Learning Management Model of Islamic Education based on Problem: A Case Study of the Tarbiyah and Adab Department of IAIN Parepare

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Abstract
Learning in college is very urgent considering aspects of relevance and effectiveness. One strategy that becomes the trend of study is problem-based learning. Problem-based learning strategies are considered urgent and relevant to be applied in higher education, as an effort to trigger scientific exploration to foster critical and creative thinking skills. Problem-based learning strategies should be based on research in order to have a systemic scientific structure, a strong, functional and implementative foundation in learning. The relevance and effectiveness of the implementation of problem-based learning strategies is designed with a management approach. Management breaks down the stages of problem-based learning strategies, including planning, implementation, and evaluation (assessment). Problem-based learning strategy planning includes the preparation of Semester Learning Plans (Rencana Pembelajaran Semester or RPS) that refer to the curriculum of study programs, establish learning outcomes, design teaching materials, analyze students, choose media, compile learning evaluation systems, and predict possible problems. All of them are designed with problem-based adapted from the results of the research. Implementation of problem-based learning begins with initial activities including attendance, apperception, orientation, and motivation, core activities include exploration, elaboration, and confirmation, and final activities including conclusions and assessments (evaluations). Evaluation of learning includes program assessment, implementation assessment, and assessment of goals achievement. Principles of learning assessment include educative, objective, accountability, and transparent. Measuring the achievement of problem-based learning is seen in indicators of critical and creative thinking abilities, including problem response, understanding problems, knowing cause of problems, able to find alternative solutions, recognize the impact of the problem, and be able to connect with other science disciplines. The strategy of problem-based learning in higher education has implications for students’ interest and motivation in developing critical and creative thinking skills.

Keywords: models, problem-based learning strategies, management, research, students.
I. INTRODUCTION

Education is an individual's need in order to develop quality, potential, and self-talent. Education is needed by humans in every time and place [1], physically and spiritually [2]. The function of education as a process of developing capabilities and forming intelligent and civilized character, and the purpose of education is an effort to develop the potential of students in accordance with the character and civilization of the nation [3]. That educational function leads to the development and empowerment of human potential [4], so that they can become civilized humans, maintain solidarity, be sincere in working humanity [5]. Therefore, education needs to be organized well, so that it can run effectively and efficiently to achieve the goals. National education standards are a reference in managing education, which is related to the planning, implementation, and supervision of educational activities at the level of district / city, provincial or national education units so that efficiency and effectiveness of education are achieved [6].

Improving the quality of education requires the right management concept [7]. Management as a science and art in regulating the process of utilizing human resources and other sources effectively and efficiently to achieve a certain goal [8]. The definition emphasizes that in the implementation of education, the existing potential is optimized for empowerment so that it runs effectively and efficiently in achieving the objectives. Learning is the embodiment of the implications of a curriculum, because learning is an effort to teach or direct student activities toward learning activities [9]. Learning interaction as a process of deliberate interaction, conscious of purpose, which is to deliver students to their maturity level [10]. An educator needs to understand the main factors that can motivate a child's learning, which are culture, family, school and the child's own self [11]. Urgent learning to be managed by paying attention to the principles of learning interaction, namely preparing materials and learning resources, choosing methods, tools, and teaching aids, choosing approaches, and conducting evaluations after the end of learning [12]. Then more simply each learning involves several components, such as goals, material, methods, media, and evaluation [13].

The Indonesians still face a variety of complex challenges, and universities are part of the education subsystem that has the responsibility of resolving life's problems, including globalization, democratization, and liberalization of Islam [14]. This dimension becomes the mainstream of higher education (Islamic) because it has a vital power in charge of developing science and technology [15]. Higher education should be inhabited by people who are rational, objective, open, and more than that is having a high quality of wisdom ... universities must be able to prepare strong and qualified human resources, both concerning spiritual, intellectual and social strength [16]. The responsibility for educating the younger generation is more predominantly based on universities.

