

Development of Team-Based Project-Based Blended Learning Model to Increase Student Creativity in Creative Economy Courses

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Abstract. The purpose of this study was to analyze the development of a team-based project-based blended learning model to increase student creativity in the Creative Economy course. Knowing the validity, practicality and effectiveness of the results of developing a Team Based Project-based Blended Learning model used to increase student creativity in the Creative Economy course. The method used in this study is a research and development (R & D) method. The development used is adapted from the ASSURE model which consists of 6 stages, namely; (1) analysis of student character, (2) determining competence, (3) choosing methods, media and teaching materials, (4) utilization of teaching materials and learning media, involving students in the learning process, (6) evaluation and revision. Product validity was tested by expert test, expert validation sheet instrument. The research instruments were in the form of expert validation sheets of learning materials, expert validation of learning models, and response questionnaires for students. The research subjects are students of the fifth semester of the Economic Education Study Program for the 2022/2023 academic year who are taking creative economics lectures. The validation assessment by the learning material experts obtained a percentage of 96% with a very feasible interpretation, the expert validation of the learning model was 90% proper interpretation. The results of the research are expected to develop a team-based project-based blended learning model in Creative Economy learning to have a positive impact on improving student learning outcomes and creativity.

Keywords: Blended Learning, Team Based Project, Creativity, Creative Economy

1 Introduction

Blended learning is an integration of face-to-face learning with online learning. Blended learning is described as a model for learning where lecturers use technology. The results of the study show that the potential benefits of blended learning are the ability to access and work for learning needs at a pace and time; increase independence and a strong response to learning and develop appropriate skills and the ability to continue to access material even though it is not present in conventional learning [1].

The learning methods commonly used by lecturers are usually only lectures and practice. In this method sometimes the concentration of students is divided, as a result teaching and learning activities cannot take place optimally because students are only given assignments and then look for themselves on the internet. Not a few students feel bored and bored to learn it, just memorize without understanding the basic concepts, this can make

student learning outcomes decrease.

There are many new problems, especially in the era of the Covid 19 pandemic which requires lecturers and students to study remotely or use e-learning. Although innovative learning models have been applied, they have not provided many opportunities for students to develop their creativity. One of the innovative learning that has been implemented is project-based learning, but it has not had a good enough impact in increasing the creativity of students [8].

Team-based project-based learning is a learning model that provides opportunities for lecturers to manage learning in the classroom by involving project assignments that are done in groups. This project-based team-based learning focuses more on meaningful life problems for students, the role of the lecturer in presenting problems, asking questions and facilitating students in designing a project they do. This will increase students' creativity in designing a project which they will then work on in the time that the lecturer has provided according to the concept being taught. In the end, students will understand the concept with the projects they do and this will increase students' creativity and critical thinking.

To develop learning development skills, learning strategies are needed that are effective, so that learning outcomes have high relevance to the needs of employment. The team based project strategy is effectively used to develop students' innovative ideas, because students have the confidence to be able to show their best when with their group. Effective strategies can increase student involvement, creativity, innovation, meaning, assist students in solving real-life problems, hone cognitive, manipulative skills, design, utilize technology, apply knowledge and the ability to combine cognitive and psychomotor knowledge and arouse curiosity. know that triggers creative imagination and critical thinking. The strategy in question is a project based learning strategy. Hammond (2002), explains that the case method is very relevant for developing students' skills, because it allows them to learn from real situations [5].

2. Literature review

The project-based learning model is an innovative learning model with a focus on contextual learning through complex activities. Concepts and principles in a discipline of study are the focus of learning by involving students in solving problems and other tasks. In addition, the project learning model provides opportunities for students to work autonomously in constructing the knowledge they have and the results of their achievements will create real products. According to Rais [12] project-based learning can create opportunities for a learner-centered learning system, more collaborative, students are actively involved in completing projects independently and in teamwork and integrating practical and real problems.

Project-based learning model is a process and a product. The processes carried out include (1) setting the project theme; (2) learning context; (3) make an activity plan; (4) carry out the activity process; (5) implementation of activities. According to Titu [6], the products produced at the output of students' creativity are (1) real products; (2) increased response in all

changes and consequences of the situation; (3) increased ability in self-management; (4) increased ability in demonstration on an incident; (5) accustomed to self-evaluation. The product results of project-based learning can be objects or ideas. According to Astuti [11] the project-based learning process requires students to think creatively, analytically, solve problems and learn independently. The project-based learning model has advantages, namely (1) growing the activeness of students in the learning process; (2) the development of mastery of the material and increase the creativity of students in solving a problem; (3) increase the interest of students in carrying out creative action activities according to the design; (4) train students in good cooperation.

