

Development of Learning Media Using Genially to Increase Student Learning Interest at SMK Muhammadiyah 2 Kuningan in Basic Graphic Design Subjects

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Abstract

Muhammad Irpan (201223025). Development of Learning Media Using Genially to Increase Student Interest in Learning at SMK Muhammadiyah 2 Kuningan in Basic Graphic Design Subjects. The background to this thesis is that students' interest in learning at SMK Muhammadiyah 2 Kuningan in the Basic Graphic Design subject is still relatively low. This is caused by learning methods that are less interesting and interactive. Genially is an online platform that allows the creation of interesting and interactive learning media. The aim of this thesis is to develop learning media using genially to increase students' interest in learning in the Basic Graphic Design subject. The main problem in this research is "Can learning media developed using Genially increase students' interest in learning in Basic Graphic Design subjects?". This research uses the Research and Development (R&D) method. The development model used is the development of Borg & Gall's instructional learning media (Puslitjaknov, 2008; Utomo, 2015) which is simplified into 5 main steps, namely: analyzing the product to be developed, developing the initial product, expert validation and revision, conducting field trials small scale, large scale field trials. The learning media developed was tested on students in class X TKJ and X RPL at SMK Muhammadiyah 2 Kuningan. Based on the results of this research analysis using a paired samples test with a significance value (2-tailed) of $0.000 < 0.05$, it shows that there is a significant difference between the initial variable (pretest) and the final variable (posttest), so that this Genially learning media can be used as a learning media primarily by students.

Keywords: Learning Media, Genially, Interest in Learning.

INTRODUCTION

There are several problems in Indonesia that have not yet been resolved completely, including: problems of education equity, education quality, and education efficiency and education relevance (Rahayu, 2023). Indeed, we need to admit that in general Indonesian people are less able to use their abilities and talents (Pratikno, Hermawan, & Arifin, 2022). This may be due to the lack of public awareness of the importance of science and how important it is to optimize human resources to improve the welfare of life (Abdurokhim, 2024; Stahl, Brewster, Collings, & Hajro, 2020).

Education is the result or achievement achieved by human development and the efforts of the institution, in achieving educational goals effectively and efficiently (Rahmi, Patoni, & Sulistyorini, 2020). Therefore, the main task of school education now is to instill a strong interest in learning from children to learn continuously throughout their lives (Iivari, Sharma, & Ventä-Olkkonen, 2020). All of this needs to be conditioned so that students have a high interest in learning, because after all, interest in learning is a

very decisive factor and functions to generate, underlie and direct learning actions (Filgona, Sakiyo, Gwany, & Okoronka, 2020).

Learning is a process of interaction between educators and students in an effort to achieve learning goals. Learning objectives can be achieved well if the learning process runs effectively and efficiently (Deak & Santoso, 2021). One of the factors that can affect the effectiveness and efficiency of learning is the use of learning media (Hamidi & Chavoshi, 2018).

Learning media is anything that can be used to channel messages from the sender to the recipient so that it can stimulate the thoughts, feelings, attention, and willingness of the recipient so that it can encourage the learning process (Siahaan, Daulay, & Hadi, 2020). Learning media has an important role in the learning process, namely as a tool to facilitate and facilitate the learning process, and increase student interest in learning (Logan, Johnson, & Worsham, 2021).

Genially is one of the interactive learning media platforms that can be used to develop interesting and efficient interactive learning media (Cabrera-Solano, 2022). The reason researchers use genially learning media is because there are many interesting features, namely presentations, infographics, gamification, interactive images, video animation, guides, training material design and other features that can produce an interactive learning media for students. Users are authorized to edit existing content through various features available on the menu. In addition, the reason researchers use Genially media is because this media is very easy to use, has a wide range, can create various kinds of learning media, and is equipped with a variety of images, icons, templates, colors, and countless fonts so that it can motivate students in the learning process which results in increased learning achievement. Basic Graphic Design subject is one of the subjects studied in SMK (Capron Puozzo & Audrin, 2021; Elmunsyah, Herwanto, Smaragdina, Anggraini, & Utomo, 2021; Lahinta, Latief, Suhada, & Bobihu, 2024; Pujawan & Mahendr, 2018; Putri et al., 2023; Yuliana & Putri, 2021). This subject learns about the basics of graphic design, such as layout, line, field, illustration, typography, color, light dark, texture and space.

