

Development of Learning Videos with the Kinemaster Application to Facilitate Online Learning at Junior High Schools in Aceh Besar

Syarifah Farissi Hamama¹, Maulida²

¹ Universitas Abulyatama, Indonesia; sy.farisi_biologi@abulyatama.ac.id

² Universitas Abulyatama, Indonesia; maulida_biologi@abulyatama.ac.id

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ABSTRACT

The teaching and learning process which is usually conducted face-to-face has been turned into an online learning process because the whole world is experiencing the covid 19 pandemic. Online learning is not without challenges, there are so many challenges that are faced during the learning process. The purpose of this research is to create learning media using the Kinemaster application to facilitate online learning. The research starts from the preparation of the proposal in June 2020 until March 2021. The length of time to conduct this research is 3 months. The method used in this research is R & D (*Research and Development*). The learning media testing involves 3 experts (media experts, linguists, concept experts/experts in developing teaching materials). The results show that learning media with the Kinemaster application can already be applied, based on the validation test 81,94%. These results refer to the validity of the media carried out by the experts involved in the research. The result validity category is quite valid, which means, it can be used but needs minor revisions. Revisions are made based on the results of the validator's input and suggestions both directly, responses and suggestion given in writing on the validation sheet.

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Corresponding Author:

Maulida

Universitas Abulyatama, Indonesia; maulida_bilogi@abulyatama.ac.id

1. INTRODUCTION

Online learning has its advantages and disadvantages. Information technology in education is an innovation to support online learning. According to (Mustofa et al., 2019; Maulida & Aryani, 2022; Tarigan, 2021) , Information technology in education is an innovation to support online learning. Online learning, where the learning process takes place remotely. Networks and the internet are things that support the implementation of the online learning process, where the learning tool is technology and the system is the internet network. Higher education is an example for online learning, because universities mostly apply distance learning processes. According to (Crews &

Parker, 2017) the absence of a distance in a place that can be used to access learning for everyone is the biggest benefit in using online learning. So that everyone can access the learning process anywhere without having to be in the same room. With the online learning process, it is proven to be able to improve the ability and use of the internet for students during the learning process (Saifuddin, 2018; Khaira, 2021).

Many experts argue that online learning gives a new impression in the learning process. One of them was said by (Bilfaqih & MN, 2015) online learning is capable to provide attractive and effective services but the implementation has its own challenges. However, the reality shows that many children do not even pursue anything during online learning activities because many tasks are given by the teacher through their parents' gadgets. Infrastructure facilities to support the online learning process from home have not been able to be fulfilled by all parents (Pringga, 2021).

Circumstances that force the learning process to change and adapt to carry out the teaching and learning process can be seen from the various innovations that have emerged recently. One form of innovation is online learning method. However, *online learning* cannot be separated from problems in its implementation, including the online learning to students at educational institutions. Therefore, various solutions are needed and a step has to be taken by planning the future (Jamaludin et al., 2020). The same thing was also stated by (Tafonao, 2018), intermediary concepts in learning that will be given to students can be given through learning media, so that there is an increase in interest, attention, and stimulates the formation of creative and critical thinkers in students. Another opinion expressed by (Arda et al., 2015) that media can be defined as something that can be used to convey messages and can stimulate students' thoughts and feelings consequently motivation to learn arises. Media serves as a tool to facilitate the learning processes to be more efficient and effective in achieving learning objectives (Asholahudin et al., 2021). In facilitating the online learning process, learning media can be created with the Kinemaster application. The kinemaster application is an application that can be used to edit videos to make them more interesting. This application can be used by IOS and Android users. The advantage of this application is the use of tools that are easier for new users to understand, so it will make their edited videos more interesting and suitable for a learning video. To be able to run this application, *a smartphone must have an Android* operating system with version 4.1 (*Jelly Bean*) and above. The supported file formats for videos are mp4, 3gp, and mov. Then for audio, the supported formats include mp3, m4a, and aac (Asholahudin et al., 2021) (Dewi & Handayani, 2021). The Kinemaster application is proven convenience in preparing teaching materials and making learning media, this is demonstrated by (Darnawati et al., 2021) that says that the Kinemaster application is easier to understand in making learning media. Kinemaster is a full-featured and professional video editing application for iOS and Android devices (History et al., 2021) It supports multiple layers of video, audio, image, text, and effects equipped with a wide range of tools that help teachers to create high-quality videos. The subject materials are designed to be as attractive as possible by using videos and animated images related to the subject; therefore, the students can be focus on what is conveyed by the teacher. In addition, Kinemaster result videos can be directly shared to social media platforms such as YouTube, WhatsApp, Facebook, Google+, and many more. This makes it easier for teachers, to share their videos to the students (Indriani & Pangaribuan, 2020). The learning process using the KineMaster application is expected to be more convenience in understanding the subject material. This Kinemaster application presents a fairly simple interface, but has quite complex features. This can help students in understanding the material. In addition, the kinemaster application is also easy to use in making simple videos and easy to implement for teachers and student in supporting the learning process (Handoko, 2021).

