Catholic Religious Learning with the Project Based Learning (PjBL) Approach: Validity and Feasibility

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A B S T R A K

Guru sebagai salah satu komponen terpenting dalam pembelajaran dituntut untuk mampu merancang kegiatan pembelajaran yang tepat dan dapat menciptakan suasana belajar yang menyenangkan bagi siswa, sehingga siswa dapat berpartisipasi aktif dalam proses pembelajaran. Penelitian ini bertujuan untuk mengembangkan pendekatan pembelajaran Agama Katolik berbasis pembelajaran proyek (PjBL) yang diharapkan dapat membantu guru dan siswa dalam proses pembelajaran sebagai salah satu strategi pembelajaran untuk memecahkan masalah yang dihadapi guru yang hanya fokus pada hasil pembelajaran. Prosedur pengembangan pembelajaran Agama Katolik menggunakan model pengembangan MPI dengan pembelajaran berbasis proyek (PjBL) pada desain instruksional. Teknik pengumpulan data melalui observasi, wawancara, dan angket. Teknik analisis data yang digunakan dalam penelitian ini adalah Mix method. Hasil reviu ahli materi adalah 95,4% dengan kualifikasi sangat baik dan dapat digunakan tanpa revisi dan hasil reviu ahli desain instruksional adalah 91,2% dengan kualifikasi sangat baik dan dapat digunakan tanpa revisi. Pengembangan pembelajaran dengan menggunakan pendekatan pembelajaran berbasis proyek akan sangat efektif untuk mencapai tujuan pembelajaran secara optimal untuk aspek kognitif dan afektif. Implikasi dari Hasil penelitian ini adalah pengembangan pembelajaran dengan pembelajaran berbasis proyek sangat bermanfaat dalam pembelajaran Agama Katolik khususnya pada aspek afektif. Sehingga tujuan pembelajaran baik aspek kognitif maupun afektif dapat tercapai.

A B S T R A C T

Teachers as one of the most important components in learning are required to be able to design appropriate learning activities and they can create a pleasant learning atmosphere for students, so that students can actively participate in the learning process. This study aims to develop Catholic Religion learning approach on project-based learning which is that can help teacher and students in the learning process as one of a learning strategy to overcome the problem facing by teachers who only focus on the result of cognitive aspect. The procedure in developing Catholic Religion subject uses Instructional Development Model (IDM) with project-based learning on instructional design steps. Data collection is conducting by observation, interview, and questionnaire. Data analysis is mix-method. The results according to material expert review is 95,4% with very good qualification and it can be used without any revision and according to design instructional expert review is 91,2% with very good qualification and it can be used without revision too as well. Learning development by using project-based learning approach will be very effective to achieve learning objectives optimally both in cognitive and effective aspects. The implication of this research implies that learning development by project-based learning is very useful in learning Catholic Religion especially in affective aspect. So the learning objective either cognitive and affective aspects can be achieved.

1. INTRODUCTION

Learning in the 4.0 era requires students to have special skills (Ruddamayanti, 2019; Seruni et al., 2019). These special skills are known as 21st-century skills. The skills include the ability to communicate, cooperate or collaborate, critical thinking, and creative thinking (Eveline et al., 2019; Nurtanto et al., 2020). In addition to these four abilities, moral and character education is also being the focus of attention in the implementation of learning in the 4.0 era (Rai, 2013; Wijayanti, 2015). Moral and character education is very important to emphasize learning as an effort to anticipate negative things that arise due to the development of technology and information (Arief & Cahyandaru, 2018; Gusviani, 2017). One of the efforts to develop moral and character can be done through religious education.

Teachers as one of the most important components in learning are required to be able to design appropriate learning activities and they can create a pleasant learning atmosphere for students, so that students can actively participate in the learning process (Haryanti, 2016; Rahmawati, 2018). The learning

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activities design are starting from learning preparation, learning implementation, to the learning assessment. Learning activities designed must be able to assist teachers in building good interactions with students, so that they are able to understand the learning material and be creative in solving a problem (Harahap et al., 2020; Trianto, 2007). Project based learning is learning that provides opportunities for students to broadly undertake projects. Students can learn through projects that are done together in groups (Marzuki & Basariah, 2015; Primayana et al., 2020). The project learning is very effective to be applied in today's learning activities, to help students achieve learning goals in an affective way (Hung et al., 2012). Project based learning is an innovative learning model where this learning emphasizes contextual learning (Rohana & Wahyudin, 2017; Sugiyanto, 2009). This means that students are given contextual project themes in their daily lives. Thus students play an active role in solving existing problems, students can construct learning outcomes themselves and can carry out evaluation and reflection to get new learning outcomes, especially new affective or attitude aspects.

