

# INNOVATIVE TEACHER REINFORCEMENT STRATEGIES TO ENHANCE STUDENT MOTIVATION IN ONLINE LEARNING

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## ABSTRACT

This study examines the effectiveness of innovative reinforcement strategies by teachers in enhancing students' motivation in online learning environments. Using a qualitative research approach with descriptive methods, the study explores how verbal, non-verbal, and digital reinforcement are implemented by teachers and how these strategies affect students' engagement and academic achievement. The results show that reinforcement plays a significant role in maintaining students' motivation, with a significant impact on students' engagement in online classes and academic achievement. Despite the challenges faced by teachers, such as difficulties in providing timely and appropriate reinforcement in virtual settings and limitations in technological infrastructure, this study emphasizes the importance of these strategies for the effectiveness of online education. The study also highlights the importance of teacher training in reinforcement techniques so that educators can adapt their methods to the unique demands of online learning. The study concludes that reinforcement strategies are essential to creating a positive and productive online learning environment, significantly improving students' motivation and learning outcomes. By implementing these strategies effectively, educators can contribute to the success of online education and support students in reaching their full potential.

**Keywords** : *Reinforcement Strategy, Student Motivation, Online Learning, Verbal Reinforcement, Non-Verbal Reinforcement, Digital Reinforcement, Academic Achievement, Online Education*

## I. INTRODUCTION

In recent years, online learning has become an increasingly relevant global phenomenon, especially triggered by the COVID-19 pandemic that forced a sudden transition from face-to-face to distance learning. This situation forced teachers, students, and parents to adjust to a completely new learning method, which posed various challenges, one of which was maintaining students' learning motivation in an environment with minimal direct interaction. At SD Katolik Sancta Familia Sikumana, Kupang City, this challenge was also felt, especially among fifth grade students. Learning motivation is a key factor in determining educational

success, both in the context of face-to-face learning and online learning. According to the motivation theory put forward by Deci and Ryan (2000), intrinsic motivation—which comes from within students—is often the main driver of learning success. However, in the context of online learning, where social interaction is reduced and distractions increase, maintaining students' intrinsic motivation becomes a greater challenge.

Teachers have an important role in maintaining and increasing student motivation, especially in online learning situations. Reinforcement given by teachers, whether in the form of praise, awards, or constructive feedback, can influence students' motivation to continue to actively participate in learning. Research by Brophy (2004), shows that positive reinforcement given by teachers can increase students' self-confidence and encourage them to achieve better learning outcomes. However, the effectiveness of the reinforcement patterns used by teachers in online learning is still questionable. Unlike face-to-face learning, where teachers can directly see students' reactions and provide real-time feedback, online learning often presents communication barriers that can reduce the effectiveness of the reinforcement given. Therefore, it is important to explore how effective reinforcement patterns can be applied in online learning to motivate fifth grade students at SD Katolik Sancta Familia Sikumana.

This study aims to identify the reinforcement patterns used by teachers in online learning and evaluate their effectiveness in motivating students. This study will also explore the factors that influence the success of such reinforcement and provide recommendations for teachers to improve their strategies in motivating students in online learning. Through this study, it is hoped that deeper insights can be gained into the role of reinforcement in online learning and how this strategy can be optimized to support student learning success. This study also seeks to contribute to the existing literature by offering practical guidance for teachers in dealing with the challenges of student motivation in this digital era.

## **II. LITERATURE REVIEW**

Motivation to learn in educational contexts has been an increasing area of research for the past few decades. One of the important aspects to measure success in learning activities is motivation. Motivation theories are important in that they suggest the significance of intrinsic motivation (Deci & Ryan, 2000) — a self-discipline as opposed to external forces motivating them— drives academic success. Likewise, one of the challenges that appear to be very difficult in online learning is student intrinsic motivation which can become low for some reasons like minimal social inter-action and high chances of getting distracted.

### **A. Learning Motivation in Online Learning.**

Since the COVID-19, online learning has gained tremendous popularity as an educational model. This initiator process does have some issues though, primarily in how it involves students with what is essentially online learning. This type of intrinsic motivation usually decreases with the online-based model because students feel less connection to both teachers and classmates, which in turn leads to a lesser effort from them during learning. According to Hartnett et al. (2011), in online learning practice often one of the big problem is

that students may lose motivation if they have to learn independently without help from a teacher or mentor.

Contrastingly, one of the studies conducted by Artino (2008) also highlights that appropriate interventions such as providing students with constructive feedback and support from teachers along with peers help improve student motivation towards online learning. Artino also emphasizes the importance of positive reinforcement as a tool to increase students' intrinsic motivation in the online context.

