Improving the Quality of Learning Through the Self-Directed Learning Model

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ABSTRACT

This research aims to analyze the improvement of the quality of learning in the application of the self-directed learning model in lecture material of Learning Assessment. This research was classroom action research, Kemmis & Taggart model. The research subjects were students of Economic Education Study Program, Faculty of Teacher Training and Education, University of Riau. Data were collected through observation and questionnaire. Data were analyzed descriptively based on indicators of performance achievement. The results of the research show that in general the use of self-directed learning models can improve the quality of learning both from the aspect of the lecturer and from the aspect of the student. This was indicated by the average learning quality score which increased from 3.9 (good) in the first cycle, to 4.6 (very good) in the second cycle. The average score of student learning independence at the beginning of the first cycle was only 3.8 (sufficient) while in the second cycle it increased to 4.3 (high). In terms of student responses to the application of the self-directed learning model, 82.6% of students stated that they strongly agreed and agreed, the remaining 15.8% of students disagree, and 1.6% strongly disagree. It is recommended to lecturers and teachers to improve the quality of learning through the model of self-directed learning by adjusting the learning objectives.

Keywords: learning quality, instructional model, self-directed learning.

INTRODUCTION

21st century life requires a variety of skills that must be mastered by someone, so education can be expected to prepare students to master various skills in order to become a successful person in life. Important skills in the 21st century are critical thinking skills and problem solving, collaborative skills, creative skills and communication skills, and also practice the main values of character including independence, hard work, creative, disciplined, courageous and learners. The learning process requires the efforts of the teacher to organize the components of learning for students to achieve learning goals so that they can help students learn well. The quality of learning is an effort to organize the environment in which learning occurs which includes organizing strategies, delivery strategies and management strategies with the students' subjects to run and produce better output.

The World Innovation Summit for Education (WISE), which conducts surveys related to the projected appearance of a school, estimates that the education system will undergo major changes by 2030. Schools will become interactive environments because innovation in technology and curriculum will fundamentally change the role of teachers and reshape the overall learning (Margaret, 2014). The survey also revealed that innovation is an integral part of the future of education. Because, 93 percent of education experts say, they support schools that implement innovative methods based on new teaching approaches and creative processes.

Clark (Eko, 2012) concluded that student learning outputs in schools were 70% influenced by students' abilities and 30% were influenced by the environment. One of the most dominant learning environments affecting learning outputs in schools is the quality of teacher learning. Indicators of the quality of learning can be seen, among others, from the learning behavior of the teacher, the behavior and impact of student learning, the learning climate, learning materials, learning media, and learning systems. Teacher learning behavior can be seen from its performance, among others: (1) building positive attitudes of students towards learning and profession, (2) mastering scientific disciplines (3) teachers need to understand the uniqueness of students, (4) master management of educational learning, and (5) develop personality and professionalism (Ministry of National Education, 2004).

An important problem that is often encountered by educators in learning activities is choosing or determining the right learning model in order to help students achieve their competencies. This is due to the fact that the ability of lecturers is limited in choosing innovative learning models in higher education that are in accordance with future demands. One effort to improve the quality of learning is through the development of innovative learning models. The learning model should be designed and developed innovatively which is student centered. That is, learning that provides more opportunities for students to construct knowledge independently (self directed) and mediated by peers (peer mediated instruction). Innovative learning bases itself on a constructivistic paradigm.

One model that can be used to improve the quality of learning is self-Directed Learning (SDL). The Self-Directed Learning (SDL) model will direct students to have initiatives, with or without the help of others, to analyze their own learning needs, formulate their own learning goals, identify learning resources, choose and implement appropriate learning strategies and evaluate their own learning achievements (Maurice Gibbons, 2002; Mark Easterby-Smith, et al 2011; and Vincent D. Wiggins, 2015). The SDL model emphasizes skills, processes and systems rather than fulfilling the contents and tests. Through the application of SDL, students are given autonomy in managing their learning which will lead to learning independence.

Independence of learning (self-direction in learning) can be interpreted as the nature and attitudes and abilities possessed by students to carry out learning activities alone or with the help of others based on their own motivation to master a competency so that they can be used to solve problems encountered in real life (Sunarto, 2008). As Maurice Gibbons (2002) stated that self-directed learning is defined as a process where a person has an initiative, with or without the help of others to analyze his own learning needs, formulate his own learning goals, identify learning resources, choose and implement learning strategies accordingly and evaluate the learning outputs themselves. The implementation of the development of this innovative learning model is expected to prioritize the personal experience of students. The development of innovative learning models is a learning model that is designed in such a way that students can find facts, build concepts and theories with students' own process skills and scientific attitudes in accordance with the demands of teaching 2030.

