Development of Learning Videos on Team-based Project Assignments

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Abstract. The implementation of team-based projects as tasks needs to be supported by the existence of learning videos, this can help students acquire 21st century skills through the implementation of these tasks. The purpose of this study was to develop a team-based project-based learning video in a digital-based learning strategy course. This research was carried out by applying the development method by borg and gall, this research was carried out through preliminary studies, product development, and product validation. The result of this research is that product development in the form of a learning video on team-based project assignment has been developed in a good category with a score of 3.57 on the basic function video of the powerpoint button, a score of 3.53 on video beautifying the presentation display, a score of 3.54 on video making videos via powerpoint, a score of 3.56 on video the basic functions of the open broadcaster software button and a score of 3.56 on video, making videos with the open broadcaster software.

Keywords: :Learning Video, Team Based Project, learning strategy, 21st Century Skills.

1 Introduction

Technological developments have influenced the development of learning at all levels of education, learning is currently supported by extensive and fast sources of information thanks to technology, students can learn the latest knowledge easily and quickly through the internet, students can also learn new knowledge anytime and anywhere, in this case, technology makes learning more flexible and cheaper [1]. technological developments by making learning more quality[2]. of course, it will be better if implemented through appropriate learning methods, cooperative learning as a more appropriate method to use [3] because this method facilitates students to be able to work together, exchange ideas, communicate with others. way more fun. one type of method is a team-based project, this learning method involves learning activities for students through collaboration [4], where collaboration is one of the most important learning outcomes [5]. Learning by implementing collaboration in it will create a more pleasant atmosphere [6][7] and work with professionalism is also maintained [8]. Seeing this impact, learning should be supported by appropriate teaching materials[9], the teaching materials needed at this time are practical teaching materials that can be accessed anytime and anywhere, can be obtained at low costs, and are oriented towards

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fulfilling student skills in collaborating through the team-based project method. in the implementation of learning with a team based project, a guide related to the tasks given to students is needed so that it can support the achievement of learning objectives through the tasks given to the maximum, but in the digital-based learning strategy course this has not been developed, so related development is needed. a guide for implementing team-based project tasks through learning videos.

2 Method

The method used in this research is a development research technique. This study uses the development research design proposed by Sugiyono. The development will be carried out in 10 steps which can be grouped into 3 groups [10] as follows:

1. Preliminary analysis (Potential and Problem analysis and Data collection)
2. Product Development (Product Design)
3. Product Validation (Design Validation, Design Revision, Product Trial, Product Revision, Usage Trial, Product Revision, Mass Production)

The population in this study were all students of the office administration study program who attended lectures on digital-based learning strategy courses. and the sample in this study will be determined based on random sampling technique. Data collection techniques in this study were by conducting literature studies, interviews and distributing questionnaires, literature studies were carried out as a basis for developing teaching materials, questionnaires were given to validate designs by experts and tested practicality based on questionnaires distributed to students, interviews were conducted to find information which is more detailed regarding the use of teaching materials by students, so to collect the data instruments have been prepared in the form of Expert Validation Questionnaires, Product Readability Test Questionnaires, Practicality Questionnaires, and interview guidelines for students. Data collection techniques in this study were by conducting literature studies, interviews and distributing questionnaires, literature studies were carried out as a basis for developing teaching materials, questionnaires were given to validate designs by experts and tested practicality based on questionnaires distributed to students, interviews were conducted to find information which is more detailed regarding the use of teaching materials by students, so to collect the data instruments have been prepared in the form of Expert Validation Questionnaires, Product Readability Test Questionnaires, Practicality Questionnaires, and interview guidelines for students.

