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Development of RPP Design Learning Media: Curiculum 2013 Revision 2018

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ABSTRACT

One of the competencies required when carrying out the Education Unit Introduction Program (PPLSP)is the ability to develop a Learning Implementation Plan (RPP). Dynamic curriculum development requires students always to update information about the curriculum. The purpose of this study is to develop learning media based on Android for the preparation of lesson plans using the 2013 revision of the 2018 curriculum and to determine the feasibility of these learning media. The ADDIE method (Analysis, Design, Development, Implementation, Evaluation) is used in the development of learning media. Media feasibility is assessed by media experts, material experts, and users. The assessment refers to eight aspects of media selection; (1) suitability of media with learning objectives, (2) suitability with student characteristics, (3) can be a source of learning, (4) efficiency and effectiveness of media use, (5) safety for students, (6) the ability of media to develop activeness and student creativity, (7) the ability of the media to develop a fun learning atmosphere, and (8) the quality of the media. The results of the validation show that the learning media developed in this study get a fairly decent value from media experts, very feasible from material experts, and feasible based on user responses. The use of learning media for preparing lesson plans is expected to help students understand and make good lesson plans.

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1. INTRODUCTION

Program ImplementationIntroduction to Education Units (PPLSP) requires students to be able to make RPP (Learning Implementation Plan). Curriculum development takes place dynamically with the revision of the 2013 curriculum in 2016 and changes to this curriculum component continuing in 2017 and 2018. The development of a dynamic curriculum needs to be a concern of students because it influences the provisions for making lesson plans. The dynamic development of the curriculum raises problems as reported by Mawardi (2019) which states that the competence of teachers(Permana et al., 2019) in the city of Sabang in preparing lesson plans is relatively low (Ali et al., 2020; Alqahtani, 2016; Anh, 2018). Khaerani (2016) found lesson plans that were plagiarized from other subjects at Pekalongan District Middle School. While Susena et al., (2016) conducted research in junior high schools in the city of Yogyakarta and reported teachers regarding difficulties in determining the steps for reviewing the syllabus, identifying learning materials, determining and formulating learning objectives, developing learning activities, assessment, time allocation, and learning resources.

According to Kinasih (2017), difficulties in compiling lesson plans can be due to the relatively short teaching experience, so teachers need to find more information about the curriculum, as well as components that must be included in lesson plans, hold discussions with colleagues, and study independently) (Rahayu et al., 2020). One of the means to improve students' ability to prepare lesson plans is the use of instructional media (Purnawirawan et al., 2020). Android-based learning media using smartphones is gaining popularity because of its practical, flexible, and personal nature, so the interest, motivation, and creative power of students in carrying out the learning process will increase. Furthermore, pandemic conditions force learning to be carried out online so that Android-based learning media is felt to be able to support the learning process (Rahmaniar et al., 2021; Randil et al., 2018).

According to Akbar (2013), there are eight principles or aspects in choosing learning media; (1) suitability of media with learning objectives, (2) suitability with student characteristics, (3) can be a source of learning, (4) efficiency and effectiveness of media use, (5) safety for students, (6) the ability of media to develop activeness and student creativity, (7) the ability of the media in developing a learning atmosphere that is fun, and (8) media quality (Ratnaya et.al., 2022; Roll and Ifenthaler, 2021).

This research is expected to produce learning media with material for making lesson plans in learning evaluation courses. This learning media is expected to be able to help users of this media, especially students in making lesson plans, including one-page lesson plans (Rosidin et al., 2019; Santoso et al., 2021).