According to UNESCO (2015), higher education must be responsible for providing opportunities for students to build scientific capacity during their academic journey. This can be done by empowering students through innovative and high-quality teaching and learning processes that are not limited to classrooms, requiring them to solve real-life problems, thus enabling the development of gradual independent learning. This process involves regulating learning objectives, managing their learning activities and applying appropriate skills and strategies to achieve learning goals (Knowles, 1975). The characteristics of students who are very independent are initiative and perseverance in learning, acceptance of responsibility for their own learning, goal orientation, strong ability to learn independently, self discipline, seeing problems as challenges, pleasure in learning and high curiosity (Guglielmino, 1978). Self-study does not only focus on accumulation of knowledge, but is developed as part of a process where

students gain experience in a particular domain. In this case, Bagheri et al. (2013) claim that 'independent learning is one of the best ways to learn'.

RESEARCH METHODS

This research is a classroom action research. The research was conducted in two cycles at the even semester of 2018 on the Economic Learning Assessment Course of the Economic Education Study Program FKIP University of Riau, involving 40 students, a lecturer as the main researcher and at the same time as the perpetrator of the action, and two teaching assistants as observers. This action research refers to the Kemmis and Mc Taggart (1988) models which are carried out through several stages, namely: the planning stage, the implementation of actions, monitoring and results as well as evaluation and reflection. Data was collected through observation, questionnaires, and documentation. Observations for carrying out systematic records of direct behavior by groups or individuals. Questionnaires to reveal students' opinions about the quality of learning using a model of self-directed learning during the learning process; while the documentation to get important notes relating to the problem of classroom learning, and interviews to obtain input from students to improve the learning process. The instruments used in this study include observation sheets, questionnaires, and interview guidelines. Data were analyzed by quantitative descriptive analysis, which is classified and categorized systematically according to its characteristics.

RESULTS AND DISCUSSION

The implementation of cycle 1 begins with the orientation of the model of self-directed learning, which includes an explanation of the syntax of the model, contract learning and assessment. The learning process activity begins with a pre-planning step, namely the lecturer presents the material and indicators of achievement of competencies, and accommodates various problems faced by students relating to the topic / material to be studied. Lecturers strive to create a conducive learning environment by generating learning motivation and preparing students to study. The next step is to develop a learning plan, the lecturer gives recommendations and some descriptions of the problems that can be developed by students in learning. Some of the problems that can be developed by students in cycles 1 and 2 are: (1) why do teachers need to develop HOTS questions?; (2) What are the characteristics of HOTS questions and the difference with the questions instead of HOTS?, (3) What is the cognitive level, and the steps to compile the HOTS problem? (4) How are the sample forms of HOTS in accordance with the Basic Competencies of each for the High School Economics subjects, and (5) What is the role of the HOTS problem in the assessment.

The next activity is the student arranges a learning plan including learning objectives, learning facilities, learning targets, and all activities related to the achievement of learning objectives. Lecturers in this case play a role in assisting students either independently or collaborating. On the step of identifying learning activities, students independently choose and identify learning strategies that are relevant to the learning targets to be achieved. Then students implement the chosen learning strategies, they can learn independently or in groups, while the lecturers monitor and observe the learning activities. The last step of learning is evaluating learning outputs, with lecturers and students discussing to solve unresolved problems, and continuing by collaborating with the knowledge gained by students. At the end of the lesson, students evaluate the learning activities that have been carried out and then reflect on the mistakes and disadvantages of each. All learning contracts are documented to be used as

material for reflection, evaluation and analysis of the learning process. The learning process stated above generally takes place at lecture meeting of each cycle. Some improvements were made based on the results of reflection at each lecture meeting.

In general, the learning process in the first cycle was conducive. Regarding the independence of student learning that is captured through questionnaires reflects the ability to manage learning independently (Dewi Oktofa R, 2010), including: self-management; desire for learning; and self-control. The results of the analysis of student learning independence at the beginning of the first cycle (before the implementation of the action) showed that the mean score 3.8 (quite high) and mean-score student learning independence after the implementation of the first cycle increased to 4.1, this mean that an increase of 0.3, but the results this is not in accordance with the criteria of success (performance) that have been set 4.2. In the second cycle, mean-score learning independence of students 4.3 entered high qualifications. These results exceed the success criteria set out in this study.

Regarding the quality of lecturer learning that is captured by using a questionnaire that reflects the behavior and performance of lecturers in implementing learning that includes ten indicators, namely: delivery of topics and indicators; identify and accommodate every problem that is conveyed by students related to the topic; creating a conducive learning environment; arouse learning motivation and prepare students to learn; accompanying students in compiling their learning plans; facilitate students in realizing the learning strategies chosen by students; discuss with students in solving problems they find; managing educational learning; develop character, personality and professionalism; and conduct evaluations. The results of the analysis of the quality of learning in the first cycle showed that the mean score was 3.9 (good), but this result was not in accordance with the criteria of success (performance) that had been set, 4.2. In the second cycle, mean-score learning quality 4.6 entered very high qualifications. These results exceed the success criteria set out in this study.

