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Development of Penjasor Management Learning Media Based on Smart Learning System Assisted MIT APP Thunkable in Merdeka Belajar Era – Kampus Merdeka

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Abstract

This study aims to develop a Learning Media for Penjasor Management Based on a Smart Learning System Assisted by Mit App Thunkable to Improve Students' Critical Thinking. The Mit App Thunkable learning media based on Smart Learning, which was developed with the help of the Thunkable application, will be tested on odd semester students taking the Physical Education Study Program, FKIP UNIB. This study uses the Research and Development (R&D) method by collecting research data using a questionnaire based on the Likert scale. There are three questionnaires that will be distributed in this study, namely a material expert questionnaire, a media expert validation questionnaire, and a user response questionnaire. The purpose of distributing the questionnaire was to determine the feasibility of developing the Thunkable Mit App Assisted Penjasor Management media that the researchers made. As a result, the total score obtained from the combined validation of material experts, media, and users is 139.5 or an average score of 4.1 which means that the Mit App Thunkable-Assisted Penjasor Management Learning Media that the researcher developed is in the category suitable for use in Learning Activities.

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INTRODUCTION

One of the compulsory subjects for Bengkulu University as part of an educational institution agrees with the social distancing measures decided by the government to reduce the spread of Covid-19. However, after almost 2 years have passed, it turns out that this pandemic is still continuing even though there is a significant decrease in cases. This situation has made the government relax social distancing by again allowing face-to-face learning by following strict health protocols.

The implementation of learning in the era where the corona virus is still spreading will indirectly affect how the government, especially the Ministry of Education and Culture, establishes policies for the Independent Campus and Independent Learning in universities. The concept of independent learning aims to provide flexibility for students to study outside campus. This means that students (students) are given the freedom to explore the knowledge needed. The application of this concept must be accompanied by sufficient technological readiness so that the independence of students in exploring knowledge can be realized. One of these technological readiness is to provide learning media that can be accessed anywhere and anytime by students.

The learning media provided are not only meaningful to improve the quality of learning but will also be better if the media is close to students. Students in the current era are generation Z students where they grew up in the era of the rapidly growing digital world so that this generation is a generation that is technology literate. The proximity of students to technological products such as gadgets requires educators to see opportunities in the provision of education, for example by developing learning media based on Smart Learning using the Thunkable application.

Thunkable application is an open source application that makes it easy for users to create applications based on Smart Learning. This application uses a block programming system where users do not need to enter the program code manually. This application has provided program code blocks so that our task is to arrange them by dragging or dropping the desired object. In addition, the Thunkable application has a smooth and modern appearance in terms of features so that it is relevant to the target user, namely students who tend to be close to technology.

Learning media based on Smart Learning using this thunkable application is made in the form of software, besides being easily accessible, this media also has a simple operating system so that it can support the process of independent campus learning activities - independent learning anytime, anywhere, and by anyone. even students. Smart Learning-based learning media using this thunkable application not only streamlines space and time but also helps the learning process become more interesting and meaningful for students.

Management learning as a process of achieving targets effectively and efficiently through planning, organizing, leadership and controlling organizational resources. Management includes interactions between people who serve as administrators and people who participate in physical education and or people who are involved in the process of exercising. Management needs this but is not limited to important things such as human resources, long term planning, programming, facilities, budget,

marketing and public relations. This material covers the dimensions of management, and steps in checking whether we are using effective and efficient means. However, since the outbreak of Covid-19, face-to-face learning activities have turned into distance learning or known as an online system. The achievement targets in the Physical Education Management course will later become the horses in other courses, therefore the foundation of this course must be strong. This means that students must understand Penjasor Management and simply be able to apply it. Seeing the importance of this Penjasor Management course, an innovation in learning is needed so that students are interested in exploring the materials contained in this course. One of these innovations is to provide learning media that are familiar to students, namely learning materials delivered through interactive media that attract students' interest in learning. By presenting Penjasor Management learning media based on Smart Learning using the Thunkable application, the learning process is not only interesting, easy to use, but also meaningful for students.