3 Result and Discussion

The research implementation begins with carrying out an analysis of the potential that can support research, several factors that can support this research can be observed based on internal and external factors, internally this research is supported by the presence of experienced human resources in teaching digital-based learning strategy courses in 3 consecutive years. At this time, technology has also developed that has been used by students and lecturers in everyday life, access to learning videos can be done via smartphones, laptops, tablets, Personal Computers, and various other gadgets via YouTube or Google Drive for online or copy access. files for offline access, this research is also supported by the availability of adequate literature to prepare initial drafts of learning videos. The implementation of the research is continued with an analysis of potential problems that can hinder the passage of the research, this stage is carried out to determine anticipatory actions so that the research can run

well, the inhibiting factor in this research is the inhibition of direct coordination with the research team so that coordination is carried out online and implement health protocols when must carry out coordination offline. This research was continued with data collection as consideration for compiling product designs, the data in this study were collected through FGDs with subject lecturers, then interviews were conducted with students so that it could be found that students hoped that teaching materials were easy to learn, accessible anytime and anywhere. and does not require a high enough cost to obtain it, students tend to want teaching materials to be developed in the form of videos with 720 pixel quality on the YouTube platform. Data collection was continued with document analysis in the Semester Learning Plan for digital-based learning strategy courses, so it was found that students needed learning videos containing tutorials for preparing presentation media on the powerpoint application and tutorials on making learning videos through the Open Broadcaster Software application. Data collection was also continued through literature study, it was found that the form of learning videos should be informative, have image pieces, have animated diagrams, have comparison videos, pay attention to language style, and link the benefits of the material. This research was continued by designing learning videos through the preparation of learning video materials and scripts, then continued with the provision of supporting tools in making videos, while the designed learning videos were: the basic functions of the power point button, beautifying the presentation display, make video through power point, basic function of open broadcaster software button, make video with open broadcaster software. Furthermore, the design validation is carried out by experts, the results of the validation are as follows:

Tabel 1. Expert Validation Test Results

	Aspect				
	Content eligibility	Serving eligibility	linguistic aspect	Mean	Category
Video 1	2.76	2.88	2.73	2.79	Enough
Video 2	2.69	2.85	2.81	2.78	Enough
Video 3	2.71	2.92	2.81	2.82	Enough
Video 4	2.67	3.04	2.77	2.82	Enough
Video 5	2.74	2.88	2.81	2.81	Enough

based on design validation by product design development experts it is still in the enough category, it is necessary to make improvements to all aspects, especially in the up-to-date material section on the aspect of content feasibility, then followed up with product trials, product trials carried out on five students, the following is a summary of the results:

Tabel 2. Product Trial Test Results

Video	Aspect			Total	Mean	Category
	Content eligibility	Serving eligibility	linguistic aspect			
Video 1	3.66	3.54	3.78	10.98	3.66	Good
Video 2	3.61	3.43	3.69	10.73	3.58	Good
Video 3	3.63	3.55	3.72	10.91	3.64	Good
Video 4	3.63	3.45	3.69	10.77	3.59	Good
Video 5	3.60	3.51	3.72	10.83	3.61	Good

After testing the product, it turns out that the product is in the good category, especially in the language aspect, although in the good category, the presentation aspect is the part that gets the lowest score and can be improved further. The research was continued by conducting a usage trial on 30 students, the following is a series of results of the usage trial:

Tabel 3. Usage Trial Test Results

Video	Aspect			Mean	Category
	Content eligibility	Serving eligibility	linguistic aspect		
Video 1	3.55	3.57	3.59	3.57	Good
Video 2	3.49	3.53	3.56	3.53	Good
Video 3	3.47	3.57	3.58	3.54	Good
Video 4	3.55	3.55	3.57	3.56	Good
Video 5	3.51	3.54	3.62	3.56	Good

The results of usage trial test conducted in large groups have shown a good average, so there is no longer any revision of the learning module products that will be used.

4 Conclusion

Based on the design results, it can be concluded that the development of learning videos with a team-based project approach in digital-based learning strategy courses includes materials; basic functions of the powerpoint button, beautify the presentation display, make videos through powerpoint, the basic functions of the open broadcaster software button, make videos with the open broadcaster software. the material was developed and revised so that based on the test on the usage trial it was found that the product had been developed in a good category with a score of 3.57 on the video for basic functions of the powerpoint button, a score of 3.53 on the video beautifying the presentation display, a score of 3.54 on the video making videos via powerpoint, a score of 3.56 on video the basic functions of the open broadcaster software button and a score of 3.56 on video, making videos with the open broadcaster software.

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