Based on these references, authors are interested to wroted "Development of Learning Media with the Kinemaster Application to Facilitate Online Learning". This research focuses on making learning videos that show the teacher's face, as well as interesting teaching materials so that online learning can feel similar to face-to-face learning.

2. METHODS

This research is the teaching materials development used is the *R & D (Research and Development)* method (Akbar, 2013). This research was conducted in the area of the Abulyatama University. The research begins with the preparation of the proposal starting from June 2020 to March 2021. It takes 3 months (90 days) to conduct this research.

2.1 Instruments in Developing Learning Media with Kinemaster

The instrument used in the development of teaching materials is an expert validation sheet on learning media with the kinemaster application. The teaching material validation sheet is designed in accordance with the instructions for preparing the teaching material validation instrument (Akbar, 2013). This validation is done by 3 experts, generally have doctoral degrees in the study scope, from Biology Education department of Syiah Kuala University. In this study, the experts were 1 media expert; 1 material expert; and 1 teaching material development expert.

2.2 Model and Design of Learning Media Development.

The design model used is the teaching materials development model introduced by Thiagarajan that develop the teaching material in *our D (4D)* model (Akbar, 2013).

1. Define

Preliminary studies were conducted to find out the real condition of school and also to perform requirements and curriculum analysis. The results from the *define* stage are the students' profile condition as well as d students' needs of the learning media.

2. Design

The design stage aims to plan learning devices. At this stage, the steps taken are:

1. Designing materials and content of learning media
2. Designing the format of learning media with the kinemaster application
3. Validating learning media carried out by a team of experts.

The results from this stage are teaching materials that have been added to learning media with the kinemaster application.

3. Develop

In the context of developing learning models, development activities *are* carried out with the following steps.

1. Revise the learning media with the kinemaster application based on input from the expert team.
2. Assessment of the quality of the revised learning media by experts
3. The second revision after quality assessment by experts, users, and *audience* (if still needed).

2.3 Data analysis technique

Data on the quality of teaching materials was analyzed by changing the results of the validator's assessment from qualitative data to quantitative data with the following conditions: poor = 1, sufficient = 2, good = 3, very good = 4; then the data is analyzed for each aspect of the assessment. The final score obtained is converted back into a qualitative level of product quality. Calculating the average score of each assessed aspect using the following percentage formula:

$$V\text{-ah} = \frac{TSe}{TSh} \times 100\% = \quad \%$$

Note: V-ah= Expert validation

TSe= Total empirical score (validation results provided by experts)

TSh= Total maximum score

(Akbar, 2013)

The validity of the teaching materials is determined from the suitability of the validity results specified in table 1. following:

Table 1. Criteria for Expert Validation Category

No	Number	Category Validity
1.	85.01 % - 100 %	Very valid, or can be used without revision.
2.	70.01% - 85.00%	Fairly valid, or usable but need minor revision.
3.	50.01 % - 70.00 %	Less valid, it is recommended not to use it because it needs major revision.
4.	01.00 % - 50, 00 %	Invalid, or should not be used.

Source: (Akbar, 2013)

The validation percentage of each expert is calculated using the formula:

$$V = \frac{TSe}{TSh} \times 100\% \text{ (Akbar, 2013).}$$

Description: V = Percentage of validation

TSe = Total empirical score obtained

TSh = Total maximum expected score.