The learning systems in universities, rated by some experts, are problem-based learning [17]. Problem based learning is not designed to help educators provide as much information as possible to learners, but problem-based learning is developed to help students develop thinking
skills, problem solving and intellectual skills, learning to share the role of adults through their involvement in real experiences and become independent learning [18]. Therefore, this topic is urgent and relevant to study to improve the quality of learning at the Tarbiyah and Adab Department of Parepare IAIN. Problem-based learning can lead students to have high otokritik (an effort to make a cultural change in a community, family, group, organization or institution by making criticism carried out by members of and for the community itself) and concern, so learning process can be dynamic, creative and fun. Those are the implications of qualified education so that graduates of Tarbiyah and Adab Parepare Department can exist and be competitive in the community.

The Concept of Learning Management

Learning management is the process of utilizing all interacting components (teaching resources) to achieve the objectives of the teaching program [19]. There are five major steps in fulfilling the target of learning management activities, including: 1) management ‘the atmosphere’ of learning; 2) management of teaching task; 3) management of teaching assignments in the cognitive and affective domains; 4) management of presentation of learning materials; and 5) management of the learning environment. Some of the most important parts of learning management include: 1) the creation of a learning environment; 2) teaching and training expectations for students; 3) increase learning activities; and 4) improve student’s discipline. The following are the components of learning management, namely [20].

Planning of Learning

Planning is a decision-making process for a number of alternatives (choices) regarding the goals and ways that will be implemented in the future in order to achieve the desired goals and monitoring and evaluation of the results of their implementation, which are carried out systematically and continuously [21]. Planning is an activity that diagnoses aspects of a target that considers the answers to questions born from planning, namely: (1) What are the business targets for a certain period of time in the future? (2) How long can the business target be achieved? (3) Who is responsible for carrying out the work? (4) To whom is the job accountable? (5) Is there a Standard Operating Procedure? (6) Is there a time schedule? (7) Is there an action plan? (8) What is the background of the consideration so that the activity needs to be carried out immediately? [22]

The main problems in learning planning are (1) Problems with direction and purpose; (2) Evaluation issues; (3) Problems in the content and sequence of subject matter; (4) Method problems; and (5) Obstacles [23]. Before drawing up a learning plan, educators need to prepare themselves especially in professional competence. Educators are required to understand and master the tools needed in the preparation of learning. Things that must be prepared in planning learning are (1) Understanding the curriculum; (2) Mastering teaching materials; (3) Arranging learning programs; (4) Carry out learning programs; and (5) Assessing learning programs and the results of the learning process that has been implemented [24]. In addition, educators must master the latest learning technology devices, the ISSN 1869-0459 (print)/ISSN 1869-2885 (online)
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psychological conditions of students, and so on.

Organizing Learning

Organizing learning also means organizing classes, namely the efforts made by educators in helping students to achieve optimal conditions for the implementation of teaching and learning activities as expected [25]. A class that is orderly and conducive, can be seen from the indicators, namely (a) each student continues to work, no one stops because they do not know the learning assignments that they have to do or cannot do the tasks given to them, and (b) each student continue to do the work of learning without wasting time in order to complete the learning assignments given to him [19]. In organizing learning, educators as learning managers do things, namely: (1) Choosing the right teaching technique; (2) Choosing the right audio-visual learning aids; (3) Choosing the right class (number of students); (4) Choose the right strategy to communicate complex rules, procedures, and learning [26].

Classes are study rooms (physical environment) and study groups (emotional environment) "). The physical environment includes: (1) the room, (2) the beauty of the class, (3) seating arrangements, (4) the arrangement of teaching facilities and tools, (5 ) ventilation and light settings. While the socio - emotional environment includes: (1) the leadership type of the educator, (2) the attitude of the educator, (3) the educator's voice, (4) the building of a good relationship [27]. Therefore, the success of educators in preventing the emergence of behaviors of students who interfere with the course of the learning process, the physical condition of learning and the ability to manage it [28]. Educators should build classroom activities based on students, interact with the language that students speak in, and provide attention without discrimination.

