

# EFFECTS OF TANGIBLE REWARD SYSTEMS TOWARDS PUPILS' ENGAGEMENT AND PARTICIPATION IN SCHOOL: A MIXED METHODS APPROACH

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**ABSTRACT:** *This study aimed to evaluate the effects of the three tangible reward systems (namely: stickers, special certificates, and special treats) on the level of engagement of pupils. The sample participants consisted of 61 grade four pupils from one public school in Negros Oriental, Philippines. The study adopted mixed methods both quantitative and qualitative approaches. The quantitative approach adopted a true-experimental design to determine the level of engagement in school before and after the intervention of the three tangible reward systems. The descriptive qualitative approach was adopted through observation to elicit the observed behaviors of the two groups before and after the intervention of rewards. The Student Engagement in School Questionnaire (SEQ) was adopted and used as a data collection tool for this study. As a result of the study, the use of the tangible reward system is one of the most effective ways to get pupils interested in participating in class. The study revealed that the special treats have the highest weighted mean of 4.43, which means that the special treats are the most effective among the three tangible rewards. Furthermore, it was concluded that there were substantial differences in the levels of pupils' engagement and participation between the experimental and control groups. The experimental group displayed a high level of participation during the intervention of the three reward systems compared to the control group.*

**Keywords:** Engagement, Mixed methods approach, Participation, Reward System, Tangible

## INTRODUCTION

Even before COVID-19, there needed to be more student participation [1]. Concerns about the impact of COVID-19 over time on students' learning outcomes and collaboration opportunities have been raised by the remote and decreasing participation and engagement levels [2]. Academic institutions improve student learning outcomes, performances, and reputation through increased engagement [3]. Moreover, among other factors, student motivation, involvement, and personality substantially influence their learning results [4]. According to a study, 83.4% of students who take online classes do not pay attention to their teachers, 64.2 % are not actively engaged in school, and 83.2% do not have close relationships with friends [2]. Teachers who believe they ought to improve professionally include those who believe they are competent in ensuring children's participation [5]. However, encouraging pupils to learn and participate can be pretty challenging [6]. Also, a lack of personal motivation has been linked to students' decreasing academic interest; this deficiency can cause difficulties for pupils [7]. Children's transition [from early childhood development to grade one] requires special attention since this is the point at which systems can either benefit or adversely affect them [8]. Recognizing the value of participation may encourage educators to use a variety of tactics in class activities [9]. According to [6], despite the teacher's absence, using rewards in this new normal encouraged students to cooperate in academics. Similarly, it becomes a motivator for the students if rewards are used at each session [10]. Currently, there are no studies regarding the specific types of reward systems that work best to improve pupils' engagement and participation. This reward system will make it easier for students to understand how good behavior and task completion translate into high academic achievement [6]. The impact of various reward factors on students' motivation to attain their goals must be carefully considered [11]. In addition, using rewards can encourage students to succeed for specific reasons, which

affects how they interact with and react to their learning environments [12]. Therefore, giving rewards is critical for teachers to comprehend and apply this information since motivation and engagement are significant elements that influence behavior [13].

The reward system impacts how engaged and attentive students are during class discussions. Inactive or sluggish students might become active or attentive learners when tangible rewards are used in the learning process [10]. Exploring how different types of tangible rewards affect students' engagement and participation is a significant aspect of the process. Regarding the theoretical viewpoint, numerous authors have asserted that children who receive rewards and incentives tend to improve their conduct and practices at school [14]. Furthermore, when the pupils' degree of school engagement is considered, it is evident that participation in the classroom and matters involving the teacher is very high [15]. To the best of our knowledge, we still need to focus on students' engagement and participation.

## REVIEW OF LITERATURE

Student engagement is a "complex" idea that remains significant in generating student outcomes [16, p.78]. The terms "affective engagement" and "behavioral engagement" pertain to how students should learn regarding their schools, and "cognitive engagement" relates to the "students' beliefs linked with school and learning," respectively [16, p.68]. Also, teachers strive to personally influence, promote, and develop students' capacities to become educated, skillful, and morally upright individuals as the foundation of education [17]. With that teachers frequently decide on engagement techniques that oppose their conceptualizations of student engagement and have a variety of highly divergent conceptions of what constitutes student engagement [18]. Since engagement is a significant predictor of pupil outcomes, teachers must be able to evaluate pupil engagement correctly and objectively so that they may base their judgments on facts rather than thoughts [19]. Therefore, teachers must understand and use this knowledge in their

lessons since motivation and engagement are essential factors that affect behavior [13].

