lectures. | 2.35 | FE | 1.95 | ME | + |
| 8. Looking over class notes between classes to make sure I understand the material | 2.50 | ME | 2 | ME | + |
| 9. Putting forth effort in learning the lecture. | 2.50 | ME | 1.65 | HE | + |
| 10. I don't get distracted in class. | 2.80 | PE | 2.25 | ME | + |
| 11. I don't keep things to myself and have a lot of interactions in online discussion. | 2.75 | PE | 2.70 | PE | + |
| 12. I volunteer during class recitation. | 2.60 | PE | 1.8 | ME | + |
| 13. I pay attention all throughout class. | 3.25 | PE | 2.85 | PE | + |
| **Composite Mean** | **2.52** | **PE** | **1.89** | **ME** | **+** |
| **Motivational Engagement** | | | | | |
| 14. I like participating in online discussion. | 2.35 | ME | 1.5 | ME | + |
| 15. Online discussion is a fun activity to participate. | 2.35 | ME | 1.9 | FE | + |
| 16. I am interested in participating in online discussion. | 2.2 | ME | 1.65 | HE | + |
| 17. I feel excited in online discussion. | 2.25 | ME | 2.05 | ME | + |
| 18. I do not feel bored in online discussion. | 2.85 | PE | 2.6 | PE | + |
| 19. I enjoy class discussion. | 2.4 | ME | 1.85 | PE | + |
| 20. I believe being placed in competition with other students in the classroom increases my motivation to participate better. | 2.65 | PE | 1.9 | PE | + |
| 21. I believe being placed in group competition increases my motivation to do better. | 2.5 | ME | 1.85 | PE | + |
| 22. I feel more responsible in my learning when I am in group. | 2.6 | PE | 2.1 | PE | + |
| 23. I participate better when the classroom environment is competitive. | 2.85 | PE | 1.8 | PE | + |
| **Composite Mean** | **2.50** | **ME** | **1.92** | **ME** | **+** |

| | | | | | |
|---|---|---|---|---|---|
| **General Weighted Mean** | **2.51** | **PE** | **1.90** | **ME** | **+** |

Note: 1.00-1.75 – HE=Highly Engaged; 1.76-2.50 – ME=Moderately Engaged; 2.51-3.25 – PE=Poorly Engaged; 3.26-4.00 – NE=No Engagement; DI – Descriptive Interpretation; + – increase in level of recitation engagement

The disparities between the pre-survey and post-survey responses clearly demonstrate that the Digital Badge System (DBS) effectively increases students' interest in oral recitation. The improvement observed after the implementation supports the conclusion that DBS is a valuable tool for enhancing students' oral participation. Movchan (2019) emphasizes that digital badges can effortlessly boost motivation by assigning point values to badges, which students can accumulate to redeem rewards or improve grades. This aligns with findings from Arkoosh et al. (2009), Boonmoh & Phungphai (2021), and Hoffman et al. (2009), who highlight that rewards inspire students to engage personally with learning and that teachers often use rewards both for behavior management and academic achievement. Moreover, intrinsic motivation remains crucial, as students tend to deepen their understanding and interest in the subjects, they are internally motivated to learn (Xiang, 2010).

Overall, through the adapted instrument from Drexler (2010) and Pacheco et al. (2018), the study found a positive change in both behavioral and motivational engagement from pre- to post-survey, shifting the descriptive analysis from poor to fair engagement. Although the change was minimal, it is significant given the multiple factors influencing motivation. Students' learning behaviors are shaped by both intrinsic and extrinsic motivation, as well as external factors. Ferrer (2017) adds that motivated learners experience enhanced development, particularly in understanding their own nature, needs, and challenges, underscoring the importance of motivation in educational contexts.

### *Difference between pre- and post-survey of students' self-reported assessment*

A dependent-sample t-test was performed to compare pre-survey and post-survey behavioral engagements. There was a significant difference in the behavioral engagement between the pre-survey (M = 2.52) and post-survey (M = 1.87); $t = 6.2232$, $p = 0.00001$. There was also a significant difference in motivational engagement whereas pre-survey is M= 2.50, post-survey is M = 1.92, producing a $t = 3.9994$ and a $p = 0.00077$.