Further analysis, the calculation of collective validation obtained by using the following formula:

$$V = \frac{Vah1+Vah2+Vah3}{3} = \dots \% \text{ (Akbar, 2013)}$$

Description: V = Validation (combined)

Vah1 = Validation expert 1 (linguist)

Vah2 = Validation expert 2 (material expert)

Vah3 = Validation expert 3 (media expert)

Vah4 = Expert validation 3 (teaching material development expert)

3. FINDINGS AND DISCUSSION

The design of learning media with the kinemaster application is evaluated using validation test method of teaching materials by a team of experts. The team of experts who validated these teaching materials consisted of 3 (three) experts, namely: media experts, linguists, concept experts/experts in developing teaching materials. Expert validation scores were analyzed using a validation formula. The results of the percentage of expert validation on teaching materials can be seen in Table 2 below.

Table 2. Expert validation results

No	Validator	Percentage Validity	Category Validity
1	Linguist	87.96%	Quite valid
2	Material Expert	75.93%	Quite valid
3	Media expert/teaching material development expert	75.00%	Quite valid
4	Combined	81.94%	Quite valid

The result of the combined validation test is 81.94% which means the validity category is quite valid; therefore, the teaching material can be used but it needs minor revisions. Revisions are made based on the validator's input both directly and written on the validation sheet. Expert suggestions for revision of teaching materials include adding material so that there are no misunderstandings or misconceptions in students. Media can support learning, motivate and foster student interest (Divine & Desyandri, 2020). Media can also stimulate thoughts, feelings, attention, and the ability of students in the learning process (Arwin et al., 2019).

The results analysis of the percentage validity of each aspect are still in the quite valid category. The validity result of each aspect can be seen in Table 3.

Table 3. Recapitulation of Validation Percentage

No	Evaluation	Percentage Validity	Validity Criteria
1.	Able to teach students (<i>Self Instructional</i>)	77.08%	Quite valid
2.	Conformity to the demands of student-centered learning	81.25%	Quite valid
3.	Whole and intact (<i>Self Contained</i>)	91.67%	Very valid
4.	Stand-alone	68.75%	Not valid
5.	Adaptive	82.29%	Quite valid
6.	Friendly with the user (<i>User Friendly</i>)	89.59%	Very valid
7.	Language in speaking and writing	91.67%	Very valid
8.	Comprehensive delivering	95.83%	Very valid

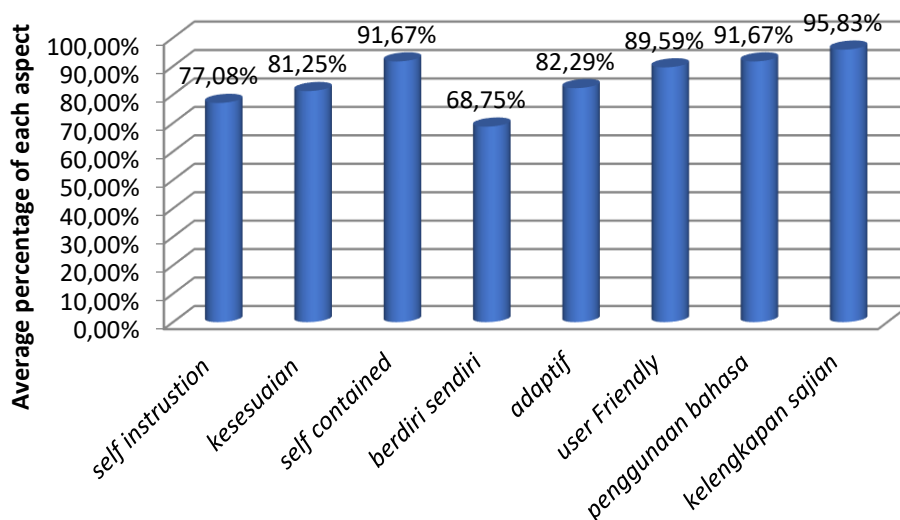


Figure 1. Validation of Every Aspect of Assessment on Development of Teaching Materials

Based on Figure 1, the percentage analysis for each aspect of the assessment is averaging 70%, except for the stand-alone aspect which is 68.75%. This is because the learning process requires supporting aspects such as the use of laboratory equipment that supports learning activities. This is in accordance with the opinions of experts that in the learning video there are 3 aspects that can be developed, namely kinesthetic, auditory and visual of the students (Adiasti, 2021). (Widiono, 2021). The use of various applications can help the teaching and learning process because application like kinemaster can be downloaded for free by anyone. Based on this opinion, it is clear that audio-visual

(video) media has many benefits, including helping students understand the subject matter presented by the teacher and making it easier for teachers both at school and during distance learning (Fitri, 2019). (Saputra et al., 2020) . Distance learning, currently being implemented, is causing by school closures and is conducted from home. This is in accordance with the Circular issued by the Ministry of Education and Culture Number 15 of 2020 concerning Guidelines for Organizing Learning from Home in an Emergency Period for the Spread of Covid-19. One of the supports for distance learning method and to make students more interested in the learning process is learning media in video format (Fitri, 2019) .