Implementation (of Leadership in) Learning

Educators as learning leaders, have authority over students, namely: (1) Traditional authority; (2) Bureaucratic authority; (3) Professional authority; and (4) Charismatic authority [29]. Educator leadership is intended to motivate, encourage and guide students as a community so that they are better prepared to achieve the agreed learning goals [26]. The roles of educators in learning activities are as informers, organizers, motivators, directors, initiators, transmitters, facilitators, mediators, and evaluators. Interactions between educators and students need to be built on mutual understanding, sense of belonging, and a sense of responsibility in the success of learning activities, an open and transparent attitude is needed, their basic motives in taking decisions regarding learning are conveyed to students, built up good social solidarity and care, creating a 'collegial collective' environment at work as an instrument for creating togetherness, cohesion and unity; respect plurality for every difference both in terms of ideas, opinions, talents, interests, ideals, and sociocultural aspects.
Learning Evaluation

Judging from the objectives, evaluations are of a macro nature and some are micro. Macro evaluation is the target of educational programs, namely programs planned to improve the education sector. Micro evaluation is often used in classrooms, especially to find out the learning achievements of students. Learning achievement is not only cognitive, but also includes all the potential that exists in students. So the target of micro evaluation is a learning program in the classroom and those who are responsible are educators for schools or lecturers for higher education [30]. Evaluation has two main functions, they are to determine the achievement of student learning outcomes and the results of teaching educators [31]. Knowledge of student learning outcomes is related to the extent to which students have achieved the learning objectives or competencies that have been set. Educator's teaching results are related to the extent to which educators as learning managers of students [26], in terms of how educators plan, manage, lead, and evaluate learning activities.

The tests are carried out after completing certain subjects (certain basic competencies) as formative tests and end-of-semester tests known as summative tests as well as tests conducted at the end of certain levels of education in the form of final school examinations and national examinations. From formative, summative [32], to final school examinations and national exams, most are in the form of written tests. In fact, written tests are only one form of test (in addition to oral tests and actions), and tests are only one of the evaluation techniques (in addition to non-test techniques).

Problem Based Learning

Jodion Siburian, et al., stated that problem-based learning is one of the learning models associated with contextual learning. Learning means faced with a problem, which then through problem solving, through these problems students learn more basic skills [33]. Problem-based learning is developed to help students develop thinking skills, problem solving and intellectual skills, learning various roles of adults through their involvement in real experiences and becoming independent learning. Bern and Erickson emphasized that problem-based learning is a learning strategy that involves students in solving problems by integrating various concepts and skills from various disciplines. These strategies include gathering information, and presenting findings [34].

The problem-based learning strategy can be applied in higher education: (1) Students master and understand the material fully; (2) Educators develop rational thinking skills; (3) Students develop the ability to solve problems and create intellectual challenges; (4) Encouraging students to be responsible for learning; and (5) Learners understand the relationship between teaching material and reality in life (the relationship between theory and reality). Barrows, Tamblyn, and Engel, stated that problem based learning can improve discipline and success in terms of: (1) adaptation and participation in a change, (2) application of problem solving in a new or upcoming situation, (3) creative and critical thinking, (4) adoption of holistic data for

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problems and situations, (5) appreciation of various perspectives, (6) successful team collaboration, (7) identification in learning weaknesses and strengths, (8) self-directed progress, (9) effective communication skills, (10) description of basics or argumentations of knowledge, (11) ability in leadership, and (12) the use of varied and relevant sources [35].

The steps of the problem-based learning model: (1) Implementation of problem-based learning, including (a) Planning tasks, (b) Setting objectives, (c) Designing problem situations, and (d) Organization of resources and logistical plans; (2) Interactive tasks, including (a) The orientation of students to the problem, (b) Organizing students to learn, (c) Helping independent and group investigations; and (3) Analysis in evaluating problem solving processes. The task of educators in the final stages of problem-based learning is to help students analyze and evaluate their own thought processes and the investigative skills they used [36].

II. RESEARCH METHODS

The research approach is qualitative, by taking into account the data obtained later in the form of descriptive data, data as it is and not in the form of numbers [37]. Furthermore, this type of research is a case study, which is an activity that investigates to analyze and describe something in detail from the social phenomena that occur. The object or location of this study is the Tarbiyah and Adab Department Prepare IAIN. The data source is the Head of the Tarbiyah and Adab Department, lecturers, and also students.