Based on the results of observations made by researchers at SMK Muhammadiyah 2 Kuningan, student learning interest in Basic Graphic Design subjects is still relatively low. This can be seen from the lack of enthusiasm of students in participating in learning, lack of student motivation to learn, and low student learning outcomes. Therefore, efforts are needed to increase students' interest in learning in Basic Graphic Design subjects. One of the efforts that can be made is by using interactive learning media.

RESEARCH METHOD

This study uses the Research and Development (R&D) method to develop interactive learning media based on the genially platform. The R&D method was chosen because it allows researchers to not only identify the problem of low student interest in learning, but also develop concrete solutions that can be tested and evaluated (Pudjiaraka, 2024). The research began with the observation and problem identification stage at SMK Muhammadiyah 2 Kuningan, especially in the Basic Graphic Design subject which experienced a decline in student interest in learning. This observation was conducted to deeply understand the factors that cause low interest in learning, including conventional learning methods that are less interactive and interesting for students.

After identifying the problem, the researcher continued with the product development stage. At this stage, interactive learning media was developed using various interesting features of the Genially platform. Genially was chosen for its ability to accommodate various learning styles by providing attractive visualizations, multisensory content and interactive elements. These features include animations, infographics, quizzes and games designed to stimulate student curiosity, encourage independent exploration and reinforce understanding of the subject matter. By using Genially, researchers hope to create a more enjoyable and effective learning experience, which in turn can increase students' interest in learning.

The developed product was then tested in class X Computer and Network Engineering (TKJ) and X Software Engineering (RPL) at SMK Muhammadiyah 2 Kuningan. This trial aims to see the impact of using interactive learning media on student interest in learning. The trial process involved using Genially media in daily teaching and learning activities, with researchers observing students' interaction with the media, their level of engagement, as well as changes in learning interest and motivation. Data collected from the pilot included direct observation, interviews with students and teachers, and student learning outcomes before and after the use of the interactive learning media.

The results of this pilot were then evaluated to assess the effectiveness of the developed learning media. This evaluation includes qualitative and quantitative data analysis to understand the extent to which Genially media is able to increase students' interest in learning. The results showed that the use of Genially-based interactive learning media significantly increased students' learning interest in Basic Graphic Design subjects. Students become more interested and motivated to learn, which is reflected in increased active participation in class and better learning outcomes.

Through this R&D method, researchers not only managed to identify and understand the problem of low student interest in learning, but also developed and implemented an effective solution. Genially's interactive learning media is proven to make the learning process more interesting and interactive, thus increasing students' interest in learning. This research makes an important contribution to the development of more innovative and effective learning methods, which can be applied in various subjects and educational levels. The results of this study can also be a reference for teachers and educational institutions in developing learning media that can significantly improve student interest and learning outcomes.

RESULTS AND DISCUSSION

The teaching and learning process at SMK Muhammadiyah 2 Kuningan is still dominated by monotonous learning media. This is not optimal in attracting students' interest in learning. Therefore, this research aims to develop interesting learning media by using Genially. Borg & Gall's instructional learning media development model with 5 main steps is applied in this research.

A. Needs analysis for learning media development

This research and development begins with a needs analysis. Observations were made at SMK Muhammadiyah 2 Kuningan by interviewing students of class X Computer and Network Engineering (TKJ) and class X Software Engineering (RPL). The results of this analysis become a reference in the development of Genially learning media. Based on observations, students of class X TKJ and class X RPL SMK Muhammadiyah 2 Kuningan want Genially learning media with several functions:

1. Media is easily accessible: Learning materials can be reached anytime and anywhere, without time and space constraints. Users can learn easily and flexibly.
 2. Easy to learn media: The material is presented in a way that is easy for users to understand and comprehend.
 3. Media is easy to use: Users are able to utilize learning media optimally to support the learning process, increase engagement and motivation to learn.
 4. Media helps students: Learning materials combine theoretical concepts and their application in practice in a balanced manner, helping users understand concepts more deeply and applicable.
 5. Save time: Users can save time in searching and finding learning materials needed easily and quickly, increasing learning productivity.
 6. Media functionality: Learning media is easy to use and provides a comfortable and enjoyable learning experience, increasing users' interest in learning.
 7. Satisfaction of using the media in the learning process: Learning materials that are complete and easy to understand help users achieve learning objectives effectively, improving learning outcomes..
- B. Learning media development stage
- At this stage of learning media development, researchers take several steps:
1. Preparation of material
Researchers compile materials that will be included in the Genially learning media.
 2. Collection of editing materials
After the material is organized, researchers look for editing materials such as backsound and images to be displayed on Genially learning media.
 3. Editing Genially learning media
Researchers carry out the editing process on Genially learning media by compiling materials and materials that have been prepared using the available features.
 4. Rendering Genially learning video
Researchers perform the rendering process on Genially learning media.
 5. Adding backsound and effects to Capcut application
Researchers combine backsound and effects with video results from Genially learning media in Capcut application.
 6. Final rendering on Capcut application
Researchers perform final rendering on Capcut application.
- C. Small-scale trial
- At this stage, researchers apply the media design that has been developed and revised. Small-scale trials of learning media products were conducted to see student responses (material users) to the Genially learning media that had been developed. This trial involved 25 students, with 18 male students and 7 female students.

Table 1. Test Result Data

No. of questions	VD	F	DE	LF	Total
1	19	5	1	0	25
2	23	2	0	0	25
3	21	3	1	0	25
4	15	10	0	0	25
5	18	7	0	0	25
6	16	8	1	0	25

7	17	8	0	0	25
Total	129	43	3	0	175

After the test result data has been obtained, the next step is to perform the calculation. Here are the results of the calculation score

Table 2. Total Score

	Total	Score	Result
LF	129	4	516
F	43	3	129
DE	3	2	6
VD	0	1	0
	Total		651

The total score obtained is calculated to determine the quality of the product in usability testing. The next step is to determine the quality based on scores and categories. This quality determination is carried out using the previously created category table. For assessment categories can be seen in the table below:

Table 3. Assessment Categories

No	Presentation	Category
1	21%-40%	Less Feasible
2	41%-80%	Decent Enough
3	61%-60%	Feasible
4	81%-100%	Very Decent

Based on the table above, the usability test percentage results show a value of 93%. This value is included in the "Very Feasible" category and fulfills all aspects of usability. The usability test results show that Genially learning media is easy to use and understand by users.

2. Large-scale field trial

Furthermore, at the large-scale trial stage, researchers gave pretest and posttest questions to students in class X TKJ & class X RPL to find out whether there were differences before and after using the media that had been developed and then presented. Based on the results of SPSS calculations, the following data were obtained:

a. Paired Samples Statistics

Table 4. Samples Statistics

		Mean	N	Std. deviation	Std. error mean
Pair 1	PRE TEST X RPL & X TKJ	48.2400	25	16.99333	3.39867
	POST TEST X RPL & X TKJ	89.3200	25	10.53850	2.10770

Based on the Paired Samples Statistics table, it can be concluded that:

- 1) There is a significant difference between the pre-test and post-test scores. This is evidenced by the different Mean values and the relatively small Std. Error Mean which is relatively small.
 - 2) The difference in Mean scores shows that the average post-test score is higher than the average pre-test score. This shows that there is an increase in students' interest in learning after using the Genially.
- b. Paired Samples Correlations

Table 5. Samples Correlations

		N	Correlation	Sig.
Pair 1	PRE TEST X RPL & X TKJ	25	.809	.0000
	POST TEST X RPL & X TKJ			

Based on the Paired Samples Correlations table, it can be concluded that:

- 1) There is a strong positive correlation between pre-test and post-test scores. This is evidenced by the Correlation value of 57 0.809, which shows that there is a positive and strong relationship between the two variables.
 - 2) The positive correlation shows that the higher the pre-test score, the higher the post-test score. This shows that students who have a good initial understanding of Basic Graphic Design material tend to be better at understanding the material after using the Genially.
 - 3) The small Sig. (2-tailed) value (0.000) indicates that there is a statistically significant relationship between the pre-test and post-test scores. This means that it is unlikely that this correlation result occurred by chance.
- c. Paired Samples Test

Table 6. Sample Test

		Paired Differences				
					95% confidence interval of the difference	
		Mean	Std. deviation	Std. error mean	lower	Upper
Pair 1						
	PRE TEST X RPL & X TKJ	-	10.48777	2.09755	45.40914	36.75086
	POST TEST X RPL & X TKJ	41.08000				