The research that the researcher will do is one of the subjects that will be included in the study, where the researcher develops learning media for Penjasor Management based on Smart Learning with a focus on the help of thunkable applications that have more modern features and a smoother appearance than inventors. The limited research on the use of thunkable applications as a tool in developing learning media, especially in the Penjasor Management course is also the reason researchers want to do this research. The development of learning media based on Smart Learning using the thunkable application allows the achievement of learning objectives in the era of independent learning policies - independent campuses and allows the creation of effective Penjasor Management learning in the midst of the Covid-19 pandemic that is still spreading.

Research on the development of learning media based on Smart Learning using a thunkable application in this Penjasor Management course will use the Research and Development (R&D) method. (Sugiyono 2011) states that development research is research that aims to produce certain products. This research will produce the main output in the form of articles published in SINTA 3 accredited national journals, namely the Champion journal, STKIP Muhammadiyah Kuningan. In addition, there are additional outputs in the form of articles that will be presented at the National Seminar on Sports held by the University of Bina Darma Palembang in November 2021.

METHODS

The method used in the research is Research & Development (R&D) (Sugiyono 2017). This method is a research method that aims to find, formulate, improve, develop, test the effectiveness of products, models, methods / strategies / methods, services, which are effective and meaningful (Putra 2011). This research refers to the 4D (four-D) research and development model. According to (Lawhon and Thiagarajan 1976) the 4D research and development model consists of 4 main stages, namely definition, designing, developing, and disseminating.

Participants and Sampling

The population of this study were all students of the Physical Education Study Program FKIP UNIB T.A. 2022/2023. While the samples in this study were 6th semester students who took the Physical Education Management

course, FKIP UNIB Physical Education Study Program.

Place and time of research

This research was conducted at Bengkulu University on semester students of T.A. 2022/2023 Physical Education Study Program FKIP UNIB. The time of the study was carried out from July to December 2022.

Procedures

This classroom action research plan will be implemented in two cycles, and each cycle consists of four stages, namely (1) planning (planning), (2) action (acting), (3) observation (observing), and (4) reflection. (reflecting). The following is a table that describes the flow of research that will be carried out by researchers.

1. Planning Stage

At the planning stage, preparation of learning tools needed during the teaching and learning process is carried out, including: (1) compiling RPS for Sports Health Education courses, (2) preparing material in the form of power points, (3) preparing observation sheets containing questions basic knowledge of Sports Health Education as a pre-action instrument to determine the percentage of student interest, (4) preparing learning scenarios for cycles 1 and 2 with the concept of the Numbered Heads Together (NHT) Cooperative learning model, (5) making an assessment instrument for Sports Health Education, and (6) set up a TRello account as the main application that accommodates Sports Health Education learning activities.

2. Implementation Stage

This stage is the implementation of the learning scenarios that have been made in the previous stage in the classroom, including initial, middle, and final activities.

3. Reflection stage

Constraints in the learning process were analyzed from the results of the questionnaires that had been distributed for further improvement to achieve the learning outcomes targets.

Data collection technique

The data in this study were collected using questionnaires and test techniques. There are three questionnaires that will be distributed in this study, namely the material expert questionnaire, the media expert validation questionnaire, and the student response questionnaire. The distribution of the questionnaire has the aim of knowing the feasibility of developing learning media that researchers make (Gulo 2013). The technical test in the form of giving questions to students aims to find out the extent to which students understand the material after learning media based on Smart Learning has been tried out.

Data analysis

The data analysis technique used in this research is questionnaire data for material experts and media experts and a student response questionnaire conducted with five rating scales, where the highest score is 5 (strongly agree) and the lowest score is 1 (disagree). To calculate the average total score of each questionnaire, the following formula is used: = /N. The score obtained is then converted according to the table reference below:

Table 1. Conversion of scores on a scale of five

Value interval	Category
X > Xi + 1,8 Sbi	Strongly agree
Xi + 0,6SBi < **X ≤ Xi + 1,8Sbi**	Agree
Xi - 0,6SBi < **X ≤ Xi + 0,6Sbi**	Just Agree
Xi – 1,8SBi < **X ≤ Xi − 0,6Sbi**	Disagree
X ≤ Xi − 1,8Sbi	Don't agree