Students' learning outcomes are significantly influenced by various factors, including student learning, motivation, and personality [4]. According to [3], academic institutions improve student learning outcomes, performance, and reputation through increased student involvement. With that, engagement and participation are crucial for students' academic success and boosting their desire and interest in learning [20]. Moreover, the study of [21] indicates that pupils who participate in extracurricular activities are more motivated than their non-participating peers. Primary school kids' performance is impacted by various factors [22]. Learning outcomes are improved when teachers use engaging teaching strategies that significantly affect student interest and achievement in school [23]. The study of [24] stated that motivation is frequently thought of as an inner drive for acting or behaving in a particular way because it has been constantly stated in literature as a critical component for people's functioning and kids' achievement in learning. Their motivational ways also impact Children's performance [25]. Because motivation influences student accomplishment, using motivational approaches in the classroom is crucial [26]. Students with great motivation are more likely to attain their learning goals [27]. For instance, as compared to students who were taught in a low relatedness supportive context, the dependent variables of motivation, engagement, and effort considerably improved for students taught in a high relatedness supportive setting [28]. Based on Phungphai & Boonmoh's reward design study "Tangible rewards (materials and symbolic) include (1) sticker, (2) special certificate, and (3) special treat (cards edibles like chocolate and crisps, preferred activities such as listening to music, watching a movie)" [12, p.44]. Teachers frequently utilize prizes to encourage their students in the classroom, and awards incentivize students to study, behave, and accomplish. These can encourage positive behavior, acquire new skills, or improve existing ones. Therefore, rewards serve as effective forms of behavior modification [12]. Furthermore, reward increased motor skill acquisition and performance-based reinforcement feedback [29].

If individuals know the potential for varying levels and intensities of motivation, the effectiveness of motivational tactics affects motivational intensity [30]. Additionally, rewards should emphasize quality and advancement rather than merely participating in an activity [31]. "Ensuring participation in educational institutions is related to the views of preschool and elementary teachers on children's participation" [5, p. 190]. The utilization of rewards in the new normal encouraged students to cooperate on their academic work even in the absence of a teacher [6].

In addition, the study by [32] revealed that students may have been more motivated to learn the "course materials approach" and perform better during the treatment than in the control group due to the inclusion of rewards throughout the intervention. Researchers and educators believe motivation is a crucial prerequisite for starting and learning expertise, positively impacting pupil engagement and performance [33]. When students receive praise, it is observed that their motivation increases [34]. Similarly, teachers frequently

utilize verbal praise as a motivator in the classroom; genuine verbal praise plays a crucial part in keeping order in the classroom and encouraging good student behavior [35]. Children experiencing emotional instability, despair, or indifference may have difficulty adjusting emotionally to school. On the other hand, children who entered kindergarten with enthusiasm, motivation, contentment, and compliance may have a better chance of transitioning socially [36]. Lastly, a lack of intrinsic or internal motivation has been linked to students' decreased academic interest. Students may experience difficulties due to this lack of intrinsic motivation [7]. Given these facts, it is essential to understand that reward systems generate interest in engagement and participation. This can only be done by observing the behaviors of the experimental and control groups before and during the introduction of the three tangible reward systems. This can be utilized in the following areas: affective, behavioral, and cognitive.

Rewards significantly influence pupils' learning and performance. However, studies have yet to be conducted to determine the specific types of rewards that can increase or enhance participation and the level of engagement of pupils in a classroom. In that way, we would evaluate what types of reward systems are used by teachers who have the potential to either advance or impede pupils' academic progress

## METHODOLOGY

### Research design

This study utilized mixed methods, both quantitative and qualitative approaches. The quantitative approach adopted a true experimental design to determine the level of engagement in the school of the experimental and control group before and after the introduction of the three tangible reward systems. The descriptive qualitative approach was adopted through observation to elicit the observed behaviors of the two groups before and after the introduction of rewards.

### Setting

The researchers conducted this study at Bayawan City East Central School, an elementary school in the Bayawan City Division, Philippines. The researchers chose this school because they have many pupils among the schools in the city, as well as one of the nearest schools where the researchers are enrolled.

### Participants

The sample participants of this study comprised fourth-grade pupils in the Bayawan City School Negros Oriental Philippines. There are 11 sections, 2 of which are identified as the experimental and control groups. The researchers did probability sampling using a lottery draw, which resulted in section A, with a total number of 31 pupils, serving as the experimental group, and the control group was section B with 30 total pupils, with 61 fourth-grade pupils involved in the study.

### Instrument

The researchers adopted the Students Engagement in the Schools Questionnaire (SESQ) as an instrument. The questionnaire consists of 33 items that deal with affective, behavioral, and cognitive engagement. This type of

questionnaire is a paper-and-pencil utilizing a Likert type (e.g., 1=never,2= rarely, 3= sometimes, 4= often, and 5= always). A scale with three subscales evaluated student participation: affective, behavioral, and cognitive engagement [37]. As the items only represented engagement indicators (i.e., affective, behavioral, and cognitive), only the composite of Student Engagement in Schools (33 items) was investigated. The SESQ showed congruence with the theoretically driven development (five factors: cognitive engagement, affective engagement-liking for learning, affective engagement-liking for school, behavioral engagement-effort and persistence, and behavioral engagement-extracurricular) [16].