Data collection can be done in various settings, various sources, and various ways [38]. Data is collected using several methods, namely: (1) participatory observation (participant observation); (2) In-depth interviews; (3) Documentation.

The data analysis technique is carried out in three activities that are one entity (interrelated), namely; (1) word reduction; (2) data presentation; (3) conclusion / verification. Data reduction is the selection process, focusing on simplifying, abstracting and transforming rough data that emerges from written records in the field. This process continues throughout the research. Data reduction includes summarizing data, encoding, tracing themes, making clusters. Data presentation is an activity when a set of information is compiled, so as to give the possibility of drawing conclusions and taking action. Drawing conclusions is carried out continuously while in the field. Qualitative analysis technique is carried out for data taken from the field. Activities in qualitative data analysis are carried out interactively and taken place continuously until complete, so the data is saturated (complete). The validity test of data in qualitative research according to Sugiyono includes credibility (internal validity), transferability (external validity), dependability (reliability), and confirmability (objectivity) [38]. The process of testing the validity of the data is repeated until there is accuracy in the conclusion of the research.
III. DISCUSSION OF RESEARCH RESULTS

Management of learning (lecture) is a way of working to compile a series of learning activities that are measurable, systematic, and scientific. Learning in college is a learning activity that is conducted by lecturers and students effectively and efficiently to achieve a goal. It is important to do it professionally because what is faced by lecturers are students who have high academic abilities, sharp otokritik, and rational reasoning. The success of learning can be obtained through the right and correct management work processes.

The management of problem-based learning becomes a concept and learning system that is needed in higher education. College learning is considered to be more effective when referring to cases and becoming a node in solving problems. This context encourages students to be more sensitive and concerned about the situation around them because they can understand the important meaning of problem solving. Students can absorb and appreciate learning if the learning platform provides examples of existing problems.

Planning problem-based learning

Semester Learning Plans preparation should refer to the Study Program curriculum. The following is the informant's statement:

We compiled Semester Learning Plans for courses, not referring to a patent or official curriculum, because the curriculum has not been completed. For example, in the Study Program curriculum, Learning Outcome (LO) is usually written in each course, so that lecturers can formulate teaching materials and other components by looking at the subject matter LO.

This information shows that one of the obstacles in the preparation of the RPS is if the Study Program curriculum is not finished. The Study Program curriculum in the Tarbiyah and Adab Department has not been written in document, even though it is considered final. The following is the informant's explanation that: "The curriculum of Islamic education (PAI) has not been completely documented" [39]. Likewise with the statement of the informant that: "The curriculum of History of Islamic Civilization (SFI)/Study Program has not been completed because there is still one stage that has not been implemented". Likewise with the statement from the Arabic Language Education (PBA) Study Program stating that: "PBA Study Program curriculum has not been completed." The information shows that the preparation of RPS courses by lecturers because there is no definite reference, namely the patented curriculum of the Study Programs.

Arrangement of RPS courses should refer to the profile of graduates determined in the Indonesian National Qualifications Framework (KKNI) based curriculum. The profile of graduates is the achievement standard that must be realized by the Study Program through the implementation of academic programs in the form of learning programs. In this context ISSN 1869-0459 (print)/ISSN 1869-2885 (online)
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informant stated that: "Indeed, every lecturer in preparing the RPS must look at the profile of the Study Program graduates contained in the curriculum" [40]. Because the KKNJ-based curriculum has not yet been completed, the informant stated: "The lecturer prepares the RPS based on scientific studies and exposure to previous teaching material" [39]. Thus, for the preparation of the RPS lecturers should refer to the profile of the Study Program graduates.

The profile of graduates is translated operationally in the form learning outcomes of study program curriculum. Learning outcomes curriculum describes the goals that must be achieved by students based on the level in the KKNJ. Based on the interview results, one informant stated that: "arrangement of RPS course should refer to Learning Outcomes (LO) of Study Program curriculum" [40]. Furthermore, other informants added, as in his statement: "LO directs lecturers to develop competency standards to pass after the subject is taught and later becomes clues in designing learning materials" [41]. However, the expectations toward lecturers to have reference in the preparation of RPS courses have not accomplished yet because the Study Program KKNJ-based curriculum has not been published yet.