## **B. Reinforcement and Its Role in Increasing Student Motivation.**

Teachers use just one method to encourage students which is called reinforcement. Reinforcements are those stimuli that reward students and thereby motivate to engage again in the learning experience (via commendation, rewards etc.). As for the conditioning theory, according to Skinner (1953) behaviour leading to positive consequences is likely to be repeated. In education, this translates to students receiving positive reinforcement being more motivated and excelling in their learning efforts.

Brophy (2010) found that consistent reinforcement by teachers enhances confidence of students thus promoting them to perform better and get the best learning outcome. Nevertheless the efficacy of this reinforcement in online learning is still yet to be discovered. The lack of face-to-face interaction and communication challenges in an online environment can reduce the impact of the reinforcement given.

## **C. Challenges of Reinforcement in Online Learning.**

Although positive reinforcement has been shown to be effective in increasing student motivation in face-to-face learning, its effectiveness in online learning is still questionable. One of the main challenges is the lack of direct feedback that teachers can provide to students in an online environment. Research by Hrastinski (2009), shows that the asynchronous nature of online learning often interferes with timely reinforcement because feedback is delayed.

Similarly, research from Rennie and Mason (2008) reveals that learners in online learning often reported less nurtured feelings compared to peers engaged in face-to-face learning. This variable may impact their response to the reinforcement provided by teachers. Therefore, it is important to explore how reinforcement can be adapted in the context of online learning to remain effective in motivating students.

## **D. Gaps in the Literature and Contributions of This Study.**

Although there are many studies exploring motivation and reinforcement in education, most of these studies have been conducted in the context of face-to-face learning. Little research has looked at reinforcement in online learning and even less in younger grades. To bridge this gap, the present study examines enforcement rewards employed by teachers in online learning at SD Katolik Sancta Familia Sikumana and analyses to what extent they work for students.

Thus, this study will not only contribute to the existing literature but also provide practical insights for teachers in optimizing their reinforcement strategies in online learning.

The research results of this process will also discuss the challenges and opportunities faced in implementing reinforcement into online environments, along with recommendations for how best to make use of it.

### **III. METHODOLOGY**

#### **A. Research Design**

This study uses a qualitative research design with a descriptive and explanatory approach. The descriptive design is used to describe the reinforcement patterns applied by teachers in online learning, while the explanatory design aims to analyze the effect of these reinforcement patterns on the learning motivation of fifth-grade students at SD Katolik Sancta Familia Sikumana.

#### **B. Population and Sample**

##### **1. Population**

The population in this study were all fifth-grade students at SD Katolik Sancta Familia Sikumana, Kupang City, and the teachers who teach in that class.

##### **2. Sample**

The sample for this study was taken using a purposive sampling technique, with the following criteria:

###### **a) Students.**

Fifth grade students who participated in online learning. Observations were conducted on these students during several online learning sessions to understand how they responded to reinforcement provided by the teacher.

###### **b) Teachers.**

Teachers who teach grade V at Sancta Familia Sikumana Catholic Elementary School. Two teachers were selected as the main participants for in-depth interviews.

The number of samples consisted of 42 students and 2 teachers who taught fifth-grade students in the 2023/2024 academic year.

#### **C. Data Collection Methods**

The data in this study were collected through two main methods: in-depth interviews and observations.

#### a. In-depth Interviews

Interviews were conducted with two fifth-grade teachers to explore their understanding of reinforcement strategies used in online learning, as well as the challenges they faced in implementing them. These interviews were semi-structured, allowing teachers to share their experiences and views freely but still focused on the research topic. Interviews were conducted on July 27 and 29, 2021.

#### b. Observations

Observations were conducted during five online learning sessions to identify reinforcement patterns implemented by teachers and how students responded to these reinforcements. These observations focused on the forms of verbal, non-verbal, and digital reinforcement used by teachers, as well as interactions between teachers and students during online learning.

### D. Data Analysis

The data obtained from the interviews and observations were analyzed using a qualitative descriptive approach. This analysis involved the following steps:

- a) Interview Transcription: The recorded interviews were transcribed verbatim to facilitate analysis.
- b) Data Coding: Data from the interview transcripts and observation notes were coded to identify key themes related to reinforcement patterns, student responses, and challenges faced by teachers.
- c) Compilation of Findings: The identified themes were then compiled and interpreted to answer the research questions.

### E. Ethical Considerations

This study was conducted with ethical considerations in mind, including:

- a) Informed Consent: Written consent was obtained from the participants, both teachers and parents of students, before the study began.
- b) Confidentiality of Data: The identities of the participants were kept confidential to maintain their privacy. Only relevant and anonymous information was used in the research report.

