

Development of Inquiry Learning Model in Islamic Religious Education (PAI) Subject in Elementary School

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Abstract—Basic implementation of learning Islamic Religious Education (Law No.20 of 2003, PP No.5 of 2007). Researchers found problems in the implementation of learning PAI, the dominant was cognitive, and the learning method used tended to lecture, the lack of critical thinking, systematic, analytic development, and the independence of learning. This had an impact on the interest of learning so that the students were not accustomed to construct the knowledge. One of the alternative ways to solve the problem is to develop an inquiry model of learning. This PAI inquiry learning model is designed with the ADDIE model. Data were collected using questionnaires, observations, interviews and tests to determine the effectiveness of the model. Data were analyzed using qualitative and quantitative methods with Aiken analysis technique. Based on the results of the study note that the Category Book was very valid with score of 0.847, BPKP was very valid with a score of 0880, and BPKPD with 0879 was very valid. Practical aspect was very practical with score of 3.23, BPKP was practical with score of 3.32, BPKPD was practical with score of 3.08. The effectiveness of the model was analyzed by SPSS-assisted version of T-count 20, based on the results of the calculations, it was found that there was a significant difference between the pre-test and the post test, thus the model was effective for use.

Keywords—learning; PAI; inkuiri; book model; BPKP; BPKPD

I. INTRODUCTION

The development of the potential of learners to become human beings who believe and pious to the One God, morality, healthy, knowledgeable, capable, creative, independent and become citizens of democratic and responsible (Law No. 20 of 2003). To achieve these goals the subject of Islamic Religious Education (PAI) should be studied in all types, levels and paths of education, (Law Sisdiknas article 27).

Based on the researcher interview with PAI educators when KKG PAI on June 13, 2015, and the researcher observation when the PAI learning process, can be concluded that the learning of PAI was still dominant cognitive that emphasizes to the transfer of science, general method was conventional-traditional (lecture method - teacher oriented) consequently the

students became passive learners, cognitive religious knowledge which was unable to transform it into "value" that "meaningful" in life [1][2].

To overcome the problem of developing inquiry model in the subject of PAI, the model or learning strategy of the inquiry makes the learner become subject of learning. Inquiry learning is series of learning activities that emphasize critical and analytical thinking processes to search and find the answers of the problems. The thought process itself is usually done through question and answer between educators and learners [3]. This learning strategy is often called the heuristic strategy, which comes from the Greek word *heuriskein* which means I find. Moreover, some of the advantages possessed in the inquiry strategy, and many are recommended to use, the advantages are: 1) Inquiry learning strategy is a learning strategy that emphasizes on the development of cognitive, affective, and psychomotor aspects in a balanced way, so that learning through this strategy is considered more meaningful, this is in accordance with the results of research conducted by Farida at SMU NU 01 Muallimin Waleri semester 1 academic year 2010-2011. The result of his research stated that learning Inquiry Discovery Learning can improve student's learning and psychomotor result, 2) inquiry learning strategy can give space to students to learn according to their learning style, 3) inquiry learning strategy is a strategy that is considered in accordance with the development of modern learning psychology considers learning is a process of behavior changes based on experience, 4) another advantage is this learning strategy can serve the needs of students who have above average skills, that is, students who have good learning ability will not be hampered by students who are weak in learning.

The research of Atta Illah at SMP Miftahul Imam Bandung, entitled Implementation of Inquiry Model in Learning PAI to increase student learning activity, and the research conducted by Ernawati with title Implementation Inquiry in Learning Qur'an Hadith in class XI MAN 1 Kandangan, both of the result of this studies suggest that the inquiry learning model can increase the learners' activity maximally, this learner in the process of learning to search and find knowledge by itself or in

groups, meaning inquiry model puts learners as subject learning [4].

II. REVIEW OF RELATED LITERATURE

A. The Characteristic of PAI Learning at Elementary School

Islamic Religious Education as one of the subjects to be taught in primary and secondary education (UUSPN article 27). In the document Dediknas Curriculum 2004 h.2 states, what is meant by PAI is a conscious and planned effort in preparing learners to know, understand, live to believe, piety and noble in implementing the teachings of Islam from the main source of the holy book of Al-Quran and Hadith through guidance, teaching, training and use of experience. Accompanied by guidance to respect the followers of other religions in relation to harmony among religious people in society until the realization of unity and national unity.

The learning function of PAI in schools are: a) the inculcation of Islamic teachings as guidance to achieve happiness of life in the world and in the afterlife, b) the development of faith and piety to Allah SWT, and noble learners as optimal as possible, which have been first invested in the family environment, c) mental adjustment of learners to the physical and social environment through PAI, d) improvement of mistakes, weaknesses of learners in belief, practice of Islamic religion in everyday life, e) prevention learners of the negative things of the foreign culture that will be faced daily, f) teaching of religious science in general, system and functional, and g) the distribution of students to deepen religious education to higher education institutions [5].