Kinemaster is very complete and easy to use video editing application (Adnyana et al., 2020). Kinemaster can be operated on Android and IOS operating systems and it is available in various languages. Another advantage of this application is the availability of features that can record, provide images, animations, transitions, text, voice recorders, even give sound effects (Indriani & Pangaribuan, 2020) . This application is also light on storage and performance of a smartphone because the size is only 66 mb (megabyte). Moreover, this app provides various types of overlays, transition effects, animations, backgrounds, additional fonts, music, even allows users to change the background (chroma key) to make the video more attractive. As the opinion of Feinberg, Song, and Lim (2016: 1) stated “*Kinemaster includes a variety of transition and filter effects, color lookup table (LUT) filters, Chroma key (green screen), precise volume envelope control over time, multi-layer support (video, image, text, handwriting, overlays), and key frame animation layers*”. In addition, using the kinemaster application in making learning videos helps teachers improve their skill and quality in information technology (Riwayati et al., 2021)

4. CONCLUSION

The development of learning media with the kinemaster application based on a validation process involving 3 experts; namely media experts, linguists, concept experts/experts in developing teaching materials is in the valid/feasible category to use with a percentage of 81.94%. This study only uses 1 material and the researchers hope this research can be continued for all science materials that apply in junior high schools so that online learning can be more easily applied

REFERENCES

- Adisti, N. (2021). The Use of social media as an Alternative to Online Learning Media. *Borneo Journal of Basic Education* , 02 (1), 101–110.
- Adnyana, PB, Citrawathi, DM, & Dewi, NPSR (2020). The effectiveness of training on making Flipped classroom videos with Smartphones and the Kinemaster application (PKM Program). *Journal of Senadimas Undiksha* , 1758–1765. The effectiveness of training on making Flipped classroom videos with Smartphones and the Kinemaster application (PkM Program)
- Akbar, S. (2013). Instruments Learning devices. PT Youth Rosdakarya. <http://repository.upi.edu/15192>
- Arda, Saehana, S., & Darsikin. (2015). Development of Interactive Learning Media for Craft Subjects for Junior High School Students Class VIII. *Journal of Science Partners* , 3 (1), 69–77. https://doi.org/10.23887/jurnal_tp.v11i1.634
- Arwin, A., Yunisrul, Y., & Zuardi, Z. (2019). Learning Make A Match Using Prezi in Elementary School in Industry 4.0 . 382 (Icet), 426–429. <https://doi.org/10.2991/icet-19.2019.107>
- Asholahudin, M., Syichabudin, I., & Solihin, DD (2021). Increasing the Ability of Learners Conceptual Knowledge Dimensions through the Application of the Integrated Discovery Learning Model of KineMaster Learning media. *JiIP - Scientific Journal of Education* , 4 (7), 536–542. <https://doi.org/10.54371/jiip.v4i7.310>
- Bilfaqih, Y., & MN, Q. (2015). The Essence of Online Learning Development . Deepublihs.
- Crews, J., & Parker, J. (2017). The Cambodian experience: exploring university students' perspectives for online learning. *Issues in Educational Research* , 27 (4), 697–719.