**RESULTS AND DISCUSSION**

The quantitative approach aimed to ensure that the two groups were similar before the investigation was conducted. The participants are labeled into control groups (N=30) and experimental groups (N=31) that responded to the Students Engagement Questionnaire. The control group and experimental group's level of engagement in the affective area (pretest), as shown in Table 1 in item 5, participants responded that the control group thought that learning was boring because it appeared to be the lowest response the participants. In contrast, the experimental group responded

were a high level of engagement and the same responses in each item. This result is further supported by the findings of [10] that student motivation is not consistent; somewhat, it gradually decreases with time. At the end of the semester, it was at its lowest level.

Additionally, because both groups' levels of involvement in the behavioral domain (pretest) had different results, the control group's participants were investigated to be less engaged in class and less focused on the topic at hand. In contrast, the experimental group had a high level of engagement in class but low participation in extracurricular. One interpretation of these findings is that both groups must excel in extracurricular activities. In parallel to the study of [21], the findings indicate that pupils participating in extracurricular activities are more motivated than their non-participating peers. This implies that participants had low motivation in terms of extracurricular activities.

Furthermore, both groups engaged at the same levels in the cognitive area of the pretest, which focused on how they understood the lesson and connected it to their previous experience or understanding. As a result, participants in both groups indicated an insignificant difference in school involvement.

**Table 1: Control and Experimental Group's Level of Engagement in School (Pretest & Posttest)**

| Items  | Pretest       |              |                    |              | Posttest      |               |                    |               |
|--|---------------|--------------|--------------------|--------------|---------------|---------------|--------------------|---------------|
|  | Control Group |              | Experimental Group |              | Control Group |               | Experimental Group |               |
|  | Weighted Mean | V D          | Weighted Mean      | V D          | Weighted Mean | V D           | Weighted Mean      | V D           |
| Affective  | 3.60          | Often        | 3.94               | Often        | 4.17          | Always        | 4.90               | Always        |
| 1. I am very interested in learning.   |               |              |                    |              |               |               |                    |               |
| 2. I think what we are learning in school is interesting.  | 3.47          | Often        | 3.65               | Often        | 4.43          | Always        | 4.87               | Always        |
| 3. I like what I am learning in school.  | 3.70          | Often        | 4.06               | Often        | 4.40          | Always        | 4.87               | Always        |
| 4. I enjoy learning new things in class.   | 3.63          | Often        | 3.87               | Often        | 4.37          | Always        | 4.81               | Always        |
| 5. I don't think learning is boring. (R)   | 3.13          | Sometimes    | 3.52               | Often        | 3.97          | Often         | 4.68               | Always        |
| 6. I like my school.   | 4.13          | Often        | 4.03               | Often        | 4.47          | Always        | 4.81               | Always        |
| 7. I am proud to be at this school.  | 3.47          | Often        | 4.10               | Often        | 4.27          | Always        | 4.68               | Always        |
| 8. Most mornings, I look forward to going to school.   | 3.53          | Often        | 3.94               | Often        | 4.37          | Always        | 4.55               | Always        |
| 9. I am happy to be at this school.  | 4.20          | Often        | 4.10               | Often        | 4.40          | Always        | 4.84               | Always        |
| <b>Total</b>   | <b>3.65</b>   | <b>Often</b> | <b>3.91</b>        | <b>Often</b> | <b>4.31</b>   | <b>Always</b> | <b>4.78</b>        | <b>Always</b> |
| Behavioral   |               |              |                    |              | 4.27          |               |                    |               |
| 10. I try hard to do well in school.   | 4.13          | Often        | 4.16               | Often        |               | Always        | 4.68               | Always        |
| 11. In class, I work as hard as I can.   | 3.77          | Often        | 3.68               | Often        | 4.13          | Often         | 4.55               | Always        |
| 12. When I'm in class, I participate in class activities.  | 3.40          | Sometimes    | 3.77               | Often        | 4.13          | Often         | 4.58               | Always        |
| 13. I pay attention in class.  | 3.47          | Often        | 3.97               | Often        | 4.17          | Often         | 4.75               | Always        |
| 14. When I'm in class, I work hard to participate. (R)   | 3.63          | Often        | 3.65               | Often        | 3.73          | Often         | 4.55               | Always        |
| 15. In school, I did everything to pass. (R)   | 3.93          | Often        | 4.10               | Often        | 4.47          | Always        | 4.71               | Always        |
| 16. When I'm in class, I focused on our discussion. (R)  | 3.27          | Sometimes    | 3.71               | often        | 3.73          | Often         | 4.61               | Always        |
| 17. If I have trouble understanding a problem, I go over it again until I understand it.             | 3.13          | Sometimes    | 3.58               | Often        | 4.00          | Often         | 4.65               | Always        |
| 18. When I run into a difficult homework problem, I keep working at it until I think I've solved it. | 3.07          | Sometimes    | 3.90               | Often        | 4.07          | Often         | 4.58               | Always        |
| 19. I am an active participant of school activities such as sport day and school picnic.             | 3.07          | Sometimes    | 4.03               | Often        | 3.90          | Often         | 4.45               | Always        |
| 20. I volunteer to help with school activities such as sport day and parent day.                     | 3.53          | Often        | 3.19               | Someti mes   | 3.70          | Often         | 4.29               | Always        |
| 21. I take an active role in extracurricular activities in my school.                                | 3.20          | Sometimes    | 3.32               | Someti mes   | 3.80          | Often         | 4.65               | Always        |
| <b>Total</b>   | <b>3.47</b>   | <b>Often</b> | <b>3.76</b>        | <b>Often</b> | <b>4.01</b>   | <b>Often</b>  | <b>4.59</b>        | <b>Always</b> |
| Cognitive  |               |              |                    |              |               |               |                    |               |
| 22. When I study, I try to understand the material better by relating it to                          | 3.70          | Often        | 3.65               | Often        | 4.23          | Always        | 4.58               | Always        |