Catholic Religious Learning at SMP Maria Jakarta takes place for three hours learning schedule with two hours of effective learning activities in class and one hour for spiritual activities. This condition will affect learning with a lack of time in the learning activity because the learning is more focused on the cognitive aspects only. Therefore, Catholic Religious learning with a project-based learning approach can help teachers to develop learning to achieve learning goals in the affectives way. In addition, to helping students to get learning outcomes in affective aspects. Learning to get cognitive aspects can be done by the teacher with students in the classroom, while learning to get the affective aspects can be done by students through project with work working together in small groups.

Some previous studies using a project-based learning model (Widayanti et al., 2018) Furthermore, project based learning was also developed in civic education learning (Marzuki & Basariah, 2015), and Then, other studies have also developed project-based learning in learning in vocational high schools (Chiang & Lee, 2016). Based on these previous studies, it is known that there is no research that conducts the development of religious learning with project-based learning orientation approach. The novelty State of the art of this research study is to develop Catholic religious learning with project-based learning orientation approach. This study aims to develop appropriately Catholic Religion learning with a project-based learning approach to create more students' innovative and effective student learning, so that they can get good satisfy learning outcomes according to expectations and specially to get complete or holistic learning outcomes, namely both cognitive and affective aspects. It is hoped that by implementing appropriate the project-based learning strategies in Catholic Religion learning will achieve complete learning objectives to develop student personalities into individuals who have value education and are able to apply it in everyday life.

2. METHODS

This research design is research and development (R&D). Research and development is a method to create a product was used in learning activities. The intended products are such as textbooks, teaching materials, learning methods and programs. To develop Catholic Religion learning products, researchers used the IDM with a project-based learning approach. The IDM consists of nine stages steps, namely: (1) identifying instructional needs and setting general instructional goals; (2) conducting instructional analysis; (3) identifying behaviors and initial characteristics of students; (4) writing objectives special instructional objectives; (5) develop learning outcome assessment tools; (6) develop instructional strategies; (7) develop instructional materials; (8) design and implement formative evaluations; and (9) implementation of summative evaluations and innovation diffusion (Atwi Suparman, 2014).

The subject in this study is a catholic religion learning product, with the validity of the learning product as the object of the research. Subjects involved in the product validation process are material experts, learning design experts, and student respondents. Product validity Data was collected using the non-test method, namely the instrument in the form of a questionnaire instruments for content expert, design instructional expert, and students' feedback of the product. The grid of instruments used in this study is presented in Table 1.

Table 1. Validation Instrument Grids

Expert	Indicator
Content Expert	1. A brief description of the lesson content relevant to the material
	2. The explanation of the relevance of the new course content is very relevant
	3. The material description of the learning material is very clear
	4. Examples and non examples are very clear

