

## **The Influence of Kinemaster Application-Based Learning Media and Learning Environment on Student Learning Motivation at SD Katolik 1 Santo Yohanes Tomohon**

**Afrilia Asari Lengkong\*, Harol R Lumapow, Widdy H.F. Rorimpandey**

Universitas Negeri Manado, Indonesia

Email: [afrilialengkong03@gmail.com](mailto:afrilialengkong03@gmail.com)\*, [harolrlumapow@unima.ac.id](mailto:harolrlumapow@unima.ac.id),

[widdyrorimpandey@unima.ac.id](mailto:widdyrorimpandey@unima.ac.id)

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### **Abstract**

This study aims to analyze the influence of KineMaster application-based learning media and the learning environment on student learning motivation at SD Katolik 1 Santohanes Tomohon. The development of digital technology encourages the use of innovative and interactive learning media to improve the quality of the teaching and learning process. The KineMaster application allows teachers to present material in an attractive audio-visual form, which can increase students' attention and interest. In addition, a conducive learning environment, both at school and at home, plays a role in shaping students' enthusiasm and motivation to learn. This study uses a quantitative approach with a survey method. Data collection was carried out through the distribution of questionnaires to students as respondents. The data was analyzed using regression tests to determine the influence of each variable, both partially and simultaneously. The results of the study show that KineMaster application-based learning media has a positive and significant effect on students' learning motivation. The learning environment also has a positive and significant effect on learning motivation. Simultaneously, these two variables have a significant influence on increasing student learning motivation. Thus, the use of KineMaster application-based learning media, supported by a conducive learning environment, can be an effective strategy in increasing student learning motivation.

**Keywords:** kinemaster-based learning media; learning environment; learning motivation.

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### **INTRODUCTION**

Education plays a very strategic role in shaping the character and potential of superior human resources. Along with the times, the world of education is required to continue to innovate in order to adapt to increasingly complex global changes (Abdulrahman et al., 2020). In the digital era like today, the learning process is no longer sufficient to rely solely on conventional methods such as lectures or questions and answers. An approach that integrates information technology as a tool is needed to deliver learning materials in a more interesting, interactive, and contextual way for students, especially at the elementary school (SD) level (Di Pietro & Castaño Muñoz J., 2025).

In the context of 21st-century learning, students are expected not only to be passive recipients of information, but also to be active participants in the learning process. Learning must encourage creativity, independence, collaboration, and critical thinking skills. For this reason, teachers, as facilitators, are required to choose and use learning media that not only convey material but also arouse students' interest and motivation to learn (Daryanto, 2016). According to (Zhang R., 2022) technologies such as Augmented Reality, virtual simulations,

educational games, interactive videos, and Learning Management Systems have been proven to improve concept understanding, learning motivation, and student engagement. One potential media to support this goal is the use of digital applications such as KineMaster, which is a smartphone- and tablet-based video editing application with various interesting visual and audio features (Ghozali, 2021). (Corporation, 2023) KineMaster is not only easy to use, but it also provides an opportunity for teachers and students to get creative in creating video-based learning content (Nur Aeni et al., 2022). In thematic learning, for example, teachers can make short videos that combine text, images, sounds, background music, and animation so that the material presented becomes more lively and easy to understand. From a student's perspective, involvement in the process of creating or watching learning videos can stimulate their interest in the material, increase curiosity, and strengthen their understanding of the lesson. This indirectly contributes to increased learning motivation, which is one of the key factors in achieving optimal learning outcomes. Learning motivation itself is an internal and external force that drives students' enthusiasm to learn, sets learning goals, and maintains and directs learning behavior in a productive direction. Students who have high motivation to learn will show enthusiasm, perseverance, and a sense of responsibility in following the learning process. In contrast, students with lower motivation tend to get bored easily, lack focus, and have little enthusiasm for completing school assignments. Therefore, it is important for educators to understand and manage the various factors that can influence students' motivation to learn (Slameto, 2015).

In addition to the use of digital learning media such as KineMaster (Munir, 2017), the learning environment is also an external factor that is no less important in influencing student learning motivation (Patel V., 2021). The learning environment can include physical conditions such as the availability of comfortable classrooms, adequate lighting, good air circulation, and the existence of adequate teaching aids or learning media. On the other hand, the learning environment also includes social-psychological aspects, such as the relationship between teachers and students, interactions between students, the emotional atmosphere in the classroom, and support from the family environment (Qianyi, 2024). A conducive learning environment can create a sense of comfort and security for students, which ultimately positively impacts their motivation to learn. A fun and interactive classroom atmosphere will encourage students to participate more actively, feel valued, and be more confident in expressing opinions or asking questions. On the other hand, a less supportive environment due to inadequate facilities and less harmonious social interaction can cause students to lose interest and enthusiasm for learning (Sardiman, 2018).