things I already know.

|   |             |              |             |              |             |              |             |               |
|---|-------------|--------------|-------------|--------------|-------------|--------------|-------------|---------------|
| 23. When I study, I figure out how the information might be useful in the real world.   | 3.40        | Sometimes    | 3.52        | Often        | 4.03        | Often        | 4.42        | Always        |
| 24. When learning new information, I try to put the ideas in my own words.  | 3.33        | Sometimes    | 3.35        | Someti mes   | 4.03        | Often        | 4.58        | Always        |
| 25. When I study, I try to connect what I am learning with my own experiences.  | 3.13        | Sometimes    | 3.97        | Often        | 4.07        | Often        | 4.50        | Always        |
| 26. I make up my own examples to help me understand the important concepts I learn from school.   | 3.80        | Often        | 3.23        | Someti mes   | 4.07        | Often        | 4.39        | Always        |
| 27. When learning things for school, I try to see how they fit together with other things I already know.                                 | 3.23        | Sometimes    | 3.61        | Often        | 3.60        | Often        | 4.55        | Always        |
| 28. When learning things for school, I often try to associate them with what I learned in other classes about the same or similar things. | 3.13        | Sometimes    | 2.87        | Someti mes   | 3.67        | Often        | 4.55        | Always        |
| 29. I try to see the similarities and differences between things I am learning for school and things I know already.                      | 3.57        | Often        | 3.19        | Someti mes   | 3.97        | Often        | 4.48        | Always        |
| 30. I try to understand how the things I learn in school fit together with each other.  | 3.50        | Often        | 3.32        | Someti mes   | 4.30        | Always       | 4.58        | Always        |
| 31. I try to match what I already know with things I am trying to learn for school.   | 3.63        | Often        | 3.94        | Often        | 4.20        | Often        | 4.60        | Always        |
| 32. I try to think through topics and decide what I'm supposed to learn from them, rather than studying topics by just reading them over. | 3.40        | Sometimes    | 3.10        | Someti mes   | 3.87        | Often        | 4.33        | Always        |
| 33. When studying, I try to combine different pieces of information from course material in new ways.                                     | 3.13        | Sometimes    | 3.26        | Someti mes   | 3.97        | Often        | 4.73        | Always        |
| <b>Total</b>  | <b>3.41</b> | <b>Often</b> | <b>3.76</b> | <b>Often</b> | <b>3.97</b> | <b>Often</b> | <b>4.52</b> | <b>Always</b> |

Note. R means revised. VD verbal description. Range of 4.21–5.00 was always, 3.41–4.20 was often, 2.61–3.40 was sometimes, 1.81–2.60 was rarely, and a range of 1.00–1.80 was similar to never. The study involved N = 30 participants in the control group and N = 31 in the experimental group.

As presented in the data Table 2a, T-test Analysis for the pretest result of the Control Group and the Experimental Group showed that the p-value in the behavioral area of both groups results significantly, that is, the p-value lower than 0.05. In contrast, the two areas, affective and cognitive, are insignificant and thus had high p-values. This result means there are significant differences in the pretest of both groups.