The KKNJ-based curriculum is formulated as a learning strategy policy that can be used as a reference by lecturers in compiling RPS. The learning strategy policy is described in the Teaching Center Learning (TCL) and Student Center Learning (SCL). Those two approaches can be developed by lecturers to choose and decide learning strategies that are suitable with the courses chosen. The informant stated that: "I always compiled the RPS using the SCL approach, which is student-based" [39]. The information shows that although there is no patent curriculum, lecturers still choose the student-oriented learning approach (SCL).

Furthermore, the lecturers of the Tarbiyah and Adab Department using the SCL approach in learning will make it easier to choose the right learning strategy. The learning strategy that is considered the most relevant is problem based. The following is the informant's statement: "In my opinion, the learning strategy that is relevant to the student world is a student-based learning strategy" [40]. Furthermore, other informants added that "the problem-based learning strategy opens the student space to be more creative, explorative, and innovative in developing the ability to think and solve problems" [39]. The informant's expectation describes that the lecturer in drafting the RPS should consider the problem-based learning strategy as a strategy presentation in teaching material to students.

The right step in implementing a problem-based learning strategy is a factor that determines the success of learning. Lecturers who formulate problem-based learning strategies appear to be varied. One informant stated that: "I designed a problem-based learning strategy by means of asking questions or problems, then students studying and looking for alternative solutions" [41]. Next, another informant thought that: "I prepared a problem-based learning strategy by preparing actual case examples, students examine, and then find a solution" [39]. Then, another informant stated that: "there are cases, studied the causes, find solutions, relate to scientific disciplines, and the effects" [41]. The informant's information shows that the steps in arranging cases or problems in problem-based learning strategy are by preparing the
problems, looking for alternative solutions, and relating the solutions to other science disciplines.

Students as sources and objects of learning, so it is important to pay attention to the situation and conditions of students, before designing a problem-based learning design, it is important to look at the variables and expectations of these students. Students will be responsive if the application of problem-based learning strategies is in line with student learning styles. Related to this, there was an informant who gave a response, as follows: "Yes, accordingly and maybe the lecturer understands the student's learning style" [39]. Furthermore, another informant stated that: "the lecturer applies this strategy according to how to develop my reasoning capability, so that it is easily absorbed" [42]. The context was also added by another informant who stated: "Yes, I agree because with the strategy applied the discussion will develop" [43,44]. Furthermore, another informant also added that: "In my opinion, the strategy / method is important and interspersed with motivation both at the beginning and the end" [45]. Based on the informant's information then it can be derived that the implementation of problem-based learning strategies is in line with students’ learning styles [48].

One of the components in problem-based learning is learning evaluation. Learning evaluation is prepared by considering the learning strategies that will be implemented. The following is the respondent's response that "lecturers always evaluate learning after completion of lectures and evaluation systems are relevant to problem-based learning" [40]. Furthermore, there is a lecturer adding that: "I evaluate the problem-based learning strategies referring to critical thinking skills, such as fluency, flexibility, novelty, and elaboration in problem solving" [39]. Models of problem-based learning evaluation always consider aspects of fluency in explaining cases, fluency in teaching, paying attention to aspects of novelty, and problem-solving abilities.

Learning planning, based on document studies and observations, lecturers design the assignment systems for students in groups, work on one theme for each group, and present in front of the class based on the specified schedule. The assignment of students in the form of papers is arranged based on the results of studies, observations, and group conclusions. The assignment contains a number of problems that must be solved by students based on the source searching and the research they do.

**Learning Implementation**

The implementation of learning is the actualization of the *RPS* courses that have been compiled by the lecturer. The implementation of the learning has stages such as initial activities, core activities, and final activities. The initial activities include attendance, apperception, orientation, and motivation; core activities include exploration, elaboration, and confirmation; the final activity as a closing includes conclusions and evaluations. Those learning activities are general procedures that are passed through by educators, both at the basic, intermediate and higher education levels. Systematics of learning activities in the classroom shows
discipline, orderliness, and synergy to achieve the stated goals.