Expert	Indicator
	5. Exercise and formative tests are self-explanatory
	6. A brief summary of the learning material is very clear
	7. Glossary relevant to learning strategies
	8. The final reflection in learning is very good
	9. The formulation of learning objectives is relevant to affective learning material
	10. Fill in the material descriptions relevant to the learning stages
	11. The learning model is relevant to the material description
	12. Evaluation of learning is relevant to learning material
	13. Learning material is relevant to the material description
	14. The exercises and project assignments given are relevant to the learning objectives
	15. The learning material is relevant to the stages of preliminary learning activities, presentation and closing
	16. The accuracy of time allocation for each stage of learning activities
	17. The project based learning assessment rubric is very clear
	18. The consistency of the material is relevant to the subject matter
	19. Consistency between relevant subjects and sub-topics
	20. Learning materials are arranged systematically
	21. The suitability of the spelling used in learning amteri to the applicable rules (PUEBI)
	22. The accuracy of using language in the material
Learning Design Expert	1. The formulation of learning objectives is relevant to the learning material
	2. The description of the learning material is relevant to the learning objectives
	3. The method used in learning is very relevant
	4. The media used is relevant to the material
	5. Suitability of time allocation is relevant to the stage of learning activities
	6. Learning evaluation is relevant to the learning objectives
	7. A brief relevant description of the content of the learning material
	8. The relevance and benefits of good learning material
	9. Learning strategies relevant to learning objectives
	10. A description of the material relevant to the learning strategy
	11. Examples and non-examples in learning are very clear
	12. A brief summary relevant to the content of the learning material
	13. Glossary relevant to learning strategies
	14. The learning design is relevant to the project based learning method
	15. The steps for project based learning are good to understand
	16. The preparatory stage for project based learning is good
	17. The implementation stage of project based learning is good
	18. The project based learning reporting stage is good and in accordance with the guidelines
	19. Completeness of project implementation documentation is good
	20. Students' reflections in project reports are relevant to project based learning steps either
	21. The student assessment rubric is relevant to the project based learning steps
	22. Good consistency of learning material content
	23. Learning activities through power point media are good
	24. The spelling used in learning is good and in accordance with the applicable language (PUEBI)
	25. The use of language in project based learning is good and relevant to student characteristics

Data analysis technique used mix method. This the data analysis technique was carried out by classifying information from qualitative data such as comments, suggestions, criticism of improvements, or revisions that were obtained by researchers in the questionnaire. Quantitative descriptive analysis techniques are used to process data obtained in the form of a percentage. The formula used to calculate the percentage of each test subject is percentage (%) = Σx / SM1 x 100 where Σx is the total score and SM1 is the ideal maximum score (I. M. Tegeh, 2014; M. Tegeh et al., 2015). Decision making for the development of Catholic Religion learning with a project-based learning approach uses the provisions as shown in Table 2.

Table 2. Conversion Level of Achievement of Review Results

Level	Qualification	Description
90% - 100%	Very Good	no need not to be revised
75% - 89%	Good	according to the needs
65% - 74%	Enough	minor of revisions
55% - 64%	Less Poor	major of revisions
– 54%	Very Less Poor	revised total

3. RESULT AND DISCUSSION

The development of Catholic Religion learning using a project-based learning approach and learning is a classroom model. The project based learning approach This model is oriented to help meet the needs of teachers and students in carrying out a learning activity in class. The characteristics of this model emphasize the role of the teacher in managing learning activities in the classroom. Class-oriented learning development models can be applied from elementary school to tertiary education levels. The process of developing Catholic Religion learning by following the procedure of the IDM with a project based learning approach at the instructional design steps, especially in the learning strategy. The IDM and the project based learning approach are oriented to classroom learning. Through this classroom model, it can help teachers and students in learning. The development of Catholic Religion learning with project based learning has been reviewed by material expert, instructional design expert before it is tried and implemented to students. The review analysis aims to assess the feasibility of Catholic religious learning products with a project-based learning approach from the material aspect by material expert, and the learning instructional design aspect by learning instructional design expert.

Catholic Religion Learning Using a Project Based Learning Approach

The example of a learning design with a project-based learning approach, one of the subjects of learning Catholicism shown in Table 3.

Table 3. Learning Instructional Design with Project Based Learning Approach

Phase/Syntax of Project Based Learning	Description

Stage 1 Starting with essential questions	1. The teacher asks some essential questions.
	   a) The teacher gives students the opportunity to read the gospel of Matthew 25: 14-31, then the teacher asks the following questions
	   b) What are the talents according to the Gospel of Matthew 25: 14-31?
	   c) How should man behave towards his talents according to the Scriptures?
	   d) Students are asked to write a list of their abilities
	   e) What feelings arise when writing a list of his abilities?
	 2. The teacher conveys the project learning objectives.

Stage 2 Design a project plan	1. The teacher divides the students into groups of 5-6 people. 2. The teacher presents the theme of the project to be carried out. 3. The teacher conveys the project implementation and reporting procedures (from the preparation, implementation and reporting stages).
Stage 3 Create a project activity schedule	1. Teachers assist students in scheduling project implementation activities
Stage 4 Monitoring students	1. The teacher monitors student activities in project implementation
Stage 5 Assess the results	1. The teacher prepares a project appraisal rubric. 2. The teacher prepares a systematic report and a final rubric for project implementation.