The novelty of this research lies in its integrated examination of both KineMaster application-based learning media and the learning environment as simultaneous predictors of student learning motivation within a single analytical framework. This study introduces several novel elements. First, it extends previous research by (Aeni et al., 2022) and (Anisah et al., 2024) by quantifying the precise contribution of KineMaster media to motivation variance (38.7%) using rigorous regression analysis. Second, it contributes to the literature on learning environments by (Sulastri, 2021) and (Prmono & Widayati, 2020) by empirically demonstrating the magnitude of environmental contributions (21.2%). Third, and most importantly, this study uniquely examines the combined effect of both variables, revealing that together they account for 39.4% of motivation variance, providing empirical evidence of their

collective importance. Fourth, the study situates these findings within the specific context of a Catholic elementary school in Tomohon, Indonesia, addressing geographical and institutional gaps in the literature. Fifth, this research focuses specifically on the KineMaster application, which has received limited empirical attention in educational research compared to other digital tools (Green M., 2024).

At SD 1 Santo John Tomohon Catholic School, as in many other elementary schools, the challenge of improving the quality of learning and student learning motivation is still a major concern. Based on the results of initial observations of all students as a research population of 99 people, consisting of 38 grade IV students, 27 grade V students, and 34 grade VI students, it was found that all of the students showed signs of low learning motivation during the learning process. Although schools have made various efforts to improve the quality of education, there are still a number of students who show symptoms of low learning motivation, such as often not doing assignments, not focusing when the teacher explains the material, or showing a lack of enthusiasm when participating in learning activities. This is certainly a serious problem that must be solved immediately. Seeing this reality, an appropriate and innovative approach is needed to overcome this problem. One solution is by integrating technology in learning through the creative and communicative KineMaster application. On the other hand, attention also needs to be paid to creating a learning environment that is fun and supports the learning process of students, both in the classroom and at home. The combination of using digital learning media and creating a conducive learning environment is believed to significantly increase student learning motivation (Lai & Zheng, 2018). Based on this presentation, the researcher is interested in studying more deeply the influence of KineMaster Application-Based Learning Media and the learning environment on student learning motivation at SD Catholic 1 Santohanes Tomohon. This research is expected to make a theoretical and practical contribution, especially in providing recommendations for innovative and effective learning strategies to increase students' learning motivation at the elementary school level (Hamzah, 2018).

## **METHOD**

This study uses a quantitative approach to measure and analyze the influence of Kinemaster Application-Based Learning Media and the learning environment on student learning motivation at SD Catholic 1 Santohanes Tomohon. The data collected will be analyzed using statistical techniques to determine how much influence the variables of Kinemaster Application-Based Learning Media and the learning environment on the learning motivation of students at SD Catholic 1 Santohanes Tomohon.

### **Data Collection Techniques and Procedures**

The data collection technique used in this study is a questionnaire. A questionnaire is a data collection tool in the form of a series of questions or statements given to respondents to be answered. Questionnaires are often used in quantitative research to obtain information or data about the attitudes, opinions, behaviors, or characteristics of individuals or groups.

The research instrument contains a number of statements that must be responded to by respondents to find out information about the three variables discussed. The development of the instrument goes through several stages, namely (1) Determining the Research Objectives and Variables, (2) Developing a Theoretical Framework, (3) Determining the Type of

Questions, (4) Compiling Question Items, (5) Compiling the Measurement Scale, calculating the validity and realism of the research instrument and (6) Testing the Instrument (Validity and Reliability). The variables that will be made in the questionnaire are first made a conceptual definition, operational definition and a grid of research instruments (Sugiyono, 2022).

### **Data Analysis Techniques**

The collected data is analyzed to test whether the hypothesis that has been established can be accepted or rejected. Before the data analysis is held, the following analysis requirements test process has been carried out:

#### **Regression Analysis Requirements Test (Assumptions)**

- **Normality Test:** For this test, the Kolmogorov-Smirnov (KS) formula was used. If a significant value of  $p$  is found  $>$  a significant level of  $\alpha = 0.05$ , then the data is considered to be normal. If the  $p$  value is  $<$   $\alpha$  on the other hand, the data is considered not to be normally distributed, so regression analysis is not possible. If the data turns out to be abnormal, then as an alternative, it is held in a non-parametric analysis.
- **Linearity Test:** Due to regression analysis, the assumption of the linearity of the relationship between variable  $X$  and variable  $Y$  must be met, for which a linearity test is required through the  $F$  test within the framework of variance analysis, which is in SPSS 27 through ANOVA analysis. If the value of  $F$ - is calculated to be greater than the value of  $F$ -Table, then there is a linear relationship between variable  $X$  and variable  $Y$ .
- **Regression analysis:** Simple regression analysis and multiple regression analysis.

Furthermore, to test the hypothesis, the  $F$ -test will be used. If the value of  $F$ -calculates  $>$  of the value of  $F$ -Table or the value of  $p$ - $<$   $0.05$ , then an alternative hypothesis is accepted.