2. METHODOLOGY

2.1 Making Learning Media

This study uses the ADDIE research design (Analysis, Design, Development, Implementation, Evaluation). Activities carried out in the analysis stage include needs analysis, namely increasing students' ability to prepare lesson plans, then identifying problems, task analysis, and potential analysis. Activities carried out at the design stage are the preparation of flowcharts and storyboards from learning media. Activities at the development stage are making learning media using Adobe Flash CS6 software. Implementation activities for the use of learning media include media distribution, media installation on smartphones, and outreach. The implementation of learning media was carried out for 25 students of Agroindustry Technology Education as respondents who had completed PPLSP in 2020. Evaluation activities are carried out throughout the media development process by conducting media validation by material experts and media experts. Furthermore, the revision of learning media is carried out based on suggestions from media experts and material experts.

2.2 Data Analysis Results of Learning Media Validation

Validation was carried out with an instrument in the form of a questionnaire. Validation is carried out in two stages, namely in each aspect and validation of the learning media as a whole. Learning media is said to be feasible if every aspect of the learning media obtains the criteria of "decent" or "very feasible" with a

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score of 71-100% by following the formula proposed by Abror (2017). The instrument grid for material validation experts and media experts is presented in Table 1.

Table 1. Instrument grid for material validation experts and media experts

Aspects observed by material experts	Aspects observed by media experts	Aspects observed by users
Suitability for purpose: Material applicability (facilitating students to apply the material)	Fit for purpose • Media convenience for students to access anytime and anywhere • Media interactivity (motivates interaction/ responds to messages) • The ability of the media to make it easier for students to recall material • the ability of the media as a tool to understand and remember information	Benefit • The ability of the media to make it easier for students to recall • Media interactivity (motivates interaction/responds to messages) • The applicability of the material in the media (makes it easier for students to apply it) • Ease of material to understand • The ability of the media to create a sense of pleasure
Compatibility with student characteristics • **Ease of language to understand** • **The suitability of the material with the needs of students**	Compatibility with student characteristics Media suitability for use student	
	Efficiency and effectiveness of media utilization • Media efficiency in relation to time • Media efficiency in relation to cost • Media efficiency in terms of power	Ease of Use • Ease of access to media • Ease of operation of media • Media efficiency
Media capability as Learning Resources • **Material accuracy (truth and accuracy of facts, concepts, and theories)** • **Material update** • **Material equipment** • **term accuracy**	Deep media capability develop activity and student creativity • Deep media capability • develop student motivation • The ability of the media to attract students' attention	Appearance • Legibility of form and size of writing • The clarity of the images presented • The attractiveness of the application layout and design • Compatibility of icons with their functions
Media quality • **The accuracy of the structure/format of the presentation** • **Accuracy of quizzes/questions** • **Accuracy of answers to questions** • **The accuracy of the RPP example**	Media quality • Visual (layout design and color) • Text quality (typography) • Introduction and rules of the game • *Navigation aids* • Consistency	

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1. RESULTS AND DISCUSSION

1.1 Development of Learning Media

The appearance of the RPP design learning media is presented in Figure 1. The main page loads two menus namely the user manual menu which contains how to use the media and the start menu which contains the material menu and the info menu. Users can choose the analysis menu or download it on the material menu. If you select the download menu, the user will be directed to the 2013 RPP component analysis subject matter file located on Google Drive. If you choose the analysis menu, the user will be given a choice of component analysis menu. In each analysis menu, there are several examples of analysis along with quizzes. After answering the quiz, the media will provide feedback in the form of quiz answers and explanations regarding the analysis.

[Main page]

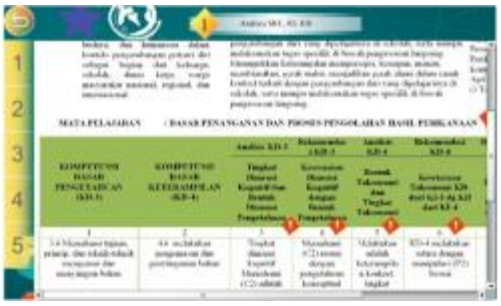
[Instructions for Use Display]

[Main course]