**Table 2a: T-test Analysis for the Pre-test Result of the Control Group and the Experimental Group**

| Area       | Control |      | Experimental |      | T     | p     |
|------------|---------|------|--------------|------|-------|-------|
|            | M       | SD   | M            | SD   |       |       |
| Affective  | 3.65    | 0.33 | 3.91         | 0.21 | -1.98 | 0.069 |
| Behavioral | 3.47    | 0.35 | 3.76         | 0.30 | -2.18 | 0.040 |
| Cognitive  | 3.41    | 0.23 | 3.42         | 0.33 | -0.02 | 0.981 |

Note. The standard deviation is a measurement of how the data is in comparison to the mean, the mean is the average of the weighted mean across all areas and the p value or probability value how the data have occurred under the null hypothesis or extremes. If the p value is 0.05, then the probability that the test statistic will be at least as dramatic as the one discovered if the null hypothesis were true is 5%.

In contrast Table 2b was statistically significant. There is a significant difference between the level of engagement in the school of the experimental and control groups before (pretest) and after (posttest) the introduction of the reward system. Taken together, our findings indicate that tangible reward systems assist in promoting pleasant and proper behavior in the classroom and can give children a sense of satisfaction and accomplishment, which inspires them to push themselves more. The result is parallel to the study of [10] "The use of

tangible reward in the learning process can change the attitude of passive students to become more active and lazy students become diligent " (p. 335).

**Table 2b : T-test Analysis for the Post-test Result of the Control Group and the Experimental Group**

| Area       | Control |      | Experimental |      | T     | p      |
|------------|---------|------|--------------|------|-------|--------|
|            | M       | SD   | M            | SD   |       |        |
| Affective  | 4.31    | 0.16 | 4.78         | 0.12 | -0.01 | <0.001 |
| Behavioral | 4.01    | 0.24 | 4.59         | 0.12 | -0.41 | <0.001 |
| Cognitive  | 4.00    | 0.21 | 4.52         | 0.11 | -0.68 | <0.001 |

The p-value of <0.001 from the ANOVA result in Table 3 indicated a significant difference between the pupils' engagement when compared based on the tangible reward. The group descriptive revealed that the special treats have the highest weighted mean of 4.43, which means that the treats are the most effective among the three tangible rewards. This research provides supporting evidence that tangible reward systems, specifically special treats, can encourage pupils to participate more actively in their academic progress.

**BEHAVIORS OF THE CONTROL AND EXPERIMENTAL GROUP BEFORE THE INTRODUCTION OF A TANGIBLE REWARD SYSTEM**

During the class discussion, individuals in the control and experimental groups exhibited the same behavior. Some pupils are conversing with their classmates, while others are not paying attention to what their teacher is saying and simply minding their own business. Examples include playing with their things, sneaking a snack, roaming the classroom, and napping. Some students are also making fun of and ridiculing one another. Only a few of them raise their hands to interact with the teacher actively, but not consistently, because other students who need to pay attention to the teacher or are acting disruptive may sometimes capture their attention. Some students are not assisting their group members during the activity. They often discuss and complain to their teacher that their classmates did not thoroughly check their papers while submitting them for assessment. Only 3 to 10 students actively participate when reviewing for the summative exam. During class, there have been repeated disruptive behaviors. Teachers frequently reprimand the entire class.

**Table 3: One-way ANOVA Results and Descriptive for the Three Tangible Outputs and the Pupil's Level of Engagement**  
One-way ANOVA (Welch's)

|               |                  | F    | df1  | df2   | P      |
|---------------|------------------|------|------|-------|--------|
| Weighted Mean |                  | 10.2 | 2    | 63.3  | < .001 |
| <hr/>         |                  |      |      |       |        |
|               | Tangible Rewards | N    | Mean | SD    | SE     |
| Weighted Mean | Certificate      | 31   | 4.29 | 0.236 | 0.0410 |
|               | Sticker          | 31   | 4.16 | 0.275 | 0.0478 |
|               | Treats           | 31   | 4.43 | 0.213 | 0.0370 |

**BEHAVIORS OF THE CONTROL AND EXPERIMENTAL GROUP BEFORE THE INTRODUCTION OF A TANGIBLE REWARD SYSTEM**

During the class discussion, individuals in the control and experimental groups exhibited the same behavior. Some pupils are conversing with their classmates, while others are not paying attention to what their teacher is saying and simply minding their own business. Examples include playing with their things, sneaking a snack, roaming the classroom, and napping. Some students are also making fun of and ridiculing one another. Only a few of them raise their hands to interact with the teacher actively, but not consistently, because other students who need to pay attention to the teacher or are acting disruptive may sometimes capture their attention. Some students are not assisting their group members during the activity. They often discuss and complain to their teacher that their classmates did not thoroughly check their papers while submitting them for assessment. Only 3 to 10 students actively participate when reviewing for the summative exam. During class, there have

been repeated disruptive behaviors. Teachers frequently reprimand the entire class.