## **RESULTS AND DISCUSSION**

This research was carried out at SD Catholic I Santohanes Tomohon, especially in grades IV, V, and VI. The total number of students in the three classes reached 99 people, with details of 38 students in grade IV, 27 students in class V, and 34 students in class VI. From the total population, as many as 60 students were selected as a sample using purposive techniques, with the aim that each class is represented in a balanced manner while obtaining valid data that reflects real conditions in the school. Based on the sample distribution, class IV was taken as many as 23 students, class V as many as 18 students, and class VI as many as 19 students. This sample is the subject of research that provides data related to three main variables, namely  $X_1$  (use of the Kinemaster application),  $X_2$  (learning environment), and  $Y$  (student learning motivation). Data collection is carried out through questionnaires that are given directly to students. This instrument is designed to quantitatively measure students' perceptions, while capturing their level of motivation, engagement, and response to learning media as well as the conditions of the learning environment applied by teachers. The results of the questionnaire showed that most of the students gave a positive response to the use of the Kinemaster ( $X_1$ ) application.

Kinemaster's animation-based media and interactive videos have been proven to make it easier to understand material, grab students' attention, and increase their engagement during learning. This shows that this digital application is effective in supporting the learning process and motivating students. In addition, the data also revealed that  $X_2$  (learning environment)

plays an important role in learning success. Teachers who are able to provide a conducive, creative, and interactive learning environment, as well as integrate various learning media, are able to increase student participation and enthusiasm. A good learning environment directly encourages students to be more motivated and actively participate in every learning activity. Overall, the description of the study data shows that the combination of X1 (Kinemaster application) and X2 (learning environment) makes a positive contribution to Y (student learning motivation). Engaging learning media combined with a supportive learning environment can increase student interest, perseverance, and engagement, while emphasizing the importance of integrating digital technology and teacher creativity in improving the quality of learning at the elementary school level.

### **Analysis of Determination Coefficient (Adjusted R<sup>2</sup>) Effect of Kinemaster Application Variables on Learning Motivation Variables**

Determination analysis was used to determine the percentage contribution of the influence of the Kinemaster Application variables on learning motivation variables. The results of the determination analysis can be seen in the SPSS 27 *Model Summary* output from the results of the simple regression analysis below:

**Table 1.** Simple Regression Model Summary for the Effect of Kinemaster Application on Learning Motivation

<b>Model Summary<sup>b</sup></b>				
Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630a	.397	.387	2.872
a. Predictors: (Constant), Aplikasi_Kinemaster				
b. Dependent Variable: Motivasi_Belajar				

Based on the table, the R. Square number is 0.387 or 38.7%. This shows that the percentage of contribution of the influence of independent variables of the Kinemaster Application on learning motivation is 38.7%. While the rest are influenced by other variables that are not studied in this research model.

### **Analysis of Coefficient of Determination (Adjusted R<sup>2</sup>) Learning environment on learning motivation variables**

Determination analysis was used to determine the percentage contribution of the influence of the learning environment variable on the learning motivation variable. The results of the determination analysis can be seen in the SPSS 27 *Model Summary* output from the results of the simple regression analysis below:

**Table 2.** Simple Regression Model Summary for the Effect of Learning Environment on Learning Motivation

<b>Model Summary<sup>b</sup></b>				
Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.475a	.225	.212	3.257
a. Predictors: (Constant), Lingkungan_Belajar				
b. Dependent Variable: Motivasi_Belajar				

Based on the table, the *R. Square number* is 0.212 or 21.2%. This shows that the percentage of contribution of the influence of independent variables of the learning environment on learning motivation is 21.2%. While the rest are influenced by other variables that are not studied in this research model.

**Analysis of the Coefficient of Determination (Adjusted R<sup>2</sup>) the effect of the variables of the Kinemaster Application and the learning environment together on the variables of learning motivation.**

Determination analysis was used to determine the percentage contribution of the influence of the variables of the Kinemaster Application and the learning environment together on the variables of learning motivation. The results of the determination analysis can be seen in the output of the SPSS 27 *Moddel Summary* from the results of the multiple linear regression analysis below:

**Table 3.** Multiple Regression Model Summary for the Combined Effect of Kinemaster Application and Learning Environment on Learning Motivation

Model Summary				
Models	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.644a	.414	.394	2.857

a. Predictors: (Constant), Lingkungan\_Belajar, Aplikasi\_Kinemaster

Based on the table, the *Adjusted R. Square* figure is 0.394 or 39.4%. This shows that the percentage of contribution to the influence of independent variables of the kinemaster application and the learning environment together on learning motivation is 39.4%. While the rest are influenced by other variables that are not studied in this research model.

## CONCLUSION

Overall, this study confirms that the use of the Kinemaster application and the creation of a conducive learning environment have proven to be effective in increasing the learning motivation of students of SD Catholic I Santohanes Tomohon. The Kinemaster application is able to make learning more engaging, interactive, and easier to understand the material, while a creative and supportive learning environment encourages active student engagement. The integration of the two has a significant positive impact on learning motivation, emphasizing the importance of the role of digital technology and teacher creativity in improving the quality of the teaching and learning process at the elementary school level.

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