Art Learning Using MIT App Inventor Professional in Team Based Project Prototype Curriculum

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Abstract. This study aims to design and develop Fine Arts Learning Media Using Professional MIT App Inventors in a Team Based Project-Based Prototype Curriculum for PGSD FIP UNIMED students. The application is the reason for teachers to be able to use it for students. This development research uses a 4D model. At the development stage carried out with 3 activities; validity, implementation and effectiveness. In the final stage the product is distributed evenly on a wider scale.

Keywords: Media Development, Art, MIT App Inventor, Prototype, Team Based Project.

1 Introduction

The 2013 curriculum is an alternative to the Unit Level Curriculum (KTSP). The 2013 program complements the previous program, which then over time transformed the 2013 curriculum into a *prototype curriculum.* Educators as facilitators must be able to use and even develop technological products to improve the learning process. Referring to the concept of "free learning" put forward by the Minister of Education and Culture, Nadiem, he explained that the nature of freedom of thought must be prioritized by educators before not teaching it to students. For educators at all levels, without transitioning core competencies and existing curricula, there will never be learning. As well as changes to Core Competencies and Regulations on basic skills to Minister of Education and Culture Regulation Number 1. 37 of 2018 views that in order to meet the basic needs of students regarding capacity building in the digital era, it is necessary to add and integrate IT content into basic skills within the basic framework. and *prototype* curriculum structure. For this reason, both educators and implementers need to develop their skills in the digital era by preparing learning materials to meet the goals of core competencies and basic competencies of *prototype* curriculum structures, which are then devoted to new learning systems, namely *Team Based Projects* and *case methods.* Based on observations of the learning process in art-based courses at PGSD FIP UNIMED, the curriculum does not answer the needs of an elementary school teacher when teaching SBDP subjects. The subject matter is always prepared according to theoretical needs and does not focus on learning outcomes. The

ICIESC 2022, October 11, Medan, Indonesia
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DOI 10.4108/eai.11-10-2022.2325428

use of learning resources and media that do not follow the development and needs of the arts in elementary schools results in the inability of students to provide information and skills that are in accordance with their facial needs. In the art-based teaching process at PGSD, understanding the art aspects is very theoretical without following the applied practical methods. For example, in the Art Education course at PGSD, the hands-on activities only focused on singing and free composition without an understanding of the elements of art. Students do not have standards to measure the performance of the actual activities they do. With the lack of time also affects the quality of art learning in PGSD, then interesting learning media is certainly needed to support the success of learning objectives, which are easier and more practical.

Many teaching materials have been produced and used in learning activities. One of them is MIT App Inventor which is claimed to be an easy and fun interactive learning media creation software. The development of interactive teaching materials using the MIT App Inventor is very suitable for use in making interactive teaching materials for art materials because it has many different characteristics in terms of learning needs. By using these media, they can directly interact and demonstrate the material they have learned. Output can be generated from MIT App Inventor ranging from formats for iOS, Android and PC users.

Especially when the disease caused by the Corona virus or Covid19 is declared a pandemic circulating in most countries in the world. The impact of the Covid-19 pandemic has disrupted various sectors, including the education sector which experienced a significant disruption. The Indonesian government has made various efforts to prevent its spread, one of which is the Circular Letter of the Ministry of Education and Culture (Kemendikbud) No Year 2020 concerning the Implementation of Education Policies in the country. Virus Disease (Covid19). Through this circular, the Ministry of Education and Culture directs the implementation of distance learning and recommends that students study at home. Therefore, to support distance learning during the Covid19 pandemic, educators must innovate in structuring learning so that it continues to function effectively and efficiently. Based on background behind problem in on so researcher interested for conducted a study with the title "Development of Art Learning Media Using MIT Professional App Inventor in *Team Based Project* - Based *Prototype Curriculum* ".

