

Implementation of Project Based Learning (PjBL) Method for Business Simulation Courses in Master of Management Study Program Faculty of Economics Universitas Andalas

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ABSTRACT

This classroom action research aims to determine the effectiveness of case-based learning methods and outcome-based assessments for business simulation courses in the Master of Management study program, Faculty of Economics, Universitas Andalas. The business simulation course is a course offered in the odd semester of the 2021/2022 academic year which is a course that prepares students to be able to prepare a business feasibility study proposal that discusses the feasibility of a business from all aspects related to functional areas in management science. The outputs result from this course encourage students to understand well all aspects of starting a business or business. In order to achieve learning outcomes in this business simulation course, project-based learning methods are used. The results show that the project-based method used in this study has been implemented through the RPS which has accommodated the project base in the form of teaching materials and an assessment rubric that explains this in detail.

Keywords: *business simulation, project base, learning achievement*

1. INTRODUCTION

The Business Simulation course is one of the mandatory courses for Master of Management (MM) students, Faculty of Economics, Universitas Andalas, which is given in 3rd semester for all classes, both regular, international and weekend classes. This course has a weight of 3 credits given in class in 3 x 45 minutes given by the course supervisor team that has been determined by the head of the study program in accordance with the competencies and fields of the appropriate lecturer for this course. The curriculum in the Master of Management study program include this course is one of the uniqueness of the Master of Management study program at the Faculty of Economics, Universitas Andalas which is proposed in the ABEST 21 accreditation which is translated into the material provided. ABEST 21 is an international accreditation followed by the Master of Management at the Faculty of Economics, Universitas Andalas which has the concept that each study program must have a uniqueness or specialty in providing education for the masters level and focus more on the planning made by a program. In this accreditation, it is the uniqueness and planning that will be assessed later to get the ABEST 21 accreditation based in Japan. Regarding the uniqueness of the study program, the Master of Management study program at the Faculty of Economics, Universitas Andalas proposes 2 (two) forms of uniqueness, namely the teaching learning process using the project based method and providing expertise for students to be able to conduct a feasibility study

on an investment that will be carried out as well as for business expansion or additional investment. These skills and soft skills can be imparted to students through learning methods based on the competencies possessed for all functional areas in management science, namely: marketing management, human resource management, operations management, entrepreneurship and financial management. Besides that, the learning method provided is also more emphasized on material and the use of simple applications in conducting a business feasibility study on the business. Therefore, in this course the method given is more appropriate using project based learning which can provide a deeper understanding to students. Not only learning methods but also the appropriate assessment system used is an assessment of the project being carried out. After taking this course, students are expected to: have a correct understanding of feasibility studies and their impact on the success of a business, be able to analyze a business plan from the point of view of marketing, operations, organization, social economy, finance and the environment, able to compile a feasibility study report, able to use a simple application in conducting a feasibility study.

The contribution of this course is in line with the learning achievements of the Master of Management study program at the Faculty of Economics, Universitas Andalas, namely: demonstrate an ethical attitude, be able to communicate ideas and opinions logically and effectively, and have high motivation and discipline to improve individual and team performance (attitude), have knowledge of feasibility studies

and be able to analyze the business environment related to feasibility studies (knowledge), able to understand business feasibility studies and relate them to interrelated concepts in feasibility studies (general skills), able to analyze case studies of feasibility studies and be able to formulate decisions that must be taken and able to anticipate risks that will be faced (special skills). This course will help students to prepare to become consultants.

The learning method used in this course is student-centered learning and teacher-centered learning to achieve learning outcomes in this course. Student-centered learning is a learning method where the object is student and lecturers as a moderator during discussions. Meanwhile, teacher-centered learning in this course is carried out by providing briefing or providing theories related to aspects that need to be studied in making a feasibility study of a business. make a feasibility study where students determine and make their own The assessment carried out in this course is through a final assessment and process assessment. The final assessment is carried out to determine students' understanding of the material that has been given, while the process assessment is carried out to determine human understanding of the stages carried out in assessing the feasibility of a business. The distribution of values in all business simulation classes in the odd semester of the 2020/2021 academic year in the Master of Management study program, Faculty of Economics, Universitas Andalas which consists of 4 (classes), namely: each for the morning regular class, international class and weekend A and B (2 classes). The total number of students taking business simulation courses is 65 people with the values distribution of values with grade A, A- and B+. However, on average, the number of students who get A- and B+ grades means that it is necessary to improve the learning methods in this course because the learning achievement is that students are able to use simple applications in making a feasibility study.