Finally, the students 'responses to the application of the self-directed learning model by using questionnaires were used to capture students' opinions about the learning process experienced and felt by students using models of self-directed learning. The results of the analysis turned out to be student response scores, 82.6% stated strongly agree and agreed; 15.8% gave a disagreeable response, and 1.6% of students gave responses strongly disagree with the model of self-directed learning used in the Learning Evaluation lecture on the subject matter of the Higher Order Thinking Skills (HOTS).

DISCUSSION

One aspect that needs to be considered in learning is the use of effective and innovative learning models so that the implementation of learning can be more varied, run smoothly and quality. In addition to the quality of learning problems that are not based on learning outputs, sometimes the learning styles that exist in each student are in accordance with their respective characteristics, so that the quality of the learning process itself is not good which ultimately leads to learning outputs and student learning independence which is not optimal.

The use of the self-directed learning model is new and unfamiliar for students, especially for students who all this time prefer to be spoiled by lecturers who always explain specifically about all the material, therefore various responses or responses given by students are related to the quality of the process. learning, as well as his opinion on the use of the model. Moreover, this model of self-directed learning places more emphasis on skills, processes, and systems than fulfilling content and tests. Through the application of this model, students are given autonomy in managing their learning (planning, determining strategies, managing to evaluating), which ultimately leads to the achievement of learning independence.

The results of the analysis of student learning independence at the beginning of the first cycle (before the implementation of the action) showed that the mean score 3.8 (high enough) and mean-score student learning independence after the implementation of the first cycle increased to 4.1, this means that an increase of 0.3, but this result is not in accordance with the success criteria (performance) that has been set, 4.2. In the second cycle, mean-score learning independence of students 4.3 entered into high qualifications. These results exceed the success criteria set out in this study. Independence of learning is a learning skill that in the individual learning process is pushed, controlled, and assessed by the individual himself (Lilik et al, 2013). Variants of the results of learning independence occur because students are not accustomed to independent learning; so far, students usually tend to accept explanations from the lecturer as the main source after which they are just doing other tasks or activities both individually and in groups. On the contrary, in the self-directed learning model students have begun to get involved from determining problems, planning learning, implementing it themselves to evaluating. In connection with these problems, the effort to solve is done through planning in the second cycle, namely by explaining again the importance of independent learning along with its strategy, including in determining the target of achieving learning outcomes (Roger Hiemstra, 2011).

Viewed from the process of using this model of self-directed learning by students, based on the results of observations and interviews with students, in the first cycle it is known that students have not fully involved themselves especially in terms of developing problems and in determining activities and learning strategies according to themselves so as to influence achievement targets study. In connection with these problems, the effort to solve is done through planning in the second cycle, namely by giving intensive guidance to students who are still having difficulty in developing problems, and providing information on various choices of learning strategy activities that can be chosen by students. In addition, students are reminded of the importance of responsibility for agreed learning contracts. After these various efforts were made, in the second cycle there was an increase in students' ability and enthusiasm using the model of self-directed learning.

The results of the analysis of the quality of education in cycle 1 are indeed classified as good (3.9) but still have not reached the desired criteria (4.2). The problem of the quality of learning is related to: the lecturer has not been optimal in identifying and accommodating every problem presented by the student; arouse learning motivation and prepare students to learn; facilitate students in realizing learning strategies chosen by students; and evaluate. This factor which is the cause is not fully the role of students in involving themselves in learning using the self-directed learning model as seen in the results of cycle 1. Efforts to overcome these problems are done through planning improvements in cycle 2 namely increasing the intensity and focus in guiding students to develop problems in accordance with the expected learning outcomes. Its efforts in the form of discussion and enlightenment activities related to the experience of lecturers and the results of relevant research on the problems faced by teachers in the preparation of HOTS-based tests. In addition, it is also carried out to reintroduce the forms of learning activities and strategies that can be chosen by students according to their wishes. Whereas the evaluation problem which in the first cycle is only question and answer without involving all students involved, the score given by students is also not optimal. In the case during the learning process, the lecturer has also made an assessment based on the observation sheet and the results have also been delivered before the learning in the first cycle ends. After various efforts, in the second cycle there has been an increase in the score of 4.6 (very high), meaning an increase of 0.7 points.