Eligibility Results of Material Experts

Based on the results of the feasibility assessment of the learning material expert above, the percentage of achievement in the material expert's assessment level is 95.4% The results of the material aspect analysis by a material expert have been converted by the researcher into the conversion table in

table 2, the percentage of qualification attainment is in a very good category, and is feasible to use without any revision in the learning and material aspects. The learning aspect with an average percentage of 95.0% in a very good category, while the material aspect with an average percentage of 95.0% in a very good category. and The aspects of language and communication have an average percentage of 100% including in a very good category. According to material experts, the material provided in Catholic Religion learning with a project-based learning approach is matching with the learning objectives and needs to be studied more deeply, especially in the the Ability material, the learning strategy in project steps at the initial stage are essential questions directly refer to on the content of the Scriptures and more on the experiences of students about the talents they have.

Eligibility Results of Learning Design Experts

Based on the results of the feasibility assessment of the instructional design expert, the percentage level of achievement is 91.2% in a very good category and feasible to use without any revisions of the learning program aspects, instructional design aspects and language and communication aspects. The results of the assessment of the percentage of the outline aspects of the learning program is 86.6% in a good category, and the instructional design aspects with an average of 90.5% in a very good category, and the language and communication aspects with an average of 100% in s a very good category. According to the expert review, the instructional design model used is appropriate and effective and relevant to use in Catholic Religion learning to achieve affective learning goals.

Discussion

Based on the results of the feasibility review of the experts review of the material and instructional design of Catholic Religion learning development with a project-based learning approach that is feasible and can be used in Catholic Religion learning activities, and this learning is very effective and efficient to achieve the learning objectives affectively for students in learning. Some previous studies have developed learning using a project-based learning model First, research on the development of project-based learning in physics learning (Widayanti et al., 2018), Furthermore, project based learning was also developed in civic education learning (Marzuki & Basariah, 2015), Then, other studies have also developed project-based learning in learning and in vocational high schools (Chiang & Lee, 2016). Based on these previous studies, it is known that there is no research that conducts the development of religious learning with project-based learning orientation. So, this study produces an outline of an instructional design, a learning strategy with a project-based learning approach, an attitude assessment rubric and project appraisal and teaching materials. The results of this study are expected to be very effective and efficient in the learning process for students at SMP Santa Maria Jakarta in achieving learning goals in an affective way. Thus students will form good character education and they can apply it in their daily life. Through project based learning, students work extensively and collaboratively together in groups.

The development of Catholic Religion learning with a project-based learning approach for students greatly helps students and teachers in the classroom learning process. The results of this study as a learning strategy in overcoming the problem of lack of learning outcomes in the affective aspects (Purwanti, 2017; Rahardiana et al., 2015; Rizki, 2018). The procedure for developing Catholic Religion learning with a project based learning approach uses the IDM which is integrated with a project based learning approach at the instructional design stage. The results of the feasibility analysis of the experts in the development of Catholic Religion learning with a project-based learning approach for 7th grade VII students of SMP Santa Maria Jakarta is 95.4% of the material experts with a very good category without any revision and 91.2% of the instructional design experts in a very good category without any revision. Therefore, the project based learning approach is appropriate for use in Catholic Religion learning for students and teachers in the classroom learning process by 7th grade students of SMP Santa Maria Jakarta and is expected to be effective and efficient in achieving learning outcomes.

4. CONCLUSION

The development of Catholic Religion learning with a project-based learning approach for students greatly helps students and teachers in the classroom learning process specifically in Catholic Religion learning. The results of this study as a learning strategy in overcoming the problem of lack of learning outcomes in the affective aspects. The procedure for developing Catholic Religion learning with a project based learning approach uses the IDM which is integrated with a project based learning approach at the learning design stage. The results of the feasibility analysis of the experts in the development of Catholic Religion learning with a project-based learning approach for 7th grade students is 95.4% of the material experts with a very good category without any revision and the instructional design experts is

91.2% in a very good category without any revision as well. Thus the project based learning approach is appropriate for use in Catholic Religion learning for students and teachers in the classroom learning process and is expected to be effective and efficient in achieving learning outcomes.

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