2 Method

The type of research used is development research which was developed and proposed by Thiagarajan, Dorothy S. Semmel, and Melvyn I Semmel (1974), with a 4-D model consisting of four stages of development, namely define , *design* , *develop* .) , and *disseminate* (spread) (Trianto, 2010). The purpose of development research is to assess the changes that have occurred over a certain period of time. (Setyosari, 2013). study development as distinguished from simple learning development, is defined as a systematic study to design, develop, and evaluate programs, processes, and learning outcomes that must meet internal consistency and effectiveness criteria. Thus, the development is carried out using a development model.

3 Results and Discussion

3.1 Define (define*)*

This research begins by conducting a needs analysis on optimizing the use of the MIT App Inventor application as a strategy for implementing the art lecture process in accordance with learning outcomes and answering the needs of implementing SBDP learning in elementary schools. To see this need, the researcher used a questionnaire containing 5 statements and presented it in the *Zoho form.*

3.1 Design (design*)*

The purpose of this stage is to design learning tools in accordance with the results of the specification of learning objectives at the *define stage*. The process of selecting the format, cover, form of teaching materials, media, discourse which is the main basis for the product. The design phase focuses on the initial product design in the form of *Team Base Project -based art learning media* for PGSD FIP UNIMED students with materials that have been determined in the previous stage. The initial design of an interesting *Team Base Project* -based art learning media so that it becomes a guide that increases artistic creativity in accordance with educational developments.

The design stage is done by designing music teaching materials that are integrated with the MIT App Inventor application. In the first stage, the researcher made a design related to the *cover, layout* and content of the material. The results of the cover design and *layout* are as follows:

Fig. 1. Design *Cover* and *Layout* Teaching materials

3.2 Development (develop*)*

The purpose of this development stage is to produce the final form of Team Base Project -based art learning media after going through revisions based on input and suggestions from expert lecturers and education activists, which are then evaluated so as to obtain findings to produce the final form of Team Base Project -based fine arts and skills textbooks.

At this development stage, it begins with expert validation which includes the feasibility of the material, the feasibility of presentation and the feasibility of the language. Then, a trial of learning media products was carried out on research samples, including students of PGSD FIP UNIMED batch 2019, 2020, and 2021. The product display is as below;

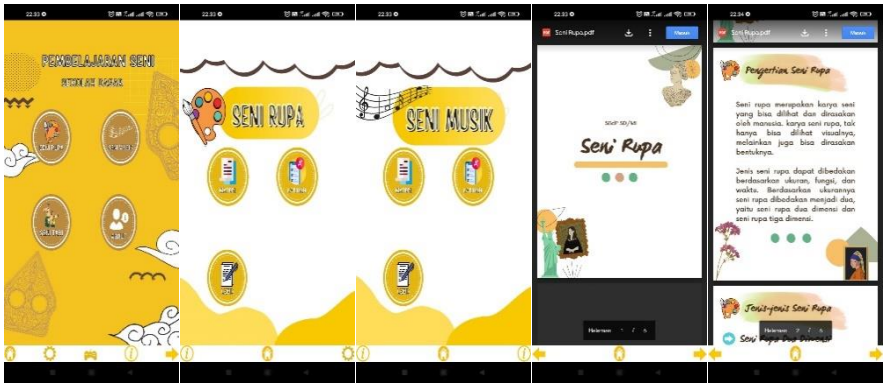

Fig. 2. MIT APP Inventor application product design

3.3 Spread (*Disseminate)*

The process, which is the final stage of development, aims to disseminate the research products that have been produced. At this stage, the use of providing art learning media based on the *Team Base Project* has been developed on a wider scale. Dissemination and application of this learning media by giving it to elementary school teachers in schools as practitioners.

4 Conclusion

At the definition stage, it is necessary to have the results of the distribution of the questionnaire to see the response of the sample to support the learning process of art education at PGSD UNIMED related to theoretical and practical material. At the design stage, the cover creation process, *layout,* material mapping, material integration with the MIT App Inventor application, application introduction, and preparing learning support videos were carried out. art education. At the development stage, it is necessary to carry out validation carried out to experts, in order to obtain the feasibility of the material (Very Valid), presentation (Valid), and for the feasibility of Language (Valid).

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