- Darnawati, Irawaty, & Uke, aode AS (2021). Learning Video Making Training With Bandicam Application and O-Matic Screencast. *National Journal of Community Service* , 12 (1), 100–105. <https://doi.org/10.47747/pengabdiankepada Masyarakat.v2i1.255>
- Dewi, FF, & Handayani, SL (2021). Development of En-Alter Sources Animation Video Learning Media Based on the Powtoon Application for Elementary School Alternative Energy Sources. *Journal of Basicedu* , 5 (4), 2530–2540.
- Fitri, F. and A. (2019). Development of Learning Videos Using the Kinemaster Application on Thematic Learning in Elementary Schools. *Journal of Basicedu* , 3 (2), 524–532.
- Handoko, A. (2021). UTILIZATION OF KINEMASTER AS AN APPLICATION FOR MAKING VIDEO ADVERTISEMENTS FOR PKBM MANAGERS AND EDUCATORS Arif Handoko. *Journal of Design: A Study of Design Research* , 1 (1), 14–24.
- Divine, LR, & Desyandri. (2020). Development of Powtoon-Based Integrated Thematic Learning Media in Grade III Elementary School. *Journal of Basic Education Studies* , 3 (2), 1058–1077.
- Indriani, E., & Pangaribuan, TR (2020). The Effectiveness of Using Kinemaster Media on the Ability to Write Procedure Texts for the remainder of class VII SMP Sasta Muhammadiyah Medan FY 2019/2020 . 3 (2), 1058–1077. <https://garuda.kemdikbud.go.id/documents/detail/152400>
- Jamaludin, D., Ratnasih, T., Gunaan, H., & Paujiah, E. (2020). Online Learning During the Covid-19 Pandemic For Prospective Teachers: Barriers, Solutions and Projections. In *Scientific Writing* . <http://digilib.uinsgd.ac.id/30518/>
- Khaira, H. (2021). Audio Visual Learning Media. In *Proceedings of the National Seminar* , 1 (1), 1–8. <http://digilib.unila.ac.id/3817/17/BAB II.pdf>
- Maulida, & Aryani, I. (2022). PROBLEMS EXPERIENCED BY TEACHERS IN THE LEARNING PROCESS DURING THE COVID-19 PANDEMIC IN KAASAN ACEH BIG. *Journal of Educational Dedication* , 6 (1), 85–91.
- Mostofa, MI, Chodzirin, M., Sayekti, L., & Fauzan, R. (2019). Formulation of the Online Lecture Model as an Effort to Suppress the Disparity of Higher Education Quality. *Walisongo Journal of Information Technology* , 1 (2), 151. <https://doi.org/10.21580/wjit.2019.1.2.4067>
- Priangga, YS (2021). Development of Smartphone Application-Based Learning Media to Facilitate Students' Mathematical Creative Thinking Ability. *Scholar's Journal: Journal of Mathematics Education* , 5 (2), 1116–1126. <https://doi.org/10.31004/cendekia.v5i2.599>
- History, S., Ristontoi, Destania, Y., Ariani, NM, Risnanosanti, Masri, & Syofiana, M. (2021). Kinemaster workshop for teachers to improve the quality of learning videos. *Kinemaster workshop for teachers to improve the quality of learning videos* . 2 (2), 162–171.
- Saifuddin, MF (2018). E-Learning in Student Perception. *VARIDIKA Journal* , 29 (2), 102–109. <https://doi.org/10.23917/varidika.v29i2.5637>
- Saputra, HN, Salim, Idhayani, N., & Prasetyo, TK (2020). Al-Ishlah: Journal of Augmented Reality-Based Learning Media. *Al_ishlah: Journal of Education* , 12 (2), 176–184. <https://doi.org/10.35445/alishlah.v12.i2.258>
- Tafonao, T. (2018). The Role of Learning Media in Increasing Students' Interest in Learning. *Journal of Educational Communication* , 2 (2), 103. <https://doi.org/10.32585/jkp.v2i2.113>
- Tarigan, AL (2021). Evaluation of Online Learning During the Covid-19 Pandemic In Minas District. *Learning Strategies During a Pandemic* . <https://jurnal.uhnp.ac.id/psn-uhnp/article/view/129>
- Widiono, A. (2021). Application of the Kinemaster Application in Science Learning through LMS for PGSD Study Program Students. *Proceedings of the IAHN-TP Palangka Raya National Webinar* , 3 , 12–21. https://scholar.google.co.id/citations?user=jB1AlvoAAAAJ&hl=id#d=gs_md_cita-d&u=%2Fcitations%3Fview_op%3Dview_citation%26hl%3D%26user%3DjB1AlvoAAAAJ%26citation_for_view%3DjGo%3A4zAAAF3Dj%3D%26user%3DjB1AlvoAAAAJ%26citation_for_view%3DjGo%3A4zAAAF3Dj%3D