Since the p-values both in the students' behavioral and motivational engagement are smaller than the significance level 0.05, a significant change has occurred. The lower p-value indicates that the null hypothesis should be rejected. This means that there is a significant difference between the time before the intervention and after implementation of the DBS. The same result is presented in the study of Damian (2018) talking about how Duolingo, a digital badge system, has enhanced the engagement of students in class. While the DBS is not as comprehensive and well-mechanized as the Duolingo of Damian (2018) or the Renard's (2017) Classcraft, the elements of the DBS and the integration of a rewards system presented in this study poses a positive result in enhancing the grade 8 students' engagement in oral recitation.

**Table 3.** T-test results of the mean ratings for the pre- and post-surveys of students' self-reported assessment in relation to their recitation engagement ($n = 20$)

| Indicator | Pre-survey Mean Rating | Post-survey Mean Rating | Diff | *t*-value | *p*-value |
|---|---|---|---|---|---|
| *Students' self-reported assessment* | | | | | |
| Behavioral Engagement | 2.52 | 1.87 | 0.65 | 6.2232 | .00001* |
| Motivational Engagement | 2.50 | 1.92 | 0.58 | 3.9994 | .00077* |

Note: *$p$<.05

### *Grade 8 students' level of recitation engagement based on the cooperating teacher's assessment before the intervention*

Issue 1(1), 34-49.
Research Journal Publications Unit, Research and Innovation Office, Bulacan State University, Philippines

The Cooperating Teacher's assessment before the DBS revealed that catching students' attention was *moderately engaging* (2.33). This denotes that the CT may not always have the attention of the students every time there is class discussion. Students' participation was also rated to be *moderately engaging* (2.00). Students' interaction, which includes listening attentively, competing, focused or concentrated in class and interacting with their peers, was rated with 3.40 (No Engagement). This means that students are less likely to interact with their peers in the activities presented in class. The CT's view of reward systems has a pre-survey mean rating of 2.17 which denotes moderate engagement. Overall, the CT's assessed the Grade 8 students to be moderately engaging (2.38) before the implementation of the Digital Badge System.

**Table 4.** Level of recitation engagement among grade 8 students based on the cooperating teacher's assessment ($n$ = 20)

| Indicator | Pre-survey | DI |
|---|---|---|
| **To catch students' attention** | | |
| 1. It is not hard to catch the attention of the students for class participation. | 3 | PE |
| 2. It is not difficult to get the attention of the students in responding to class activities during discussion. | 2 | ME |
| 3. It is not hard to solicit students' ideas as they are asked questions related to the lesson. | 2 | ME |
| **Composite Mean** | **2.33** | **ME** |
| **Students' participation** | | |
| 4. Students participate well in the class discussion. | 3 | PE |
| 5. Students are sometimes selective with their class participation. | 1 | HE |
| **Composite Mean** | **2.00** | **ME** |
| **Students' Interaction** | | |
| 6. Students seem to be competing every time I discuss in class. | 4 | NE |
| 7. Students listen to me attentively. | 2 | ME |
| 8. Students have full concentration on the literary piece we are analyzing, or the lesson we have. | 4 | NE |
| 9. Students interact with one another. | 4 | NE |
| **Composite Mean** | **3.50** | **NE** |
| **View on Reward System** | | |
| 10. Reward systems are most effective when students determine their own goals for success. | 1 | HE |
| 11. The use of extrinsic rewards ultimately leads to decreased intrinsic motivation. | 3 | PE |
| 12. Rewards increase student participation. | 2 | ME |
| 13. Students should be rewarded for good behavior. | 3 | PE |
| 14. Students should be rewarded for academic performance. | 2 | ME |
| 15. Students are more motivated by tangible rewards than by verbal or written praise. | 3 | PE |
| 16. Specific verbal or written praise is frequently given to students in my classroom. | 2 | ME |
| 17. Rewards systems are too time consuming. | 2 | ME |
| 18. Reward systems are an effective strategy for managing disruptive behaviors. | 2 | ME |
| 19. Reward systems increase academic success. | 2 | ME |
| 20. Reward systems are more effective when a response cost is applied (ex. The reward can be lost for inappropriate behavior). | 2 | ME |
| 21. Following school or classroom rules should be an expectation, not something to be rewarded for. | 2 | ME |
| **Composite Mean** | **2.17** | **ME** |
| **General Weighted Mean** | **2.38** | **ME** |

Note: 1.00-1.75 – Highly Engaged; 1.76-2.50 – Moderately Engaged; 2.51-3.25 – Poorly Engaged; 3.26-4.00 – No Engagement