The implementation of problem-based learning strategies is generally carried out with student's attendance, explaining the relationship and the relevance of past and present material, explaining the objectives and orientation of learning that to be carried out, and motivating students to have high interest and enthusiasm for learning. Based on this, one of the informants stated that: "in the initial learning activities, I took students’ attendance, and then explained a little scientific discourse that would be learned, and motivated students to study hard" [40]. Then there were informants who gave responses like: "every time I start learning, begins with taking attendance, gives advice, and conducts an initial introduction to scientific material". Furthermore, another informant also emphasized that: "I started learning through attendance, asked readiness to learn that day, gave brief advice, and even took examples of cases of successful and failed people" [41]. The information from informants showed that in the initial lecture activities, there were several activities that important to take into considerations, such as taking student attendance, briefly explaining teaching material and the relation, conveyed the importance of learning material and objectives to study, giving advice and motivation, and providing examples of cases related to learning motivation.

The core activities in learning are the discussion of teaching materials that are collaborated with various other activities in the classroom. The core activities are determined by a learning approach, such as SCL, so student’s participation becomes very dominant. The following is the informant's statement that: "In this core activity I present material, including examples of cases or problems around, discuss and be critical, and find solutions together with students" [39]. The core activity emphasizes the description of this material with various methods that are varied in it. The informant's statement stated that: "core activities, I often take two cases of conflicting problems, then debate with students, look for the cause of the problem, then find a solution and the impact it causes" [40]. Next, another informant added that: "core activities, I explain some theory, connect it with current and surrounding conditions, looking for relevance and related problems, and then examined the causes and solutions and the wisdom that can be taken from the case" [41].

The implementation strategy of problem-based learning encourages lecturers to explore looking for examples of cases or problems related to teaching material. In addition, the lecturer will find a solution to the problem with the viewpoint of the material being taught. Related to this, the lecturer provides a solution to the case / problem presented, as stated by the student that: "Yes, we are always told to provide solutions to the examples of problems given by the lecturer and in accordance with the teaching material framework" [46]. Then another informant continued that: "every example of a case or problem, always accompanied by how to solve problems in the scientific perspective of the course" [42], and the third informant also stated that: "it is always emphasized to us that in life there must be a problem, because life is a dynamic and the dynamics occur if there is a problem and the keyword is that every problem has a solution" [43]. The information provided by the informant confirms that the importance of learning using problem-based learning strategies because it can encourage students to be
more sensible and wiser and care about the environment when solving problems.

When the core activities have been carried out, then the next thing to do is the final activity or closing. In this activity lecturers usually provide closing statements and also evaluations of learning, both for the initial activities and core activities. Some informants gave responses, including in his statement that: "in the final activity, I usually give material conclusions, messages and impressions from examples of cases or problems, and reprimand to students who have not been able to focus on learning"[39]. Then, another informant also stated that: "Before I close the lesson, I usually give keywords as learning conclusions, both related to the material and examples of the problems discussed" [41]. Furthermore, another informant added that: "Before ending the learning, I evaluated students in the form of mastering the knowledge presented through dialogue, and ask for input regarding what needs to be addressed" [39]. The information shows that in the closing learning activities, lecturers provide conclusions of teaching material, convey the problem resolution keywords, derive messages and impression from each problem, give advice to students, and measure the level of learning achievement for students.

The implementation of learning is an embodiment of the planning of learning that has been prepared before. The success of the learning implementation is influenced by the quality of learning planning. Learning activities can be directed, systematic, and controlled because there are learning plans in the RPS as reference. The implementation of learning is divided into three, namely the initial activities, core activities, and final activities. The three activities are well designed, both in terms of content and time. Problem-based learning includes the initial activities, core activities, and final activities.