3. Research methods

This study uses the Research and Development (R&D) research method with the ASSURE Development model. The design model is developed in 6 stages, namely 1) analyze learners, 2) state objectives, 3) select strategies, technology, media, and materials, 4) utilize media and materials, 5) require learner participation, 6) evaluated and revise [10]. It is clearly seen in the following picture:

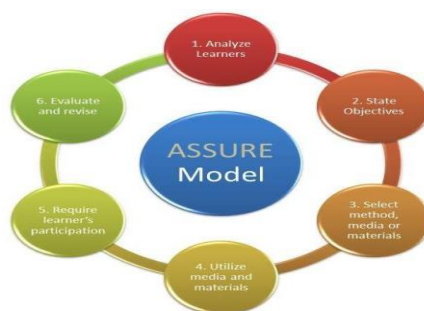


Figure 1. ASSURE . development model

The types of data used are qualitative and quantitative data. Qualitative data obtained by means of interviews, observations, as well as criticism and suggestions from the validator. Interviews were conducted after the last cycle was carried out. Some students were asked questions referring to the interview guide. Quantitative data obtained through the assessment of the validators using a validation sheet and then analyzed using percentages.

Data from expert assessment test results (product validation) were analyzed using descriptive percentage and categorical techniques to describe the feasibility of the model. At first the scores of the measurement results using a closed questionnaire were added up and averaged between the results of the expert 1 score and the expert 2. Then the score was percentage using the formula:

$$AP = \frac{\text{Actual Score}}{\text{Ideal Score}} \times 100\%$$

Information :

AP : Percentage Number

Actual Score : Score given by expert validator

Ideal Score : The maximum score of the product of the number of items with the maximum score of each item

The percentage figures are further grouped into five categories as follows:

Table 1. Validation score categories

interval	Category
81-100%	Very high
61-80%	Tall
41-60%	Enough
21-40%	Low
1-20%	Very low

Based on the percentage categories above, the project-based blended learning model can be said to be feasible to be tested if the minimum average percentage score reaches the high category (61%). The practicality test was carried out by looking at the results of the responses of colleagues and students during the limited test of the application of the model. The effectiveness test was carried out by comparative analysis, namely comparing the results of the creative economy learning design before and after the application of the model for one class with a one group pretest-posttest design using creativity criteria which included aspects of flexibility, novelty and elaboration.

4. Results and Discussion

4.1. Percentage Results of Face-to-face and Online Learning

Based on the results of observing the implementation of learning with the blended learning model for 4 face-to-face meetings and 12 online meetings, the following percentage results are obtained:

Table 2. Percentage of Face-to-face and Online Learning in the Blended Learning Model

No	Learning	Percentage	Criteria
1	Face to face	25%	In proportion
2	On line	75%	In proportion

The proportion of face-to-face and online learning activities is obtained based on the number of learning activities that have been carried out. In face-to-face learning activities carried out by 25% obtained from the number of face-to-face learning activities as many as 4 activities.

While online learning activities of 75% were obtained from the number of online learning activities as many as 12 activities out of a total of 16 activities.

4.2. Learning Material Expert Validation

Based on the data obtained from the results of the feasibility test of learning planning with the blended learning model by learning materials experts, it is stated that it is very feasible, judging from the basic aspects of consideration for the selection of blended learning learning models and components of the learning system which shows a percentage of 96% of the maximum percentage score of 100%.

Table 3. Feasibility test of learning materials

No.	Assessment Aspect	Average Validity	Category
1	The suitability of the objectives of the blended learning model with the learning objectives to be achieved.	100	so worth it
2	The achievement of learning objectives requires academic skills.	100	so worth it
3	Access to learning materials requires certain prerequisites.	100	so worth it
4	Availability of relevant materials/resources for learning materials	80	worthy
5	The suitability of the blended learning model with the maturity level of students	80	worthy
6	The suitability of the blended learning model with student learning styles	100	so worth it
7	The blended learning model can be used as a supplement in learning activities	100	so worth it
8	Blended learning models can be used to help complete subject matter that has a wide range of material.	100	so worth it
9	The blended learning model can be used to help students master the theoretical and practical competencies	100	so worth it
10	The blended learning model is effective and efficient for mastering theoretical and practical competencies so that it complements face-to-face learning activities	100	so worth it
Average		96	so worth it

The assessment of learning material experts from the basic aspects of consideration for the selection of blended learning learning models received an assessment of 96% in the very feasible category. This means that the learning planning of the blended learning model that has been made is in accordance with Rusman [9] which shows that a lecturer needs to pay attention to the basic considerations for choosing a learning model, including: goals to be achieved, learning materials/materials, students' perspectives/ students, and things that are non-technical in the form of effectiveness and efficiency.