### *Effects of the digital badge system on Grade 8 students' level of recitation engagement based on the cooperating teacher's assessment*

Table 5 presents the cooperating teacher's (CT) assessment of students' engagement before and after the intervention. The CT rated students' ability to catch attention as moderately engaged both before (mean = 2.33) and after (mean = 2.00) the intervention. Students' participation improved significantly, moving from moderately engaged (mean = 2.00) pre-intervention to highly engaged (mean = 1.50) post-intervention. Similarly, students' interaction showed notable progress, from no engagement (mean = 3.50) before the intervention to moderate engagement (mean = 2.25) afterward. The reward system was also rated as moderately engaging before (mean = 2.17) but highly engaging after the intervention (mean = 1.42).

The CT highlighted that the Digital Badge System (DBS) notably increased student participation, encouraging competition for points. During demonstration teaching sessions, students actively competed to earn points and answer challenging questions. The CT also observed that since the intervention, recitation engagement among Grade 8 students has improved, with previously less participative students making efforts to earn points and participate orally in class discussions. This suggests that the DBS effectively fostered greater engagement and interaction in the classroom.

**Table 5.** Effects of the digital badge system on Grade 8 students' level of recitation engagement based on the cooperating teacher's assessment

| Indicator | Pre-survey | DI | Post-survey | DI | Result |
|---|---|---|---|---|---|
| **To catch students' attention** | | | | | |
| 1. It is not hard to catch the attention of the students for class participation | 3 | PE | 2 | ME | + |
| 2. It is not difficult to get the attention of the students in responding to class activities during discussion. | 2 | ME | 2 | ME | |
| 3. It is not hard to solicit students' ideas as they are asked questions related to the lesson. | 2 | ME | 2 | ME | |
| **Composite Mean** | **2.33** | **FE** | **2.00** | **FE** | **+** |
| **Students' participation** | | | | | |
| 4. Students participate well in the class discussion. | 3 | PE | 2 | ME | + |
| 5. Students are sometimes selective with their class participation. | 1 | HE | 1 | HE | |
| **Composite Mean** | **2.00** | **FE** | **1.50** | **HE** | **+** |
| **Students' interaction** | | | | | |
| 6. Students seem to be competing every time I discuss in class. | 4 | NE | 4 | NE | |
| 7. Students listen to me attentively. | 2 | ME | 1 | HE | + |
| 8. Students have full concentration on the literary piece we are analyzing, or the lesson we have. | 4 | NE | 2 | ME | + |
| 9. Students interact with one another | 4 | NE | 2 | ME | + |
| **Composite Mean** | **3.50** | **NE** | **2.25** | **FE** | **+** |
| **View on reward system** | | | | | |
| 10. Reward systems are most effective when students determine their own goals for success. | 1 | HE | 1 | HE | |
| 11. The use of extrinsic rewards ultimately leads to decreased intrinsic motivation. | 3 | PE | 1 | HE | + |
| 12. Rewards increase student participation. | 2 | ME | 1 | HE | + |
| 13. Students should be rewarded for good behavior. | 3 | PE | 2 | ME | + |
| 14. Students should be rewarded for academic performance. | 2 | ME | 1 | HE | + |
| 15. Students are more motivated by tangible rewards than by verbal or written praise. | 3 | PE | 3 | PE | |

| | | | | | |
|---|---|---|---|---|---|
| 16. Specific verbal or written praise is frequently given to students in my classroom. | 2 | ME | 1 | HE | + |
| 17. Rewards systems are too time consuming. | 2 | ME | 2 | ME | |
| 18. Reward systems are an effective strategy for managing disruptive behaviors. | 2 | ME | 2 | ME | |
| 19. Reward systems increase academic success. | 2 | ME | 1 | HE | + |
| 20. Reward systems are more effective when a response cost is applied. | 2 | ME | 1 | HE | + |
| 21. Following school or classroom rules should be an expectation, not something to be rewarded for. | 2 | ME | 1 | HE | + |
| **Composite Mean** | **2.17** | **ME** | **1.42** | **HE** | **+** |
| **General Weighted Mean** | **2.38** | **ME** | **1.71** | **HE** | **+** |

Note: 1.00-1.75 – HE=Highly Engaged; 1.76-2.50 – ME=Moderately Engaged; 2.51-3.25 – PE=Poorly Engaged; 3.26-4.00 – NE=No Engagement; DI – Descriptive Interpretation; + – increase in level of recitation engagement

## *Grade 8 students' and their cooperating teacher's perception on the use of the digital badge system*

The themes and codes generated in this table were taken from a three-question open-ended questionnaire administered to the participants after the implementation of the DBS. The feedbacks and responses regarding the perception, effectivity or impact of the DBS were carefully read, chunked, and categorized. We had careful considerations in picking and categorizing the raw feedbacks of the participants and checked that they were stated by more than one participant across the responses. Most of the students' responses were aligned with the response of the Cooperating Teacher saying DBS motivate students, raise self-confidence, and made them more competitive in accomplishing tasks and other additional activities.