- c) Voluntary Participation: Participants were given the freedom to withdraw from the study at any time without negative consequences.

## F. Limitations

This study has several limitations, including:

- a) Generalization: Because this study was conducted in one school with a limited number of participants, the results may not be generalizable to a wider context.
- b) Subjectivity: Interpretation of qualitative data may be influenced by the subjectivity of the researcher, although efforts have been made to maintain objectivity through coding and triangulation of data.

## IV. RESULTS

This study aims to understand the reinforcement patterns applied by teachers in online learning and their impact on students' learning motivation in grade V of SD Katolik Sancta Familia Sikumana. The results of this study are based on data collected through observation and in-depth interviews with teachers and students.

### A. Teacher Reinforcement Patterns in Online Learning.

The results of the observation show that teachers consistently apply two main forms of reinforcement in online learning, namely verbal and non-verbal reinforcement. Verbal reinforcement includes direct praise such as "*very good*", "*exactly right*", "*excellent*", and "*very good*", which are given to students every time they give a correct answer or actively participate in an online discussion. In addition, non-verbal reinforcement, such as hand gestures (thumbs up) and facial expressions (smiles), are also used by teachers to provide emotional encouragement to students.

Teachers also use digital awards as a form of reinforcement, such as giving badges or additional points to students who complete assignments on time or show improvement in their performance. These rewards appear to be effective in motivating students to stay engaged in online learning, although some students stated that these rewards were not motivating enough without the accompanying verbal or non-verbal reinforcement.

### B. Student Responses to Reinforcement.

Students responded positively to the reinforcement given by the teacher. The results of an interview with one of the VA class students showed that praise and appreciation from the teacher provided additional enthusiasm in participating in online learning. The student said, "*During the learning process, both before the COVID-19 pandemic and during the pandemic, the teacher gave us reinforcement, such as praise when we answered questions correctly or got good grades. The teacher's praise made us enthusiastic in participating in learning activities.*" (Results of an interview with a key informant on July 27, 2021)

In addition, students who showed attendance above 95% were given a gift in the form of a pack of notebooks as a form of appreciation. One student stated, "I received a gift from the teacher in the form of a pack of notebooks because I was always present in the online learning process for one semester. Sanctions were also given to friends who did not do their assignments or were late in submitting assignments." (Results of interview with key informants on July 27, 2021)

### C. Challenges in Providing Reinforcement.

Although reinforcement has a positive impact, teachers face several challenges in its implementation, especially in the context of online learning. One of the main challenges is teachers' limited knowledge regarding the types of reinforcement that are appropriate and when they should be given. Teachers admitted that they found it difficult to determine the right time to provide verbal or non-verbal reinforcement to students in online learning. As expressed by one teacher, "Honestly, during the online learning process, I had difficulty guiding students, especially in providing reinforcement. We have never received training on how to provide good reinforcement to students in online learning." (Results of interview with key informants on July 27, 2021)

In addition, limited online learning facilities, such as inadequate internet access and devices, also become obstacles in providing effective reinforcement. Students often have difficulty participating in online learning in full due to network problems or limited internet quota, which affects how they receive reinforcement from teachers.

### D. Implications of Reinforcement on Learning Achievement.

The results of the study showed that the reinforcement given by the teacher had a positive impact on student learning achievement. Of the total 42 fifth grade students, 93% of students managed to achieve the Minimum Completion Criteria (MCC), while 7% of other students did not complete it. The high percentage of MCC shows that the reinforcement given by the teacher succeeded in motivating most students to achieve better learning outcomes, although there were some students who still needed special attention.

Diagram 1. shows the percentage of attendance of class VA students, where 25% of students had an attendance rate above 95%, while the other 75% had an attendance rate below 95%. Similar results were seen in class VB, with 23% of students having an attendance rate above 95% and the other 77% below 95%.

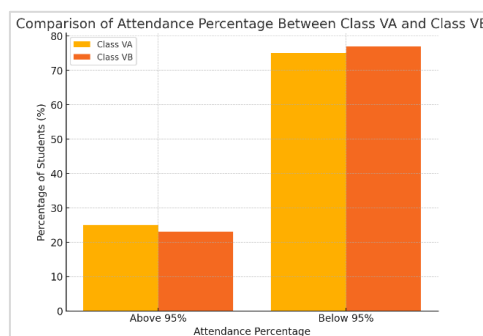


Diagram 1. Comparison of Attendance Percentage Between Class VA and VB

## V. DISCUSSION

### A. Reinforcement as a Motivational Tool in Online Learning.

Verbal reinforcement is one of the most effective methods in assisting our distant learning process. With reinforcement being praise of some kind, or tokens (if you implement a reward system), reinforcers are meant to help build the positive behavior with hope for repetition in return. This study has proven and showed that when teachers provide positive reinforcement in verbal and nonverbal forms it can enhanced motivation of students as well the engagement to learn online.