**BEHAVIORS OF THE EXPERIMENTAL GROUP DURING THE INTRODUCTION OF THE THREE TANGIBLE REWARD SYSTEM**

**A. Sticker**

As the researchers applied the tangible reward (sticker) in the experimental group, pupils actively raised their hands to answer the questions given by the teacher to get the reward. They are happy and motivated when they receive the reward (sticker). The majority of them are now focusing on the discussion. During the group activity, they are performing well compared to the other week. However, there are still pupils who tend not to listen and talk to their peers from when the teacher calls their attention; they will automatically keep silent and listen to the teacher. However, pupils in the control group had the same behaviors from last week, in which they kept talking, looking outside the classroom, feeling sleepy, etc. The teacher kept reminding everyone to keep silent and pay attention to the teacher.

**B. Special Certificate**

The experimental group is now very active for the second week of experimentation. From the moment the teacher enters the classroom, they are already raising their hands to lead the prayer. During the discussion, they already lent their eyes and ears to the teacher. When the teacher asked questions regarding the lesson, they actively raised their hands and eagerly received the special certificate. When it comes to group activities, everyone participates. They are pleased and proud of themselves when they receive the reward.

On the other hand, disruptive behaviors were still observed in the control group. As the discussion was ongoing, a few kept standing and wanting to go outside; as they were taking their assessment test, most kept talking with their seatmate. The same pupils are actively participating with the teacher.

**C. Special Treats**

The experimental group's pupils participate enthusiastically in class discussions. Although some students occasionally disregard the norms of the classroom, which forbid replying in chorus, most pupils participate actively. They continue to compete with one another to provide the best response in order to receive the rewards. On the other hand, pupils in the control group continue exhibiting the same disruptive behaviors from last week as lessons continue. However, they are also observed at times participating in class discussions.

Based on the observation, using a tangible reward system is one of the most efficient ways to get pupils interested in participating in class. Students who were engaged in the intervention of rewards were more productive than those pupils who were not engaged in rewards. This result supports the study by [10] that rewards motivate students to make positive changes in various ways, including motivating many passive students to become active learners and neglectful students to pay attention.

Additionally, the rewards system can give students more courage to express themselves and their thoughts. They were so eager to receive the reward that they were oblivious that they were already raising their hands to participate. Pupils who receive rewards also tend to do better in class, turn in

their assignments on time, participate more creatively in-class activities, and have higher levels of responsibility. These results are consistent with the claim that rewards were seen as a means of boosting self-development, learning behaviors, and motivation [12].

In summary, our research replicates [10] that the student's level of participation increases, and they engage in more pursuing activities when the teacher provides the material for learning combined with a tangible reward. The findings contribute to a growing body of evidence; teachers can now choose and apply the specific reward that could highly improve pupils' participation. In order to facilitate interactive class discussion, it will be simpler for teachers to get pupils' attention.

### CONCLUSIONS AND RECOMMENDATIONS

This study generally aimed to explore the effectiveness of the three tangible reward systems (namely, stickers, special certificates, and special treats), and it was determined that there were substantial differences in the levels of pupil engagement and participation between the experimental group and the control group. The experimental group, who had the intervention, demonstrated their enthusiasm to learn by participating fully in the lesson the teacher delivered. One of the best methods to get pupils interested in participating in class discussions is using the tangible reward system. Pupils who participated in the interventions and received rewards were more productive in class activities than those who did not. They are working quickly, finishing all the paperwork given by the teacher, and excelling in every activity that requires group participation. Additionally, among the three tangible reward systems employed in the experimental group, the results showed that special treats are the most successful kind of tangible reward that teachers may use to increase pupils' engagement and participation.

Based on the results of the current study, teachers at the elementary level should use a tangible reward system, specifically special treats, to boost pupils' engagement and participation. School administrators can use this study as their reference to support and encourage teachers to use the tangible reward system to motivate their learners. In terms of future research, it would be beneficial to examine how unique rewards affect the behavior of students with learning difficulties to extend the existing findings. In addition to these, we suggest several avenues of research that may be helpful, such as teachers' attitudes toward employing tangible reward systems and the significant correlation between student participation in the classroom using rewards that affect their academic performances.