### *Students get motivated*

Most participants agreed that the digital badge system, known as star effort points, effectively motivates students to participate more actively in class. Several students reported that the system encouraged them to put more effort into their studies, spend extra time on tasks, stay engaged, and recite more frequently. These findings align with Ferrer's (2017) research, which highlights how motivational systems promote responsiveness, voluntary participation, and sustained attention. Psychological studies by St. Onge & Eitel (2017) and Feng and Xiao (2024)further support the idea that motivation is crucial for effective learning, underscoring the digital badge system's role in fostering this motivation. Notably, the system also motivated shy or less active students to participate more, indicating its positive impact across different student groups.

In addition to boosting participation, the digital badge system was found to enhance students' self-confidence, a key affective factor in classroom engagement. Participants noted that earning star effort points made them more expressive and active, which in turn increased their confidence. This is supported by studies such as Lestari (2017), which emphasize self-confidence as essential for taking risks and engaging in challenging activities like oral recitation. Halilsoy (2024) define confidence as the ability to act effectively even in difficult situations, and Bénabou and Tirole (2006) link higher self-confidence to greater motivation to act. Overall, the findings indicate that the reward system effectively improves self-confidence, thereby enhancing students' engagement in oral recitation.

### *Students become more competitive*

The participants agreed that the star effort point is effective in making them competitive in reciting. Participant 2 said, "it is really creative. It makes them really motivated and competitive against others to reach the top". The statement was supported by participant 16 that said "star effort points is a brilliant idea to keep the students more competitive and more

eager to participate in class activities." On another note, the improvement in engagement is supported by participant 18 saying "that there's an improvement because it makes everyone more competitive towards each other. And in addition, it improves the student's confidence in speaking in class." Participant 17 correlates the boost in confidence and active participation/engagement by being competitive in class. Phillips and Lindsay (2006), cited in Haywood et al. (2008), found in their study that the competitive nature of students and their receipt of rewards influenced both their intrinsic and extrinsic motivation.

### *Students feel rewarded*

Though the thought of rewards or self-satisfaction does not directly affect engagement as required in this study, students receive rewards and perform actively better due to it. This coincides with the idea that there is improved engagement as they gain a feeling of being rewarded. Participants 13 and 14 say that the star effort points, serving as a digital badge system make them feel satisfied or rewarded as they answer. It is a rewarding system as it gives them fulfillment and satisfaction when they recite and gain a point. Additionally, it is supported by the feedback of participant 6 that it "gives the feeling of joy and that it gives the same reason that I am motivated to participate," and because they are "assured that efforts will be rewarded." This supports Deci et al. et al. (2001) where it was pointed out that satisfaction is positively related to motivation; thus "rewarding" will provide an understanding of students' engagement in class. In essence, Docan (2006) claims that when students are more satisfied – like feeling content, in approval, or have a liking towards something in the course - they will be inclined to be more motivated.

**Table 6.** Students' and cooperating teacher's perceptions on the use of the digital badge system in enhancing oral recitation engagement

| **Themes** | **Codes** | ***F*** | |
|---|---|---|---|
| | | ***Cooperating Teacher*** | ***G8 students*** |
| Students get motivated | students are motivated | 1 | 10 |
| | students are more eager to learn | | 7 |
| | students are motivated to participate since it is fun. | | 3 |
| | the star effort points (DBS) are encouraging to the students | 1 | 2 |
| | shy or less active students are motivated to participate | | 2 |
| | the DBS leaderboard made recitation more motivating | 1 | 1 |
| Students gain self-confidence | students' confidence is boosted | | 3 |
| | students are confident to recite | 1 | 2 |
| | becoming expressive in class | | 2 |
| | less active students recite | | 2 |
| Students become more competitive. | students are competitive in reciting to gain points | 1 | 3 |
| | students are competitive when fellow students are reciting | | 3 |
| Students feel rewarded. | efforts are reciprocated with points; more active in participating | | 4 |
| | receives a rewarding feeling | | 2 |

