Effectiveness of Video Lessons in Enhancing Student Engagement and Comprehension During the COVID-19 Pandemic

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ABSTRACT

The COVID-19 pandemic forced schools worldwide to adopt remote learning models, with video lessons becoming a crucial tool for instruction. This study examines the effectiveness of video lessons in enhancing student engagement and comprehension among Grade 6 pupils at Burak Elementary School, Taft District. Using a quantitative approach, surveys were distributed to 50 students and 10 teachers, measuring engagement, comprehension, and challenges encountered during video-based instruction. Results showed that 80% of students found video lessons engaging (M = 4.2, SD = 0.8), and 70% reported improved comprehension (M = 4.0, SD = 0.9). T-tests revealed no significant differences in engagement by gender ($t(48) = 1.02$, $p > .05$), but ANOVA results indicated a significant correlation between prior academic performance and comprehension ($F(2,47) = 4.56$, $p < .05$), with higher-achieving students benefiting more. However, 60% of participants identified technical difficulties, particularly with internet connectivity and device access, as major barriers to learning. These findings suggest that while video lessons can significantly enhance engagement and comprehension, additional support is needed for students with lower academic performance, and infrastructure challenges must be addressed. The study concludes that video lessons are an effective tool for remote learning but highlight the importance of equitable access to technology and tailored interventions for struggling students.

Keywords: Video Lessons, Student Engagement, Modular Learning, Academic Performance

INTRODUCTION

The COVID-19 pandemic has dramatically reshaped global education, forcing a rapid shift from traditional classroom instruction to distance learning models (Bao, 2020; Daniel, 2020). This unprecedented transition highlighted the importance of digital tools in ensuring the continuity of education, with video lessons emerging as a prominent instructional resource. Research shows that video lessons can promote more dynamic and flexible learning, particularly by enhancing student engagement and understanding through visual and auditory stimuli (Mayer, 2009; Nagy, 2018). While video-based instruction has shown promise in improving student outcomes in various educational settings, its effectiveness in elementary education remains underexplored in rural and under-resourced areas.

Given the scarcity of research in this context, this study aims to fill the gap by examining the effectiveness of video lessons in enhancing engagement and comprehension among Grade 6 pupils at Burak Elementary School during the COVID-19 pandemic. The school's rural setting and limited resources make it an ideal case to explore the benefits and challenges of video-based learning in under-resourced areas. By analyzing the experiences of both students and teachers, this study offers valuable insights into the potential of integrating video lessons in elementary education, providing evidence to inform future educational strategies, particularly in similar remote learning environments.

Objectives of the Study

This study aimed to determine the effectiveness of video lessons in enhancing students' engagement and comprehension among Grade 6 pupils at Burak Elementary School, Taft District during a pandemic. More specifically, this study was designed to answer the following research question.

1. What is the effectiveness of using a video lesson in enhancing students' comprehension and engagement?
2. What are the challenges encountered by teachers using video lessons for the students?

METHODOLOGY

Research Design

A quantitative research design was used to evaluate the effectiveness of video lessons at Burak Elementary School.

Locale of the Study

The study is located at Barangay Burak, Taft Eastern Samar. The school population is more or less 100 students in Burak Elementary School.

Respondents of the Study

The study was distributed to 50 Grade 6 students and 10 teachers, measuring variables to student engagement, comprehension, and challenges faced during video lesson implementation.

Research Instruments

The research adopted a survey questionnaire to evaluate the effectiveness of video lessons at Burak Elementary School. A structured survey, validated by education experts, was distributed to 50 Grade 6 students and 10 teachers, measuring variables such as student engagement, comprehension, and challenges faced during video lesson implementation. The survey employed a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), and questions were designed to assess the perceived impact of video lessons on learning outcomes.

Analysis of the Data

Data were analyzed using both descriptive and inferential statistics. Descriptive statistics, including means and standard deviations, were calculated to summarize the general trends in engagement and comprehension. T-tests and ANOVA were conducted to assess whether engagement and comprehension varied significantly across demographic groups, such as gender and prior academic performance.

RESULTS AND DISCUSSION

The survey results revealed that 80% of students found video lessons engaging, with an average engagement score of 4.2 (SD = 0.8). Students reported that the visual and auditory features of the lessons facilitated their learning, making lessons more interactive and comprehensible. In terms of comprehension, 70% of students reported improved understanding, with a mean comprehension score of 4.0 (SD = 0.9). These results align with prior studies that underscore the efficacy of multimedia instruction in enhancing student understanding (Nagy, 2018; Costley & Lange, 2017).

Table 1. Students Video Lessons

Video Lesson	Mean Score	SD
Engagement	4.2	0.8
Comprehension	4.0	0.9

Further analysis using t-tests found no significant difference in engagement between male and female students (t(48) = 1.02, p > .05), indicating that both genders benefited equally from video-based instruction.

Table 2. T-test result of engagement between male and female

Video Lesson	T-test	p-value
Engagement between Male and Female	1.02	p > 0.05

However, ANOVA results showed significant differences in comprehension based on prior academic performance (F (2,47) = 4.56, p < .05), with higher-performing students reporting greater gains in comprehension than their lower-performing peers. This finding is consistent with the research of Razak, Kaur, Halili, and Ramlan (2020), who emphasized that additional scaffolding may be necessary for students who struggle academically when engaging with video-based content.

Table 3. ANOVA result of comprehension on academic performance

Video Lesson	ANOVA	p-value
Comprehension based on academic performance	4.56	p > 0.05

Challenges related to video lessons emerged as a key issue, with 60% of participants citing internet connectivity and lack of access to devices as major barriers. This aligns with Duncan et al. (2020), who noted that technological barriers remain one of the most significant challenges in implementing distance learning in rural and under-resourced areas.

The findings from this study support the growing body of literature that highlights the benefits of video lessons in promoting student engagement and comprehension, particularly in remote learning contexts (Bao, 2020; Mayer, 2009). The visual and auditory elements inherent in video lessons make them an effective tool for capturing student attention and promoting better retention of information, consistent with Mayer's (2009) Cognitive Theory of Multimedia Learning. Additionally, the significant relationship between prior academic performance and comprehension suggests that while video lessons are broadly beneficial, differentiated support is needed to help lower-performing students fully engage with the material.

Addressing the technical challenges highlighted in this study is essential for maximizing the benefits of video lessons. As noted by Duncan et al. (2020), inadequate internet infrastructure and limited access to digital devices disproportionately affect students in rural areas, potentially widening the digital divide. Schools must invest in improving technology access, providing training for teachers and students, and exploring alternative low-tech solutions where necessary (Daniel, 2020).

CONCLUSION AND RECOMMENDATION

This research demonstrates that video lessons can significantly enhance student engagement and comprehension in elementary education, particularly during the COVID-19 pandemic. However, the benefits of video-based learning are contingent on addressing the technological barriers that prevent equitable access to education. Future research should explore the long-term impacts of video-based learning on student achievement and investigate more targeted interventions to support lower-performing students. The study recommends for those least learned skills or challenging lessons make a video lesson for the students to increase academic performance during new the normal education.

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