The current learning method has not been able to achieve the learning objectives because it still uses a lecture approach and individual/group assignments. Materials in the form of theories about understanding basic concepts in making feasibility studies are still given face-to-face and the assessment is done by giving written exams to students. For the learning method using a simple application, it is still done by using the examples provided by the lecturer in accordance with the predetermined business/business.

Based on the explanation above, the problems encountered in the teaching and learning process of this course are:

1. What is the right learning method to provide students with an understanding of the stages through which a business feasibility study is carried out?.
2. How is the learning method used so that students can make a feasibility study that is very relevant to existing practice?.
3. What is the right assessment method to measure student understanding in making a business feasible?.

Based on the above problems, the objectives of this research are:

1. To find out the right learning method to provide understanding to students about the stages through which a feasibility study is carried out for a business.
2. To find out the learning carried out so that students can make a feasibility study that is very relevant to existing practice.

3. To find out the right assessment method to be able to measure student understanding in making the feasibility of a business.

The benefits of the research to be carried out are:

1. Helping students to better understand the material in this business simulation course so that it can be used as capital for students to become consultants in assessing the feasibility of a business.
2. For lecturers, project-based learning methods are very helpful in delivering lecture material to students because students who take courses will immediately practice in companies to assess business feasibility if an investment is made or for entrepreneurs who g want to make a new investment.

2. THEORETICAL FOUNDATION

The project-based learning method or Project Based Learning (PjBL) is one of the learning methods that is increasingly being developed at this time. The method uses an applicative learning approach, meaning that students are included in learning activities directly through practice on a topic or material. Students as objects in this learning method are required to have the ability to innovate, have the ability to be able to work together both with other people and with groups in carrying out an activity in accordance with the concepts and materials being taught. A simple example of this project-based learning method is if engineering faculty students are asked to design or make a bridge construction project with special criteria or specifications (CBM, PjBL and OBA method workshops by LP3M) [1]. Before the engineering student made a design for the construction of a real bridge, the students were asked to make a miniature bridge that was built using simple materials such as ice cream sticks. Although the concept in this learning method is not in the actual construction of bridges, students are invited to think and innovate in bridges such as: in terms of aesthetics and the use of materials that are minimal but do not reduce the strength of the bridge to be built. Here, it is very important for students to innovate on how to determine miniatures on how to build bridges according to predetermined criteria. Miniature bridges that are built are not only based on technical aspects but also from other sides that must be considered in the construction of a bridge so that it fits the predetermined criteria and builds the bridge by taking into account other factors besides technical elements. The construction of the bridge miniature also requires the student to be able to work well with his fellow group members. Good group or team work will produce work that is efficient, effective and can meet predetermined criteria. After all groups or students have completed their assignments, at the time of evaluating each group will be assessed by another group according to predetermined criteria. This will provide a more objective assessment because the assessing group must have understood the assessment criteria that have been determined by a project carried out by another group. For example, a miniature bridge made by a group must of course be assessed objectively by another group based on technical and non-technical aspects. Technical aspects, for example, are based on the strength of the miniature bridge being built, the width of the bridge in accordance with technical provisions, the use of materials in the manufacture of the miniature bridge. Non-technical aspects are also assessed, such as relating to the aesthetic aspects of the

miniature bridge that was built to make it look more beautiful but not reduce the safety aspect for its users.