## Conclusion

Issue 1(1), 34-49.
Research Journal Publications Unit, Research and Innovation Office, Bulacan State University, Philippines

The use of Star Effort Points as a digital badge system to reward students' oral recitation engagement proved effective according to this study's findings. Before the implementation, students showed fair behavioral engagement, such as attending class, paying attention, taking notes, and following rules, but were poorly motivated in participation, discussions, competitions, and responsibility for outputs. The cooperating teacher's assessment mirrored these observations, noting low to moderate engagement in class activities and recitations. However, after the intervention, there was a significant increase in students' oral recitation engagement, moving from poor to fair engagement. Students recited more frequently, competed for recitation opportunities, and were motivated to express their answers confidently. The teacher also observed a positive shift in students' attention, participation, and interaction, attributing this to the motivational impact of the digital badge system, even within the challenges of online education.

Another key finding was that shy and less active students became more encouraged and determined to participate and compete in class activities. The digital badge system motivated students to tackle more difficult questions and fostered a healthy competitive environment through leaderboards, which tracked progress and gave equal opportunities to all students. This system also boosted students' self-confidence, enabling them to confidently answer questions across various cognitive levels—from recall to analysis and application. The rewarding experience of earning points and recognition increased their satisfaction and motivation, leading to greater participation in class discussions and oral recitations overall.

## *Recommendation*

The use of the Digital Badge System (DBS) as an intervention was effective in enhancing the oral recitation engagement of students. However, we think that the DBS could be more than just a reward system. Based on the findings of the study and the conclusions arrived at, the following recommendations are offered:

### Other teachers in the school should use it

The DBS, being effective in English class of grade 8, proves to be significant in soliciting responses and enhancing engagements of students. The DBS should also be used by other teachers not only among grade 8 students, but also to other Juniors and Senior High School classes. Additionally, the DBS should also be used in other subjects such as Mathematics, Science, Araling Panlipunan, and others since it motivates students to participate. The name of the DBS, for instance the Star Effort Points for this intervention, may be changed depending on the theme, subject, or grade level it will be used.

### A more defined mechanics and stricter process of gaining points should be employed

A reward system like the Star Effort Points brought advantages to students. This method effectively engages students to actively participate in class recitation. However, during the implementation of the intervention, students became too competitive that they all wish to answer. Furthermore, when students were not called to answer, they typed their answers to the chat box even when someone was called to answer. The reason for that is they are too eager and competitive to recite and are most probably focused on the number of points they earn and the number of times they recite. When things get out of hand, the teachers should pay attention to it. Therefore, giving points to those students who follow instructions can help the teacher manage the class. Moreover, students must know the importance of providing correct and meaningful answers. They need to learn about the importance of context in recitation to gain even higher points and recognition. The teachers should provide help, but they should also be willing to help themselves in trying to provide distinct answers.

### An alternative reward system in online learning modality should be designed

As the reward system was implemented, student teachers made their best effort in creating a more interactive classroom atmosphere for the students despite classes being conducted online. But due to some limitations brought by this modality, classes are affected, especially when these occurrences interfere: unstable internet connection and sudden technical problems. Since these problems inevitably come, there should always be plan B. For example, when the teacher suddenly loses his internet connection, he will make an alternative way to deliver his discussion well. Also, for students, if they get disconnected, they may inform their teacher regarding this, especially when oral recitation is ongoing so that they will not miss their chance in earning points. Or as much as possible, teachers and students must have open communication on how to resolve this one. This observation simply shows that online class, as learning modality, is sometimes too unfair for the students who want to become participative in oral recitation.

### Badges that feature skill should also be included

The Star Effort Points focused more on the high points earned by students when answering more difficult questions based on Bloom's taxonomy of questioning. However, we think that adding other digital badges that focus on skills, such as Best in Reading, Most Articulate, or Well-Mannered could also improve the interaction of students. Future researchers who wish to implement their version of the Digital Badge System may use this recommendation to implement a more creative version.

Overall, implementing a reward system in engaging students' activeness in oral recitation is a challenge for teachers. They must scrutinize students' answers when it comes to oral recitation to weigh if their answers are only for the sake of the reward or for their sake of improvement and development as a student. Also, it is always a good way for the students and teachers to have open communication when a problem arises in class.

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