Based on the results of expert validation of learning materials from the basic aspects of consideration for the selection of blended learning learning models, it shows:

1. There is a match between the objectives of the blended learning model and the learning objectives to be achieved;
2. Availability of learning materials/resources in the blended learning model that are relevant to the learning materials;
3. The suitability of the blended learning model with the maturity level and learning style of students
4. The selection of blended learning models in learning is declared effective and efficient for mastering theoretical and practical competencies for students.

4.3 Learning Model Expert Validation

Based on the data obtained from the results of feasibility testing by learning model experts, it is stated that learning planning with the blended learning model is very feasible with a percentage of 90% in terms of the component aspects of the blended learning model learning device.

Table 4. The feasibility test of the learning model

No.	Assessment Aspect	Average Validity	Category
1	Clarity of subject identity	100	so worth it
2	Clarity of competency standard formulation	80	worthy
3	Clarity of basic competency formulation	100	so worth it
4	Clarity of the formulation of indicators of competency achievement with basic competencies	100	Very worth it
5	Conformity of learning objectives with basic competencies	80	worthy
6	The suitability of the order of presentation of teaching materials	100	so worth it
7	Adequacy of time management according to time allocation	80	worthy
8	The suitability of learning methods with learning activities	80	so worth it
9	The suitability of the steps of learning activities with learning objectives	100	so worth it
10	Clarity of assessment of learning outcomes	100	so worth it
11	Adequacy of learning resources	80	worthy
12	Completeness of learning tools	80	worthy
Average		90	so worth it

This means that learning planning with a blended learning model is made in accordance with the content of the learning process planning in Government Regulation No. 32 of 2013 concerning the National Education System, stated that learning planning is the preparation of a learning implementation plan for each learning content. The planning contains a learning process plan presented in the form of a semester learning plan (RPS).

From the results of the expert assessment of the learning model regarding the components of learning devices with the blended learning model, it shows that:

1. There is clarity of course identity, formulation of competency standards (SK), formulation of basic competencies (KD), and formulation of competency achievement indicators.

2. There is a suitability of learning objectives with basic competencies, suitability of the order of presentation of teaching materials.
3. There is sufficient time management with the allocation of learning time.
4. There is a suitability of learning methods and steps of learning activities with the learning objectives achieved.
5. There is clarity in the assessment of learning outcomes and the adequacy of learning resources.

4.4 Descriptive Results Percentage of Student Learning Activity and Creativity

From the results of collecting data on the effectiveness of learning, especially on student learning activity and creativity, the results are as listed in the following table:

Table 5. Results of Student Activity and Creativity Questionnaire Analysis

Meeting	Aspect	Percentage	Information
face to face	Student learning activities	89%	Very good
	Student learning creativity	86%	Very good
on line	Student learning activities	87%	Very good
	Student learning creativity	85%	Very good

Based on table 5 shows that the learning activity of students in face-to-face meetings is 89% and online is 87%, while student learning creativity in face-to-face meetings is 86% and online is 85% with very good categories. This shows that:

1. Students actively ask, do assignments, respond to questions, and answer questions that are seen from the level of frequency and involvement of students in carrying out physical lecture activities;
2. Students actively develop skills, solve problems, find solutions, compare concepts. The level of student involvement in lecture activities is very good both face-to-face and online. This student activity is not only seen physically as a whole but also seen through psychological observations.

5. Conclusion

The development of a team-based project-based blended learning model in the Creative Economy course uses the Assure development model. The implementation of learning with the blended learning model was carried out for 4 face-to-face meetings and 16 online meetings. After being assessed by expert validation of learning materials, 96% of the criteria were very feasible, the validity of the learning model experts obtained results of 90% very feasible criteria.

6. Suggestion

Lecturers are advised to be creative, so lectures must provide the widest opportunity for students to develop their creativity. Because creativity grows because of the opportunity from each lesson prepared and carried out by the lecturer. Lectures are not only conducted face-to-face but are conducted online by providing adequate learning resources for students to explore the materials needed in developing their work. The work will appear if it is carried out in project-based lectures with face-to-face and online lectures (Project Based Blended Learning) and case methods.

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