The Implementation of Inquiry Training Model to Improve Student’s Independence Learning

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Abstract—The purpose of this research is to find inquiry training instructional model in order to improve student’s independency learning. Classroom action research approach was implemented in this research. The subjects of this research were students of class VI at Public Elementary School IX in South Bengkulu. The data of this research were collected by using student’s learning independency observation sheets. The data was analyzed by using mean statistics. The results of this study show that the inquiry training instructional model can improve student’s independency learning in class VI at Public Elementary School IX in South Bengkulu.

Keywords—class room action research; inquiry training; instructional models; independency learning

I. INTRODUCTION

Basic education is a level of formal education held in Indonesia by referring to Law Number 20 of 2003 concerning the National Education System Article 15, which functions to instill values, attitudes, and a sense of beauty, as well as to provide the basics of knowledge, abilities, and reading, writing and numeracy skills and learning capacity of students to continue to secondary education and / or to live in a community, in line with the achievement of national education goals [1].

Students who study at the primary education level, especially in elementary schools are children who are physically healthy, active and agile with motor skills that develop very rapidly, including social aspects [2]. In relation to the independence of children at the primary school stage, it is indicated by the conflict, on the one hand the child has the ability to create something, but on the other hand because the results are not perfect, they often feel inferior.

Learning independence is an effort to conduct learning activities independently on the basis of his own motivation, to master a particular material, so that it can be used to solve the problem at hand. In learning independence, a student must be proactive and not dependent on the teacher. Independence includes being able to take initiative, being able to overcome obstacles or problems, having confidence and being able to do something yourself without the help of others. In learning, students are required to be able to study independently. Independence in learning means, students have a desire to progress for the sake of self-improvement, able to take decisions and initiatives to overcome problems, have confidence in doing assignments, and are responsible for their actions.

In every learning implementation, the teachers have made various efforts to improve student learning independence. One effort to improve the independence of learning by implementing active, innovative, creative and fun learning (PAIKEM). Based on the results of interviews and discussions with elementary school teachers, information was obtained that through PAIKEM learning showed the results of students who were smarter and smarter and more independent in their learning, while the ignorant grew increasingly stupid and learning increasingly dependent. Learning achievements obtained by their students also showed a widening gap between students who were classified as having relatively high abilities and students who were classified as having low abilities. This appears when faced with questions and tasks that require mastery of application level knowledge, analysis, evaluation and creating.

The low achievement and independence of learning they have due to the application of PAIKEM learning has the phenomenon that only active learning processes that occur are those who belong to smart groups. While those who belong to the lower middle class, their achievements tend to only be a complement to learning activities. The importance of independence and learning achievement is in line with the research of Saefullah which shows that there is a significant (meaningful) positive relationship between attitudes toward learning independence and learning achievement [3]. This means, the better the attitude of learning independence that students have, the better the learning achievement achieved by students.

The description of the experience of self-reliance and the learning achievement of the students is certainly very concerning to prepare the next generation. Future generations are expected to have the competence and independence in learning as expected in the learning objectives in elementary school.

Based on these learning outcomes, the learning process in elementary schools needs to be further engineered so that students’ independence and learning achievement increase or
are as expected. The inquiry learning exercise model is a learning model that provides opportunities for students to move forward according to ability [4]. This means that students who belong to smart and stupid groups experience their learning progress according to their respective abilities. In connection with this, researchers want to try to improve the independence of elementary school students’ learning through inquiry learning exercise models.

Inquiry training models are clusters of information processing learning. According to Sukmadinata the inquiry learning exercise model serves to develop the ability to realize students’ curiosity through exploration or inquiry, provide direction so that students can explore the things intended in a more directed manner and aim to help students develop intellectual abilities and skills, in raising questions and looking for answers regarding things they want to know [5-7]. The concept of the inquiry training model is due to the curiosity of the great students. The inquiry training model is one of the learning models that has the steps of confrontation with problems, data-verification verification, data-gathering experimentation, formulating explanations, the last is analyzing the inquiry process.

The advantages of the inquiry learning exercise model is, a) students will understand the basic concepts and ideas better; b) help in using memory and transfer in new learning process situations; c) encourage students to think about initiatives and formulate their own hypotheses; d) encourage students to think and work on their own initiative; e) provide intrinsic satisfaction; f) the situation of the learning process becomes more stimulating; g) students are directed to always active, independent, effective and creative learning so that their independence and learning achievement will increase [3].

Seeing the advantages of inquiry learning exercise models, this learning model needs to be done because this will enable students to be able to learn easily and independently. They can learn from the simple to the complex, from the real to the abstract, and from the near to the far. The problem is: "How is the right inquiry learning exercise model done so that it can increase student learning independence?" In connection with these problems, this study aims to improve student learning independence by applying the learning model of inquiry training in class VI Public Elementary School IX South Bengkulu.

II. METHOD

The design used in this study is a study of classroom action research developed by Kemmis and McTaggart, namely through the cycle: a. Plan, b. Act & Observe, c. Reflect [4]. The subjects of this study were the sixth-grade students of State Elementary School IX South Bengkulu. Data collection techniques in this study use observations and rating scales. Analysis of research data using descriptive statistics, and data that cannot be analyzed by statistical formulas will be narrated then given an argument.