RESULT

ReDevelopment of Physical Education Management Learning Media Based on Smart Learning System Assisted by Mit App Thunkable to improve students' critical thinking using the help of Mit App Thunkable has been tested on 34 Physical Education students who take the Penjasor Management course. The results of the distribution of material expert questionnaires, media expert questionnaires, and student response questionnaires show that the learning media for Penjasor Management Based on the Smart Learning System Assisted by the Thunkable Mit App is suitable for use in Penjasor Management learning activities. In addition, there were also trials conducted on students, the results of which showed an increase in students' understanding of the Penjasor Management teaching material after using the Mit App Thunkable learning media based on Smart Learning with the help of the Mit App Thunkable application so that students get learning outcomes with a good average score. . The following is an explanation of the stages of carrying out research using the Research and Development (R&D) method that the researchers have done.

The first questionnaire was intended for lecturers who are in charge of the Physical Education Management subject at the Physical Education Study Program, namely Mr. Bogy Restu Divine, S.Pd, M.Pd and Mr. Drs. Ari Sutisyana, M.Pd. In addition to filling out the questionnaire with the following link https://forms.gle/7WLSRYRRxR8nYxBq7, the researcher also conducted interviews with the lecturer in charge of the Penjasor Management course. The questionnaire sent and responded to via the google form has 7 short questions consisting of two to three answer choices, the results of which are listed in the table below.

Table .2 Analysis of Learning Media Development Needs filled by Lecturers

QUESTION	CHOICE			PERCENTAGE		
	A	B	C	A	B	C
1	2	0	0	100%	0%	0%
2	2	2	0	100%	100%	0%
3	1	2	1	50%	100%	50 %
4	0	2	0	0%	100%	0%
5	answered in writing					
6	1	1	0	50%	50%	0%
7	2	0	0	100%	0%	0%

Later users of this media, apart from teaching lecturers, are also students who take the Penjasor Management course which is part of the trial process for developing this Thunkable Mit App media. In this regard, the researcher also asks students to fill out a questionnaire consisting of 8 questions which can be accessed at the following link https://forms.gle/oMzqydnwFzB6irdZ8. The answers to these questions will later assist researchers in developing Mit App Thunkable learning media based on Smart Learning. The following is a table that shows the results of the analysis of student needs.

Table 3. Analysis of Learning Media Development Needs filled by Students

QUESTION	CHOICE			PERCENTAGE		
	A	B	c	A	B	c
1	31	3	0	91,2%	8,8%	0
2	21	13	0	61,8%	38,2%	0
3	11	1	30	32,4%	2,9%	88,2%
4	25	17	1	73,5%	50%	2,9%
5	21	13	0	61,8%	38,2%	0%
6	33	1	0	97,1%	2,9%	0%
7	answered in writing					
8	32	2	0	94,1%	5,9%	0%

The implementation of this trial was carried out 4 times with variations in the level of difficulty of the questions and also the material. Although the questions that the researcher produced were 9 Mit App Thunkable questions originating from 9 material chapters, the

implementation of this trial only used 4 Mit App Thunkable questions with varying levels of difficulty. This is due to the limited time for collecting test results. However, these 4 Mit App Thunkable questions are a representation of the Penjasor Management material. The four materials are 1) sports management, 2) modern sports management, 3) historical sports management, and 4) sports management law. The following are the results of the trial using the Mit App Thunkable Management Penjasor learning media on students.

After the students carried out a series of trials, the researchers then distributed a questionnaire containing student responses to the Mit App Thunkable learning media based on Smart Learning. Before using this questionnaire, CV (content validity) has been calculated where the result is 0.875, which means that the validation instrument for using this learning media can be used. This questionnaire consists of three aspects, namely the learning aspect and the learning media display aspect. These 34 users or students have filled out a user response questionnaire with a Likert scale containing 12 statements related to the two previously mentioned aspects. Here are the average user validation results.

Table 4. Assessment

No	Assessment Aspect	Total score	Average Score	Category
1	Learning	28,9	4,1	worthy
2	Learning media display	22,6	4,5	Very worth it
	TOTAL	51,5	4,29	Very worth it

The table above shows the results of user responses, namely students. There are 7 statements in aspect 1 and 5 statements for aspect 2. In the first aspect, namely the learning process, the final score obtained for the seven aspects is 28.9 or obtains an average score of 4.1 which means the first aspect is in the very category. worthy. Next is the second aspect, namely the display and use of learning media, the final score obtained for the five aspects is 22.6 or an average of 4.5, which means that this second aspect is also included in the very feasible category.