### REFERENCES

- [1] Olson, L. (2021). How can learning management systems be used effectively to improve student engagement? Center on Reinventing Public Education, 19(2) 1–11. <https://crpe.org/how-can-learning-management-systems-be-used-effectively-to-improve-student-engagement/>
- [2] Akdoğan, A., & Ergin, D. Y. (2022). Psychological and social side effects of the covid-19 on students. *International Journal of Curriculum and Instruction*, 14(1), 986–1003. <https://orcid.org/00000003-1498-4576>
- [3] Singh, M., James, P. S., Paul, H., & Bolar, K. (2022). Impact of cognitive-behavioral motivation on student engagement. *Heliyon*, 8(7), 1–9. <https://doi.org/10.1016/j.heliyon.2022.e09843>
- [4] Lakkala, S., Uusiautti, S., Kyrö-Ämmälä, O., & Grönfors, P. (2020). Students' social self-image and engagement with studies within the classroom: A qualitative multimethod research on teachers' pedagogical activities in inclusive education. *International Journal of Whole Schooling*, 16(1), 35–60.
- [5] Akyol, T., & Erdem, H. (2021). Children's participation from the perspective of teachers. *Journal of Pedagogical Research*, 5(1), 188–202. <https://dx.doi.org/10.33902/JPR.2021167549>
- [6] Maglasang, I. G., & Codilla, L. L. (2022). The efficacy of Innovative Reward Intervention System Hatbox (IRISH) in improving the submission rate of kindergarten learners' self-learning modules (SLMs) in the new normal. *International Journal for Innovative Research in Multidisciplinary Field*, 8(2), 147–151. <https://doi.org/10.2015/IJIRMF/202202025>
- [7] Crow, S. R. (2015). The information-seeking behavior of intrinsically motivated elementary school children of a collectivist culture. *School Library Research*, 18, 1–14. <http://www.ala.org/aasl/slr/volume18/crow>
- [8] Chikwiri, E., & Musiyiwa, J. (2017). Challenges and gaps in children's transition from early childhood development to grade one in Zimbabwe. *International Journal of Educational Administration and Policy Studies*, 9(7), 91–102. <https://doi.org/10.5897/ijeaps2017.0510>
- [9] Sánchez-Hernández, D. I., Vez López, E., & García-Barrios, Y. (2021). Factors that de-motivate EFL students' class participation at a school of languages in the state of Veracruz, Mexico. *GIST Education and Learning Research Journal*, 22(1), 147–172. <https://doi.org/10.26817/16925777.860>
- [10] Cahya, T., Kusnadi, A. N., & Anggraeni, A. (2018). The influence of tangible rewards to student's motivation in 4th grade SDN Sinargalih 1 Ciranjang students. *Professional Journal of English Education*, 1(4), 350–356. <https://doi.org/10.22460/project.v1i4.p350-356>
- [11] Rawlings, A. M., Tapola, A., & Niemivirta, M. (2017). Predictive effects of temperament on motivation. *International Journal of Educational Psychology*, 6(2), 148–182. <https://doi.org/10.17583/ijep.2017.2414>
- [12] Phungphai, K., & Boonmoh, A. (2021). Students' perception towards the use of rewards to enhance their learning behaviors and self-development. *Journal of English Education*, 7(1), 35–39. <https://doi.org/10.30606/jec>
- [13] Saeed, S., & Zyngier, D. (2012). How motivation influences student engagement: A qualitative case study. *Journal of Education and Learning*, 1(2), 252–267. <https://doi.org/10.5539/jel.v1n2p252>
- [14] Malik, T. A., Ladhani, S., & Bhamani S. (2013). Decreasing student tardiness through strategic reward system: An action research report. *Journal of Research*