Based on Soemanto in Majid (2014) reinforcement is a positive responds from teachers to doer or so that students who have good workaviors received the task and grades its them. The aim of this reinforcement is to stimulate greater engagement and performance from the student so they persist in doing well/making progress. It is particularly important for us to have this reinforcement as we start continued remote learning with less direct teacher student interaction. Praises and verbal reinforcement among the most fragile elements that encouraged students to be more motivated, active in online learning.

### B. Principles of Effective Reinforcement.

Based on research findings, several principles of reinforcement identified by (Barnawi and Arifin (2014), are very important to apply in online learning:

#### 1. Warmth.

The teachers should give a warm reinforcement like by smiling, using hospitable voice and to show their alertness with gestures. This warmth helps to create a good teacher-student relationship since students need positive reinforcement. Experience has shown students will respond better to reinforcement provided with warmth, where they know they are valued and supported.

#### 2. Enthusiasm.

Rewarding with excited motivation will reinforce attention and make students motivated. Students feel more driven to perform when teachers offer them reinforcement with a loud voice, supplemented by the strong look. One of the major causes for continuing to actively participate in learning online is teachers' enthusiasm at providing reinforcement, according research findings.

#### 3. Meaningfulness.

Reinforcement should be specific to the student, and it must have a meaning. Teachers should provide the reinforcement as needed based on context and student performance. If you rub it in their face or remind them of what they accomplished, the learner will see this as condescending nonsense. Students are more motivated when they feel the reinforcement is indeed in line with their actual actions and outputs as stated just previously above which was found out on this study.

#### 4. Avoiding Negative Responses.

The way in which teachers reply should not instill any negativity amongst their students. Edgy questions or subtraction technique can be used to draw students in the classroom who are not so precise-to-answer, by this way no one feels being insulted and hence they work for themselves. This is crucial in case of online learning, because it involves a fair margin of direct correction which must be gentle enough not to make students feel discouraged.

### **C. Implications of Reinforcement on Learning Achievement.**

The results of the study showed that reinforcement given by teachers had a direct impact on student learning achievement. With 93% of students achieving the Minimum Completion Criteria (KKM), it can be concluded that the reinforcement applied during online learning is effective in supporting students' academic achievement. Verbal and non-verbal reinforcement applied with the right principles has helped students to stay focused and motivated in their learning process.

However, this study also revealed that there are still challenges in implementing reinforcement, especially related to teachers' low knowledge of the types of appropriate reinforcement in online learning. This lack of understanding has an impact on student motivation and learning achievement, as seen from the low attendance data in several classes.

### **D. Effective Reinforcement Strategies.**

Teachers must be able to implement reinforcement strategies that are appropriate to the needs and characteristics of students. Verbal and non-verbal reinforcement should be combined with digital rewards to provide more comprehensive encouragement to students. In addition, teachers need to develop skills in providing reinforcement that is tailored to the context of online learning, including considering student backgrounds and technical conditions that may affect the acceptance of reinforcement.

Reinforcement not only serves to increase motivation but also to control and direct student behavior towards more productive behavior. Therefore, teachers must continue to evaluate the effectiveness of the reinforcement given and make adjustments based on student responses.

## **VI. CONCLUSION**

The result of this study underscores the importance and necessity for more teacher reinforcement strategies to support student motivation in online learning context. Both verbal and non-verbal reinforcements are shown by the findings as indispensable tools that teachers can use to prompt active participation from their students, which ultimately leads to improved academic performance even in an environment where there is no physical interaction. Moreover, the reinforcement strategies are further enhanced by students being able to redeem digital rewards as a form of gamification. Yet the paper also illustrates teacher hurdles to providing real-time, personalized feedback in a virtual experience and shows how insufficient

technological infrastructure stymies their efforts. These challenges underscore the need for targeted teacher training to better equip educators with the skills needed to effectively implement reinforcement in online learning. With the impressive amount of students meeting MCC, this displays that these strategies have a strong positive effect on student motivation and achievement in online education. Educators will need to continue developing their reinforcement strategies for online learning, ensuring that every student is supported in order to succeed. Finally, reinforcement strategies create a way to build an online learning environment that is both positive and productive. Therefore, teachers must continue to evaluate the effectiveness of the reinforcement given and make adjustments based on student responses.

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