Table 7. Paired Samples Test

	t	df	Sig. (2-tailed)
Pair 1			
PRE TEST X RPL & X TKJ POST TEST X RPL & X TKJ	-7.321	25	.000

Based on the results given, we can conclude as follows:

- 1) There is a statistically significant difference between the pre-test and post-test scores. This is because the p value (0.000) is smaller than the significance level (0.05). This means that we can reject the null hypothesis, which states that there is no difference between the pre-test and post-test scores.
- 2) The mean post-test score was significantly lower than the mean pre-test score. This is indicated by the negative t value (-7.321) and the fact that the mean difference between the pre-test and post-test scores is negative (-41.08). This shows that the use of Genially learning media is effective in increasing students' learning interest in Basic Graphic Design subject.

Discussion

1. Product Review Description

Genially learning media was developed as a learning resource for class X Computer and Network Engineering (TKJ) and class X Software Engineering (RPL) students at SMK Muhammadiyah 2 Kuningan in the subject of Basic Graphic Design. Learning materials are packaged in the form of videos that can be accessed via YouTube with the channel name "irvanvauzy".

In this study also uses Borg & Gall's instructional learning media development model which has several stages, namely first analyzing the needs needed by students in class X Computer and Network Engineering (TKJ) and class X Software Engineering (RPL) at SMK Muhammadiyah 2 Kuningan, secondly making learning media development by attaching several images as well as transitions and backsound, then validation from media experts and material experts in order to assess the feasibility of the learning media that researchers develop and also the quality of the material to be presented, then directly implement Genially learning media that has been made and revised by conducting small-scale trials which include 5 male students and 5 female students, then after the small-scale trial is deemed sufficient, the next step is usually directly carried out a large-scale trial.

Before being tested, the researcher first distributed pretest questions in the form of 15 multiple choice questions to test and find out how far the students' level of understanding of the material that had been taught by the previous teacher, then the researcher exposed the media that had been made, namely Genially learning media with some material that had been compiled and validated by material experts in the form of learning videos that were developed and validated by media experts to 25 students in class X TKJ & class X RPL.

Then the next step the researcher distributes posttest questions in the form of multiple choice questions totaling 15 to find out if there is a difference before and after using the media that has been developed which is then described. Then the last step the researcher distributes student response questionnaires totaling 7 aspects of indicators related to the media that have been developed as well as the material presented to determine the feasibility of Genially learning media that is being studied by researchers.

2. Media feasibility analysis

a. Usability testing data analysis

The data obtained from the usability assessment in the form of a student response questionnaire and consists of 7 aspects of indicators, namely:

- 1) Media is easy to access

- 2) Media is easy to learn
- 3) Media is easy to use
- 4) Media helps students
- 5) Saves time
- 6) Media functionality
- 7) Satisfaction of using media in the learning process

From the results of the calculation of usability testing with reference to 7 aspects of the student response questionnaire indicators that have been determined, the overall percentage is 93%, which means it is in the "Very Feasible" category.

b. Data analysis of paired samples test

The results obtained from testing the paired samples test to see the increase in student interest in learning class X Computer and Network Engineering (TKJ) and class X Software Engineering (RPL) with reference to the calculation of pretest and posttest in the form of multiple choice questions totaling 15 pretest questions and 15 posttest questions, then then obtained a significant percentage value (2-tailed) 0.000.

CONCLUSION

Based on the results of the research and analysis of data calculations conducted on the development of Genially learning media for students in class X Computer and Network Engineering (TKJ) and class X Software Engineering (RPL) at SMK Muhammadiyah 2 Kuningan, several conclusions can be drawn: the Genially learning media developed includes learning materials, practice questions (pretest and posttest), and evaluations that are attractively and interactively packaged using the CapCut application, having passed validation tests by material and media experts. This research successfully developed Genially learning media that effectively increases student interest in Basic Graphic Design subjects, as evidenced by data analysis showing a significant difference between pre-test and post-test scores of students using the media, with usability testing yielding a 93% score in the "Very Feasible" category. The use of Genially learning media can enhance students' learning interest, confirmed by a large-scale field trial showing significant differences between initial (pre-test) and final (post-test) variables, with a significance value (2-tailed) of 0.000, smaller than 0.05. The mean post-test score was significantly higher than the mean pre-test score, indicated by a negative t value (-7.321) and a negative mean difference (-41.08), demonstrating the media's effectiveness in increasing student interest in the subject.

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