- in Arts and Education, 2(2), 19–26. <https://www.abhnavjournal.com>
- [15] Kus, Z. (2015). Participation status of primary school students. *Procedia - Social and Behavioral Sciences*, 177, 190–196. <https://doi.org/10.1016/j.sbspro.2015.02.381>
- [16] Hart, S. R., Stewart, K., & Jimerson, S. R. (2011). The Student Engagement in Schools Questionnaire (SEQ) and the Teacher Engagement Report Form-New (TERF-N): Examining the Preliminary Evidence. *Contemporary School Psychology*, 15(1), 67–79. <https://doi.org/10.1007/BF03340964>
- [17] Hendrawijaya, A.T. (2022). Effects of mediation of learning interest in improving student learning achievement. *Journal of Instruction*, 15(1), 857-872
- [18] Pedler, M., Yeigh, T., & Hudson, S. (2020). The Teachers' Role in Student Engagement: A Review. *Australian Journal of Teacher Education*, 45(3). <http://dx.doi.org/10.14221/ajte.2020v45n3.4>
- [19] Kishida, Y., Main, S., Carter, M., Kemp, C., & Campbell, A. (2022). Preservice teachers' accuracy in measuring child engagement using a digitized momentary time sampling measure. *Learning and Motivation*, 80. <https://doi.org/10.1016/j.lmot.2022.101839>
- [20] St. Onge, J., & Eitel, K. (2017). Increasing active participation and engagement of students in circle formations. *Networks: An Online Journal for Teacher Research*, 19(1), 1–10. <https://doi.org/10.4148/2470-6353.1014>
- [21] Albayrak, H., & Şener, T. (2021). The relationship between participation in extracurricular activities and motivation of foreign language learning. *International Journal of Psychology and Educational Studies*, 8(2), 122–132. <https://dx.doi.org/10.52380/ijpes.2021.8.2.390>
- [22] Fateel, M. J., Mukallid, S., & Arora, B. (2021). The interaction between socioeconomic status and preschool education on academic achievement of elementary school students. *International Education Studies*, 14(8), 60–66. <https://doi.org/10.5539/ies.v14n8p60>
- [23] Anwar, F. (2019). The effect of activity-based teaching techniques on student motivation and academic achievement. *Journal of Education and Educational Development*, 6(1), 154–170. <http://journals.iobmresearch.com/index.php/JEED/index>
- [24] Jovanovic, D., & Matejevic, M. (2014). Relationship between rewards and intrinsic motivation for learning – Researches Review. *Procedia - Social and Behavioral Sciences*, 1(49), 456–460. <https://doi.org/10.1016/j.sbspro.2014.08.287>
- [25] Adamma, O. N., Ekwutosim, O. P., & Unamba, E. C. (2018). Influence of extrinsic and intrinsic motivation on pupils academic performance in mathematics. *Supremum Journal of Mathematics Education*, 2(2), 52–59. <https://doi.org/10.5281/zenodo.1405857>
- [26] Gulatee, Y., Combes, B., Yoosabai, Y., & Jaerasukon, P. (2022). Extrinsic and intrinsic for the online classroom. *Higher Education Studies*, 12(1), 1–8. <https://doi.org/10.5539/hes.v12n1p1>
- [27] Nur, L., Yulianto, A., Suryana, D., Malik, A. A., Al Ardha, M. A., & Hong, F. (2022). An Analysis of the Distribution Map of Physical Education Learning Motivation through Rasch Modeling in Elementary School. *International Journal of Instruction*, 15(2), 815–830. <https://doi.org/10.29333/iji.2022.15244a>
- [28] Perlman, D. J. (2015). The Teacher Care Project: Enhancing motivation, engagement and effort of a-motivated students. *Journal of Research, Policy & Practice of Teachers and Teacher Education*, 5(1), 4–16. <https://ejournal.upsi.edu.my/index.php/JRPPTTE/article/view/193>
- [29] Vassiliadis, P., Derosiere, G., Dubuc, C., Lete, A., Crevecoeur, F., Hummel, F. C., & Duque, J. (2021). Reward boosts reinforcement-based motor learning. *IScience*, 24(7), 1–21. <https://doi.org/10.1016/j.isci.2021.102821>
- [30] Cracsner, C. E., & Sargent, E. (2013). Some considerations regarding the rapport between motivation-performance in primary school. *Procedia - Social and Behavioral Sciences*, 78, 446–450. <https://doi.org/10.1016/j.sbspro.2013.04.328>
- [31] Schmitz, K. (2019). Quality or quantity: Completion rewards and formative assessments in flipped instruction classes. *International Journal for the Scholarship of Teaching and Learning*, 13(3), 369–376. <https://doi.org/10.20429/ijstol.2019.130304>
- [32] Urton, K., Grünke, M., & Boon, R. T. (2022). Using a touch point instructional package to teach subtraction skills to German elementary students at-risk for LD. *International Electronic Journal of Elementary Education*, 14(3), 405–416. <https://doi.org/10.26822/iejee.2022.252>
- [33] Teppo, M., Soobard, R., & Rannikmäe, M. (2021). A study comparing intrinsic motivation and opinions on learning science (Grade 6) and taking the International PISA Test (Grade 9). *Education Sciences*, 11(14), 1–18. <https://doi.org/10.3390/educsci11010014>
- [34] Akbar, R., & Al-Gharabally, N. (2020). Does praising intelligence improve achievements? An ESL case. *International Journal of Higher Education*, 9(3), 279–289. <https://doi.org/10.5430/ijhe.v9n3p279>
- [35] Zhang, S., Du, X., & Deng, J. (2021). A mixed study on the effectiveness of verbal praise in primary school class. *Science Insights Education Frontiers*, 10(1), 1353–1363. <http://bonoi.org/index.php/sief>
- [36] Wang, F., Algina, J., Snyder, P., & Cox, M. (2017). Children's task-oriented patterns in early childhood: A latent transition analysis. *Early Childhood Research Quarterly*, 41, 63–73. <https://doi.org/10.1016/j.ecresq.2017.05.006>
- [37] Lam, S., Jimerson, S., Wong, B. P. H., Kikas, E., Shin, H., Veiga, F. H., Hatzichristou, C., Polychroni, F., Cefai, C., Negovan, V., Stanculescu, E., Yang, H., Liu, Y., Basnett, J., Duck, R., Farrell, P., Nelson, B., & Zollneritsch, J. (2014). Understanding and measuring student engagement in school: The results of an international study from 12 countries. *School Psychology Quarterly*, 29(2), 213–232. <https://doi.org/10.1037/spq0000057>