The course that will use the learning method based on this project is business simulation as one of the mandatory courses in the Master of Management study program, Faculty of Economics, Universitas Andalas. The difference in the learning methods used in the Semester Learning Plan (RPS) for the business simulation course is in terms of the implementation of the lectures which initially only provided examples of making a feasibility study on a business/business given by the lecturer face to face, then in the RPS the changes will be replaced with assignments for each student to look for themselves or go to the company that will be used as a project in conducting a feasibility analysis on the company. Feasibility studies made by students in this course can be carried out on businesses that will be opened (new) or for companies that will develop investments to increase production capacity. Companies that will be used as objects by students must meet certain criteria in accordance with the material that has been discussed at the beginning of the lecture. The learning method in this business simulation course will be combined between lectures with the lecture method and this project-based learning method. In this classroom action research activity where by adopting project-based learning methods and outcome-based assessments, the outputs that will be produced are RPS changes, final research reports and articles that will be published at international seminars held by LP3M.

The hypotheses in this study are:

1. Changes in learning methods in business simulation courses from discussing cases in class to case-based learning methods will affect students' understanding of the material discussed.
2. Changes in learning methods made to project-based learning methods also affect students to further improve their thinking and innovation skills.
3. Changes in learning methods to project-based learning methods affect the soft skills of students in working together in groups or teams.

3. METHODOLOGY

This research is descriptive or narrative approach because the output of this research is a new RPS or a change from the old RPS which already uses project-based learning methods and uses outcome-based assessment (OBA) methods. Research activities are carried out using a literature review approach, namely by analyzing theories or concepts related to the implementation of RPS based on project learning methods and OBA assessment for business simulation courses for undergraduate level 2.

The subjects in this research are lecturers who are in charge of business simulation courses at the Master of Management study program, Faculty of Economics, Universitas Andalas in the form of team teaching-based on the aspects studied in making a business/business feasibility study. The lecturer in charge of this course is a permanent lecturer in the management department of the Faculty of Economics, Universitas Andalas which has been divided into 4 (four) existing classes and into 16 (sixteen) meetings in the odd semester of the 2021/2022 academic year. Supporting lecturers including team teaching are expected to be able to

prepare RPS changes in accordance with learning planning standards at SNPT that have implemented project-based learning methods and outcome-based assessment methods. The fulfillment of the objectives in this study can be measured from several indicators, namely:

- A. Learning outcomes at the end of the odd semester of the 2021/2022 academic year. Evaluation of learning achievement in this business simulation course aims to ensure that the learning that has been carried out can meet changes and improvements in the attitudes, behavior and skills of students taking this course. The assessment carried out in this section will be carried out both during the lecture process which aims to find out which parts of the material have not been understood by students and the final assessment is carried out either through the end of semester exams, assignments, discussions and quizzes that have been given to students. Assessment of learning outcomes is in the form of numerical values (0-100) which are then converted into letters (A-E).
- B. Distribution of final scores and quizzes. Another indicator of the performance of this research activity is the distribution of final grades from students which is an accumulation of assessment components that have been explained at the beginning of the lecture. The final score from the UAS is obtained through the implementation of the UAS on a scheduled basis which has been determined by the faculty in December 2021. Besides the final score from the UAS, scores are also obtained from quizzes held in the fourth and twelfth lectures.
- C. Feedback from Students. Another performance indicator of this research activity is the existence of feedback or responses from students on the lectures that have been carried out in relation to all aspects of the implementation of the lectures. Not only about the lecture method but also related to the assessment system, including the method of delivering material by the lecturer.

The source of data in this research is secondary data, namely by obtaining data through literature or sources derived from books, articles, websites or other sources that have processed the data needed by researchers. The data collection technique is through a literature review related to the purpose of this study. After the data is collected, then data validation is held and after valid data is analyzed using a qualitative approach.