**Learning Evaluation**

Learning evaluation is an act of measuring and assessing learning, including achieving goals, synchronizing planning, effectiveness of implementation, obstacles that occur, and so on. Lecturers as executors of learning, always evaluate for improvement and effectiveness of subsequent learning. The common evaluations are the evaluations of process and product. The evaluation techniques carried out by lecturers may diverse, but the main orientation is the achievement of learning outcomes.

The implementation of learning evaluations, especially on the problem-based aspects, looks at the size of students' critical and creative thinking abilities. Thinking and creative abilities are the achievements that want to be obtained so that students can solve the problem as stated by informants, that: "evaluation in problem-based learning strategies I see it in terms of the ability of students to think critically and creatively in solving problems" [40]. Then, another informant stated that:" My form of assessment is the ability of students to criticize each problem according to the perspective of teaching materials, find causes, and solutions" [39]. The information shows that the evaluation of problem-based learning strategies implementation shows the students' critical and creative thinking skills. This was explained by the informant that: "If implementing a problem-based learning strategy, then the assessment
that I do is a response to problems, mastery of problems, causes of problems, impact problems, alternative solutions, relations with other sciences” [41]. Explanation of the informant shows that students will be driven to think critically and creatively if presented with problem-based learning.

Based on the information above, the assessment of problem-based learning can be formulated with indicators of critical and creative thinking skills, such as response, knowledge, cause, impact, resolution, and relations. Response indicators include student attitudes and concerns about the problems discussed; knowing indicators that is the level of student’s knowledge of the object of the problem being studied; indicator of cause, namely the ability of students to examine the cause of the problem studied; indicator of impact, namely the ability of students to see the impact that is born from the example case or problem; resolution indicator, namely the ability of students to find alternative solutions or the latest and best solutions to the problem; relation indicator, namely the ability of students to connect the problems studied in a multidisciplinary perspective. Next can be seen in the table, as follows:

**Table 1. Critical / Creative Thinking Ability to a Problem**

<table>
<thead>
<tr>
<th>No.</th>
<th>Student</th>
<th>Response</th>
<th>to Know</th>
<th>Causes</th>
<th>Impact</th>
<th>Resolution</th>
<th>Relation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
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<tr>
<td>TOTAL</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>3</td>
<td></td>
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</tr>
</tbody>
</table>

The category of critical thinking skills in the problem-based learning strategy ranged from the highest to the lowest category, such as the lowest is the number 0 and the highest is the number 5. Then calculate the percentage to collectively determine the level of critical / creative thinking abilities of students, using the formula, as follows:

\[
\text{Percentage} (\%) = \frac{\sum \text{The total of Students’ Scores} \times 100}{\sum \text{Number of Students}} \times \text{The Highest Score}
\]
With the criteria for evaluating the success rate of students by using percentages, as mentioned by Acep Yoni [47], as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Criteria</th>
</tr>
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<tbody>
<tr>
<td>75-100</td>
<td>Very High</td>
</tr>
<tr>
<td>50-74.99</td>
<td>High</td>
</tr>
<tr>
<td>25-49.99</td>
<td>Average</td>
</tr>
<tr>
<td>0-24.99</td>
<td>Low</td>
</tr>
</tbody>
</table>

**Table 2. Criteria of Assessment**

<table>
<thead>
<tr>
<th>No</th>
<th>Activity</th>
<th>Reference</th>
<th>Instrument</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Learning Planning</td>
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<tr>
<td></td>
<td>The arrangement of PBL-Based</td>
<td>Study Program Curriculum Based on</td>
<td>Doc. Curriculum</td>
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<td>RPS</td>
<td>KKNI</td>
<td></td>
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<td></td>
<td>Analysis of Objectives (LO)</td>
<td>LO of Subjects</td>
<td>Doc. Curriculum</td>
</tr>
<tr>
<td></td>
<td>Material Analysis</td>
<td>Courses’ Description</td>
<td>Doc. Curriculum</td>
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<td></td>
<td>Media</td>
<td>LO and learning material</td>
<td>Doc. Curriculum</td>
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<tr>
<td></td>
<td>Analysis Of Strategies/Methods</td>
<td>PBL and research’s result</td>
<td>Journals &amp; Study</td>
</tr>
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<td></td>
<td>Analysis of Evaluation</td>
<td>Assessment Based on PBL</td>
<td>Doc. Curriculum &amp; Study</td>
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<td></td>
<td>Analysis of Students</td>
<td>Lecturers and Students</td>
<td>Study</td>
</tr>
<tr>
<td>Analysis of Learning Problems</td>
<td>Research’s results</td>
<td>Journal &amp; Research Results</td>
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<tr>
<td>Analysis of Infrastructure</td>
<td>Study Program and classes</td>
<td>Study &amp; Document</td>
<td></td>
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<tr>
<td>Learning Implementation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial activity</td>
<td>PBL-based RPS</td>
<td>Attendance Apperception Orientation</td>
<td></td>
</tr>
</tbody>
</table>