Judging from the students' responses to the application of the self-directed learning model implemented after the first and second cycles, it turned out that the student responses were 82.6% stated strongly agree and agreed; 15.8% gave a disagreeable response, and 1.6%

of students gave responses strongly disagree with the use of the self-directed learning model in Learning Evaluation lectures on the subject matter of the Higher Order Thinking Skills (HOTS). This shows that not all students respond well to this model as a model that can improve the quality of learning. The number of students who disagree and strongly disagree is 17.4%, seen in the items: the model of self-directed learning makes it difficult to solve the problem of preparing HOTS questions; study this material by using a model of self-directed learning to be stressed; the model of self-directed learning makes it less skilled; and it becomes difficult to understand material. On the other hand, items that have a very good score mean that those who choose are very agree especially on the items: studying HOTS preparation material using a model of self-directed learning can explore oneself; make learning more active; and learning HOTS preparation materials using the self-directed learning model trains more daring to appear in learning.

Student responses that are less positive towards this model are caused by students not yet accustomed to learning and working independently, not yet accustomed to finding problems, not yet accustomed to compiling their own learning plans and targets to be achieved, not yet accustomed to determining appropriate forms of activities and strategies for managing their learning , and students are not accustomed to evaluating themselves. The principle is that students are not familiar with the self-direction learning model; things will work because they usually do it. In this case in the self-directed learning model, there is a process where each individual (student) takes the initiative, with or without the help of others, and the process in self-directed learning is done by realizing his own needs in learning, managing personal goals, making decisions on source and strategy of learning and assessing results (Maurice Gibbons, 2002; and Vincent D. Wiggins, 2015). Thus through the application of the self-directed learning model can provide great opportunities for students to analyze their own learning needs, formulate goals and targets) self-study, identify self-learning resources, choose and implement appropriate learning strategies and evaluate their own learning, both with own way or through the help of others. Giving autonomy to students in managing their learning can foster and improve their ability to control and direct their own learning, which in turn will be able to improve learning independence, learning activities and student learning outcomes (Dewi Oktofa Rachmadani, 2010; Mairi Sukma, 2016).

In order for this self-directed learning model to be effectively implemented to create quality learning (Mentz et al., 2016) and to realize the achievement of learning outcomes, there is a need to change the learning paradigm; especially from the habits of students who are only involved in listening to lectures passively becoming actively involved directly in learning activities through activities to disclose information that has not yet surfaced, analyze data, presentations, resolve contextual problems in learning and others. Next, this method is stated by saying: 'we need to change the focus *of what needs to be learned* into *how to learn*'. This is in line with the constructivism view that knowledge will be able to grow and develop through experience (experiment) by each individual. Because in constructivism learning, students learn from complex problems to be solved, then produce or find the necessary skills (Barbara et al, 2008).

Another thing that can be done is to create conducive learning conditions and environments as stated in the learning theory by Ivan Petrovich Pavlov, Edward Lee Throndike and Burhus Frederic Skinner that the point of learning will take place effectively and pleasantly if the learning conditions and environment also support. Finally another effort that can be done is by providing professional services in learning, meaning that lecturers are able to provide learning experiences that are diverse both mentally, physically, and socially. In addition, lecturers must be able to manage learning places, material / content, learning activities, and learning resources in such a way that allows students to be actively involved in learning. The

point is lecturers must be able to manage and create diversity in learning so that they can meet various levels of abilities and characteristics of students.

CONCLUSION

Higher education must be responsible for providing opportunities for students to build scientific capacity during their academic journey. That can be done by empowering students through innovative and high-quality teaching and learning that is not limited to classrooms. The model of self-directed learning is one of the effective learning models to create quality learning and foster learning independence for students. This model requires students to have initiatives, with or without the help of others, to analyze their own learning needs, formulate their own learning goals, identify learning resources, choose and implement appropriate learning strategies and evaluate their own learning achievements.

The results of this study show an increase in the quality of learning both in terms of aspects of behavior and lecturer performance and viewed from aspects of student learning activities. In addition, viewed from the aspect of student learning independence, this learning model also shows an increase from cycle 1 to the next cycle. This indicates that the students response to the use of this model were also positive. It was indicated by the findings of most students giving responses strongly agreeing to use this model in learning, however there were still 17.4% of students lacking and disagreeing to use this model in learning.

There are still students who disagree in the use of this model basically because the students are not yet accustomed to independent learning because they tend to prefer to receive explanations directly from their lecturers. Though this model is a process where every student takes the initiative, with or without the help of others. The process in this model is done by being aware of one's own needs in learning, arranging his own learning goals, making decisions for the sources and strategies of learning and assessing learning outputs.

In order for this model to be effective in improving the quality of learning and can foster self-reliance in learning among students, a paradigm shift in learning is needed, especially from the habit of students who are only involved in listening to lectures passively becoming actively involved in learning activities. Its activities include disclosing information that has not yet surfaced, analyzing data, presentations, resolving contextual problems in learning and others. Another effort that can be done is that lecturers try to create a conducive, effective, challenging and enjoyable learning environment in accordance with the principles of learning, and can also be done by increasing professional service delivery.

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