In cycle I the steps of the inquiry learning exercise model are as follows: Phase 1: (a) Provide general explanation of inquiry training procedures, (b) Present some events that contain gaps, (c) collect data and verify, (d) formulate objects and conditions, and (e) formulate events that contain problems. Phase 2: Collecting and verifying data that has been obtained from various sources carried out individually and in groups through discussion activities. Phase 3: Trying to find, explore, and collect information from various sources to answer problems or questions posed in groups and conduct tests of temporary answers or hypotheses. Phase 4. Formulate the results of testing hypotheses as learning outcomes through discussion. Group learning outcomes are discussed classically accompanied by the teacher. Class discussions are conducted led by a chairman, moderator and secretary who is in charge of leading the discussion and formulating the results of class discussions as a result of the findings of the class. Phase 5: Formulate the conclusions of learning outcomes obtained during the learning process by following the guidance and direction given by the teacher.

III. RESULTS AND DISCUSSION

Based on a mutually agreed scenario, the teacher conducts learning while the researcher observes and assesses students’ learning independence. After learning, the researcher and the teacher reflect on the results of the activities that have been done. The results of the assessment of student learning independence in this cycle I is reaching an average of 2.73 with the category “Good”. Based on the reflection done, even though the results are good, but there is still something lacking, students are still lacking in the ability to overcome problems, students are less active in initiative, students are still less active in finding new ideas, students are still less creative, and students are still less skilled in taking decision.

Based on the reflection, it needs improvement in the implementation of the learning process with the lack of inquiry training. These deficiencies are: (1) Teachers are still lacking in guiding formulating problems that contain problems, (2) teachers are still lacking in guiding formulating rules and providing explanations, (3) teachers are still lacking in guiding analyzing inquiry exercises, and (4) teachers still lack guidance in developing a more effective inquiry strategy.

In cycle II the steps of the inquiry learning exercise model are generally the same as in cycle I, by correcting the deficiencies found in the implementation of the inquiry learning exercise process in cycle I. Based on the agreed scenario, the teacher implements the inquiry learning exercise model, while the researcher observes and assesses towards student learning independence. Based on the results of observations and assessments there was an increase in scores on student learning independence. The average score of learning independence obtained by students in the second cycle was 3.35 with the category "Very Good". Every aspect of student independence indicator has been fulfilled well, even some of them are very well categorized. In connection with the criteria of success of the study has been achieved in the second cycle, then the study examines the action of this class does not need to proceed to the next cycle.

Based on the data obtained that the learning independence of the sixth-grade students of Public Elementary School IX South Bengkulu can be improved through the inquiry learning exercise model. Through the inquiry learning exercise model,
students’ independence can be improved from good categories in cycle I to excellent categories in cycle II. This means that the teacher must not be satisfied with the learning independence of the students achieved so far. A teacher can engineer the learning process or create learning conditions that they do in a way that can improve learning processes and outcomes. According to Gagne learning outcomes will increase if the teacher is able to create conditions or a conducive learning environment [8]. The learning process is said to be conducive if the learning process received by students is interesting, effective, efficient, not boring, and students are actively involved in the learning process [9,10].

The findings of this study in accordance with the opinion of Bandura which states that student learning outcomes (learning independence) in the form of the development of students’ abilities and skills will be determined by the results of the interaction between internal conditions of student learning in the form of cognitive conditions and processes of students with external learning conditions in the form of environmental stimulus [11]. Thus, through this inquiry learning exercise model students experience their own learning process starting from formulating problems that contain problems, collecting and verifying data, trying to find, explore, and gather information from various sources to answer problems and test hypotheses, and formulate results hypothesis testing as learning outcomes [12].

IV. CONCLUSION

Based on the results of the research and discussion of the findings above, it can be concluded that the application of the inquiry learning exercise model can increase the independence of the sixth-grade students of Public Elementary School IX South Bengkulu. This inquiry learning exercise model can be done by: (1) providing a general explanation of inquiry training procedures and formulating problems that contain problems, (2) collecting and verifying data that has been obtained from various sources carried out individually and in groups through discussion activities, (3) trying to find, explore, and collect information from various sources to answer problems in groups and test hypotheses, (4) formulate the results of testing hypotheses as learning outcomes through discussion, and (5) formulating the conclusions of learning outcomes obtained during the process learning by following the guidance and direction given by the teacher.

It is recommended to elementary school teachers, in order to improve student learning independence, it can apply the inquiry learning exercise model. The inquiry learning exercise model procedure can be carried out by the following steps: (1) the teacher provides a general explanation of the inquiry training procedure, (2) students in groups practice formulating problems that contain problems with teacher guidance, (3) students collect and verify data that has been obtained from various sources carried out in groups through discussion activities, (4) students with the guidance of teachers trying to find, explore, and collect information from various sources to answer problems in groups and test hypotheses, (5) guided students formulate the results of hypothesis testing as learning outcomes through discussion, and (6) students formulate the conclusions of learning outcomes that can be obtained during the learning process by following the guidance and direction given by the teacher.

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