The success level of students to participate in problem-based learning is an indicator of critical and creative thinking skills [49]. For the cumulative success rate an assessment with the categories mentioned above is given. If high category score is obtained by > 50%, then the lecturer is considered to have successfully implemented a problem-based learning strategy and also vice versa.

The problem-based learning management model can be described in the mapping of learning management functions, namely planning, implementation, and evaluation. Learning management functions are adapted to problem-based learning and refer to the curriculum owned by the study program. Learning planning activities formulate the learning devices by looking at graduates’ profile aspects, learning outcomes, course descriptions, learning strategies, and assessments. The activities of learning implementation in which there are three stages of activities, namely initial activities, core activities, and final activities. The initial activities including taking attendance, apperception, motivation, and orientation; core activities including exploration, elaboration and confirmation; and the final activities as closing include conclusion and evaluation. Furthermore, the activities of learning evaluation include assessment of processes and (end) products.

The description of the problem-based learning management model can be described in the following table:
Table 3. Management Model of Problem-based Learning

<table>
<thead>
<tr>
<th>Core activity</th>
<th>PBL-based RPS</th>
<th>Motivation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>Elaboration</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Final activity</th>
<th>PBL-based RPS</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td></td>
<td></td>
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</tbody>
</table>

Learning Evaluation

<table>
<thead>
<tr>
<th>Evaluation of Process</th>
<th>Critical and Creative Thinking</th>
<th>Indicator of Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation of Product</td>
<td>LO of Subjects</td>
<td>Written Tests &amp; Work</td>
</tr>
</tbody>
</table>

IV. CONCLUSION

The management model of problem-based learning in the Tarbiyah and Adab Department of Parepare IAIN has gone through planning, implementation, and evaluation. Problem-based learning planning includes the preparation of RPS by referencing on the study program curriculum based on KKN; the purpose of learning is based on learning outcomes of courses; to design the teaching material by incorporating novelty aspects, proximity, conflict, and humor; designing a system where students do assignments in groups to solve problems based on themes and present it in front of the class according to the specified schedule; designing problem-based learning strategies through studies, research, and experts’ discussions; preparing media that can support visualization and narrative of problem-based learning; to study the students for adjusting the case studies and research; designing evaluation system by referring to the development of students’ critical and creative thinking skills. The implementation of learning includes three stages of activities, namely the initial activities, core activities, and final activities. The initial activities consisting of taking attendance, apperception, orientation, and motivation; the core activities are consisting of exploration, elaboration and confirmation; the final activities are conclusion and evaluation. These learning activities, namely the beginning, the core, and the end, are applied by using problem-based, conditioned by the stages of learning activities. Learning evaluation is an action to measure and assess learning, including achievement of objectives, synchronization of planning, effectiveness of implementation, obstacles that occur, and so on. Learning evaluation has natures as process and product with educative, objective, authentic, accountable, and
transparent principles. The achievements measured from students are the ability to think critically and creatively with indicators of response, know, cause, impact, resolution, and relations. Responses include student concern for the problem, knowledge of the object of the problem (chronologically and descriptively), understanding the cause of the problem, understanding the impact on the problem, the ability to find alternative solutions to the problems being studied, and the ability to connect object problems with other disciplines (multidisciplinary). The test technique in evaluation is through observation of the ability to think critically and creatively using the existing test instruments.

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