Overall, the user's assessment of the Mit App Thunkable Penjasor learning media obtained a score of 51.5 or an average score of 4.2, which means that for users, namely students, this media is categorized as very feasible to be used in learning activities. The following is a bar chart that shows user responses to the Mit App Thunkable Management Penjasor learning media based on Smart Learning

CONCLUSION

The conclusions that the researcher can formulate from the development of the mit app thunkable learning media for smart learning-based penjasor management assisted by the mit app Thunkable application are as follows.

1. This research and development adapts the learning model consisting of 4 main stages. However, it should be underlined that the research that adapts the 4d model is only carried out until the development stage. Where at this stage there are only product trials that have been validated by material experts and media experts to students. This research procedure consists of the defining stage, the design stage, and the develop stage.

2. Overall the total score obtained from the combined validation of material experts, media, and users is 139.5 or obtains an average value of 4.1, which means that the mit app thunkable management penjasor learning media

that the researcher developed is in the appropriate category for use. In learning activities.

REFERENCES

Arifin, M. (2017). Strategi Manajemen perubahan dalam meningkatkan disiplin di perguruan tinggi. EduTech: Jurnal Ilmu Pendidikan dan Ilmu Sosial, 3(1).

Astafiria, N. S., & Bayu, G. W. (2021). Digital Learning Media Assisted by Quizizz Application (METALIQ) on Science Content of Ecosystem Topic for Sixth Grade Elementary School. Jurnal Ilmiah Sekolah Dasar, 5(3), 485-497.

Azhari, A. (2015). Peran media pendidikan dalam meningkatkan kemampuan bahasa arab siswa madrasah. Jurnal Ilmiah Didaktika: Media Ilmiah Pendidikan dan Pengajaran, 16(1), 43-60.

Enayati, F., & Gilakjani, A. P. (2020). The Impact of Computer Assisted Language Learning (CALL) on Improving Intermediate EFL Learners' Vocabulary Learning. International Journal of Language Education, 4(1), 96-112.

Gunadi, G. (2020). Rancang bangun aplikasi media pembelajaran mengenal nama hewan dalam dua bahasa berbasis android menggunakan thunkable. Infotech: Journal of Technology Information, 6(1), 35-42.

Hansson, L., Leden, L., & Thulin, S. (2020). Book talks as an approach to nature of science teaching in early childhood education. International Journal of Science Education, 42(12), 2095-2111.

Na, W. E. I., Feng, Y. A. N. G., Muthu, B., & Shanthini, A. (2022). Human machine interaction-assisted smart educational system for rural children. Computers and Electrical Engineering, 99, 107812.

Noor, J. (2017). Metodologi Penelitian. Jakarta: Perpustakaan Nasional.

Putra, N. (2011). Research & Development. Jakarta: Raja Grafindo Persada.

Ramadhan, A. (2021). Student's response toward utilizing discord application as an online learning media in learning speaking at senior high school. ISLLAC: Journal of Intensive Studies on Language, Literature, Art, and Culture, 5(1), 42-47.

Sugiyono. 2011. Metode Penelitian Kuantitatif, Kualitatif, Dan R&D. Bandung: Alfabeta.

Taufiqurrahman, T. (2010). Strategi Pembelajaran Kooperatif (Cooperative Learning Strategic). Fitrah: Jurnal Studi Pendidikan, 2(1).

Wijaya, C., & Rifa'i, M. (2016). Dasar-Dasar Manajemen mengoptimalkan pengelolaan organisasi secara efektif dan efisien. Perdana Publishing.

Wulandari, D. A., Murnomo, A., Wibawanto, H., & Suryanto, A. (2019). Pengembangan Mobile Learning berbasis Android pada Mata Pelajaran Rekayasa Perangkat Lunak di SMK Sultan Trenggono Kota Semarang. Jurnal Teknologi Informasi dan Ilmu Komputer (JTIIK), 6(5), 577-584.

Yu, X. (2021). Advanced Artificial Intelligence Assisted Learning Model for Smart Educational Learning Strategies for Teachers and Students.