4. RESULTS AND DISCUSSION

Activity class in this research will be carried out in the even semester of the 2020/2021 academic year for courses that appear in the odd semester of the 2021/2022 academic year. The student's authority, although not as effective as face-to-face, can still see the responses from the interactions and discussions carried out. In the WhatsApp group, the students were divided into smaller groups to maximize the project discussion for each meeting. Every meeting, students who prepare presentations and who will present with the Voice Note feature on WhatsApp will always be rotated, so that every student gets the same opportunity. In the WhatsApp team group, lecturers are also participants, so they can monitor student activities, remind them to be active in discussions, remind them not to go out of line for discussion and many other things. The advantage is that students are more responsive, because for each whatsapp group this team

has a few students, so it can be seen immediately who is participating and who is not. Evaluation of the project-based learning method in this study was carried out in several ways, namely:

1. Implementation of project-based RPS. The implementation of the project-based RPS in this study has been designed to be carried out for one semester, namely in the odd semester of the 2021/2022 academic year. The initial evaluation will be carried out through filling out the student attendance list which is carried out through filling in the i-learn in 2 (two) sections, namely at the beginning of the i-learn there is already an attendance list made by ICT then also a student attendance list made by the lecturer for each meeting. In addition, the lecturer will also check the attendance list through a screen shot of the zoom screen to ensure students are actually present in every lecture.
2. Evaluation of the success of project-based RPS implementation. The effectiveness of the implementation of this project-based RPS will be carried out through the achievement of CPL by students at the end of the semester through:
 - A. The results of learning outcomes at the end of the odd semester. The achievement of CPMK and sub-CPMK can be seen from the final grades of students when the entire learning process is completed. The results of this learning achievement are in the form of letters A to E along with their value components. The assessment method will include formative assessment and summative assessment. The assessment component includes UTS and UAS assessments, individual participation/discussions, assignments, attendance, and quizzes.
 - B. Distribution of final grades for UAS, UTS and QUIZ. Odd Semester Final Exams are held around December, and Random Quiz for 15-30 minutes in two meetings each before UTS and before UAS.
 - C. Student response. Student response here means feedback from students on the RPS and the learning process using a project base. The assessment includes teaching materials and assessment rubrics used in the learning process in business simulation courses. This feedback is used as the basis for the improvement of the case-based learning method in the next semester.
 - D. Displays in i-learn for regular class business simulation subjects. The learning platform used for this business simulation course is the LMS i-learn UNAND as a learning medium for the implementation of project-based RPS and the OBA assessment system. In accordance with the updated RPS, several components and materials related to the implementation of the project based-learning method have been included in each meeting, such as: at the first meeting the material for i-learn RPS for project-based courses, the use of videos to facilitate student understanding of the material covered. As explained, the class action is in the form of a project base for students to find information and then make a feasibility study for an investment. In this i-learn course, student attendance lists are also included to determine student attendance for each meeting.

5. CONCLUSION AND SUGGESTION

Based on the discussion in the previous section, the following conclusions can be drawn:

1. The project-based learning method is very relevant to be implemented for the business simulation course in the Master of Management study program, Faculty of Economics, Universitas Andalas because it is in accordance with the achievements of this course.
2. The RPS for business simulation courses already contains teaching materials and assessment rubrics for each project assigned to students.
3. The use of the learning platform greatly determines the effectiveness of the project base learning method, so the use of I-learn and other platforms needs to be carried out to obtain maximum results from the use of this learning method.

The explanation above provides input on suggestions related to the implementation of this case-based learning method, namely:

1. It is necessary to carry out a thorough evaluation to determine the achievement of the objectives of the implementation of this project-based learning method so that it can be an input for future improvements.
2. The platforms used in this project-based learning should be diverse so that the weaknesses of each platform can be minimized by other platforms.
3. Evaluation of student satisfaction with the use of this project base method should be carried out on an ongoing basis in order to obtain the latest information related to this learning method.

REFERENCES

- [1]Institute for Educational Development and Quality Assurance (LP3M) Universitas Andalas (2021). Incentive Guidelines for Implementation and Publication of Case Based Method (CBM) and/or Project Based Learning (PjBL) and Outcome Based Assessment (OBA) 2021, Padang.
- [2]Institute for Educational Development and Quality Assurance (LP3M) Universitas Andalas (2021). Workshop on Case Based Method (CBM) and/or Project Based Learning (PjBL) and Outcome Based Assessment (OBA) 2021, Padang.