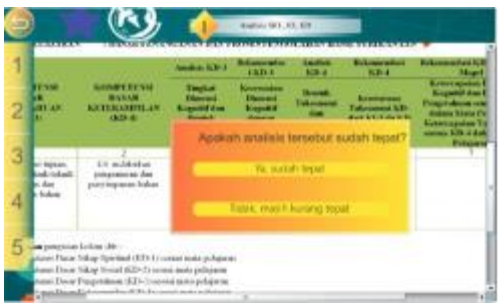
[Material Menu]

[Download Menu]

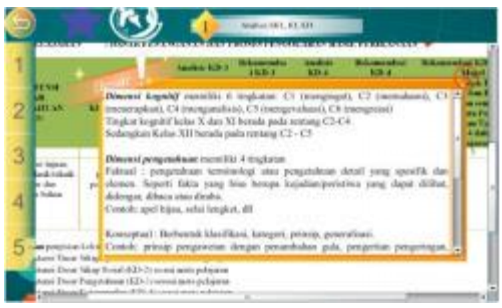
[Analysis Menu]



[Analytic Material Display]



[Quiz]



[answers and explanations]

Figure 2: Display of RPP Design Learning Media
Source: Research Documentation

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1.2 Learning Media Validation

The results of the material expert validation showed that the learning media obtained a score of 39 with very decent criteria. The suggestions from material experts include material naming, menu additions, and the latest material. The results of the media expert validation show that the learning media has a score of 45 with the criteria being quite feasible. The results of the validation of each aspect from material experts and media experts are presented in Table 2.

Table 2. Presentation of the results of the validation of media and material aspect

Aspect	Score obtained / Score Maximum		Percentage	Information
	Media Expert	Material Expert		
Media compatibility with Learning objectives	12/16	4/4	80%	Worthy
Suitability with the characteristics of the learner	3/4	7/8	83%	Worthy
Can be a source of learning	*13/16*	-	58%	Worthy
Efficiency and effectiveness of media utilization	*7/12*	-	50%	Decent Enough
Safety for students	2/4	-	75%	Less Eligible
Deep media capability Develop activity and student creativity	3/4	-	75%	Worthy
Deep media capability Develop an atmosphere Learning fun	*3/4*	-	75%	Worthy
Media quality	*12/20*	*15/16*	75%	Worthy

In the process of developing learning media, evaluation is carried out at each stage of the process before the media is given to users. The results of the evaluation of learning media show that the background display, the use of a type of writing, and the color of the icons affect the overall appearance of the media which in turn can have a positive and significant effect on student learning motivation as described by Hamzah et al., (2012). Fanny and Suardiman (2013) added the beauty, attractiveness, and interactive nature of the media make the media users not bored and are expected to increase user motivation.

The results of media validation by material experts and media experts show that the observed aspects of learning media are in the range of less feasible, quite feasible, and feasible. Even though the results of the validation of instructional media by material experts and media experts as a whole are in the "proper" criteria, but aspects Efficiency and effectiveness of the use of the media get a "fairly decent" value. Media efficiency is related to time, cost, and effort (Akbar, 2013). According to media experts, in terms of personnel, this media is efficient, but when it comes to the time required, the media is less efficient because the media is less responsive. Furthermore, the security aspect for students gets a "less feasible" value. Media experts say that learning media is considered insecure if you put documents on the Google Drive page, not on the data server. To overcome this, researchers try to use a database *server that* is, it's just having trouble. Another way that can be done is to limitdocumentwhich is shared it with the public.

2. CONCLUSION

Android-based RPP Preparation Learning Media (MPPRPP) that was developed obtained "appropriate" criteria so that it could be used in learning evaluation courses. The application of the ADDIE method facilitates the process of developing learning media because the evaluation is carried out at each stage of the process

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so that the appearance of the learning media criteria attracts the attention of its users. It is hoped that learning media for preparing lesson plans can help students make lesson plans, especially when running the PPLSP program.

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