B. Inkuiri Strategy Learning

The word "Inquiry" comes from English, that is, "inquiry" means participating, or engaging, in asking questions, seeking information and conducting an investigation. The inquiry learning strategy is a series of learning activities that emphasize the critical and analytical thinking process to search and find the answers [3][6]. The process of thought is usually done through question and answer between teachers and students. Thus, the inquiry learning strategy puts the teacher not as a source of learning, but as facilitator, and motivator. Learning activities are usually done through a question and answer process between teachers and learners. Therefore, the ability of teachers in using questioning technique is a key to do the inquiry. Third, the purpose of using inquiry strategy develops systematic, logical and critical thinking, or expands intellectual ability as part of mental processes.

C. The Steps of Inkuir Learning

In general, the learning process using inquiry strategy follows the following steps, 1) orientation, 2) formulate the problem, 3) propose the hypothesis, 4) test the hypothesis, 5) formulate the conclusion [3]. There are five steps taken in implementing this inquiry learning strategy as follows 1) formulation of the problem should be solved by the students, 2) Set the temporary answer or known as the hypothesis, 3) student searching for information, data, facts to answer the problems / hypotheses, 4) drawing conclusions or

generalizations, and 5) applying conclusions in new situations [7].

III. RESEARCH METHODOLOGY

A. Types and Research Models

Type of this research is research and development (R & D) with ADDIE (Analysis, Design, Development, Implementation, and Evaluation). In summary the development procedure of this study can be seen in the following table:

TABLE I. THE SUMMARY OF ADDIE MODEL ACTIVITY

Development Stage	Activities
Analysis	The needs of analysis through interviews and observations with teachers of Islamic Religious Education subjects are about: a. Analysis of instructional characteristics b. Analysis of the characteristics of learning 2. Problem Identification: interview with PAI teacher
Design	1. Setting learning goals 2. Designing scenarios and learning activities 3. Designing learning materials and learning tools
Development	1. Making the design of PAI inkuiri learning model 2. Make a draft of teacher workbook 3. Creating a workbook design for learners
Implementation	1. Applying the model that has been compiled at the elementary school that become the object of research a. Conducting observations on the implementation of the PAI inkuiri learning model b. Activity of learners in PAI inkuiri learning model c. Students' satisfaction with learning material as a result of implementation of PAI inkuiri learning model
Evaluation	1. Conduct a test of practicability 2. Conduct effectiveness test.

B. Test Model and Subject

The subject of this research was the students in V grade Elementary School of 31 Balai Labuah Lima Kaum Batusangkar academic year 2016-2017 semester 1. This was quantitative and qualitative research. Quantitative data, referred to: 1) data collected through the questionnaire about the needs of the development of inquiry learning model, 2) the validity of inquiry learning model of PAI 3) the practice of inquiry learning model PAI 4) the effectiveness of PAI inquiry learning model. Qualitative data was intended to generate data about PAI Learning Model Development Needs with inquiry model. Based on the types of data and data collection techniques, there were several kinds of data collection

instruments. These instruments included: interview guides, questionnaires, observation sheets, and validation sheets

C. Data Analysis Techniques

The data in this study consists of qualitative and quantitative analysis. Qualitative data was analyzed by this following formula [8, 9]:

$$V = \frac{\sum s}{n(c-1)}$$

IV. RESULTS OF RESEARCH AND DISCUSSION

This development research produced products in the form of model books, educator work manuals and workbooks of learners. So, based on the validation of experts on the book category, it categorized very valid with the score of 0.847, the manual book of educators categorized very valid with a score of 0.880, while the workbook of learners also belonged to very valid with a score of 0.879. Judging from the practical aspect of the model book in the implementation of learning was in the category of very practical with a score of 3.23, educator work manual on the aspect of its usage was also very practical with a score of 3.32, while the use of the workbook manual was in the practical category with a score of 3.08. Based on the data mentioned above it can be cited that the model of inquiry learning on the subject of Islamic education with material the life story of Prophet Ayyub As, Moses As, and Isa AS worthy to use. The effectiveness of this model is seen from the aspect of the learner's activity, in this case obtained the average score of the students 70.95% of this indicates that the students were active learners, effectiveness is also seen from the results learner's data shows the existence of differences between pre-test and posttest before and after implemented model, this result obtained by using t-test formula and assisted SPSS 20, the results were:

TABLE II. PAIRED SAMPLES STATISTICS

		Mean	N	S	s ²	Minimal Value	Maximal Value i
Pair 1	Pretest	72,8800	25	7,270	52,850	60	94
	Posttest	79,9600	25	6,425	41,280	66	94

TABLE III. THE RESULT OF T TEST TO PREE-TEST AND POST-TEST WITH SPSS VERSION 20

Value	\bar{x}	N	S	t- count	t-table
Pre-Test	72.88	25	7.270	4.734	1.711
Post -Test	79.96	25	6.425		

V. DISCUSSION

There are three main points involved in this discussion, *first*, the validity of the products is the validity of the book model of inquiry learning in the subjects of PAI, the validity of the manual work of educators, and the validity of the workbook of learners. *Second*, the practicality of inquiry learning model in PAI, and the *third* effectiveness model of inquiry learning model in PAI.

A. Product Validity Development of Inkuiri Learning Model in PAI

1) *Validity of PAI Inkuiri Learning Model Book*: The results showed that the development product consisting of PAI instruction inkuiri book, educators manual workbook and student manual workbook which categorized very valid. Thus all the products of the development of PU inkuiri learning model meet as one of the criteria to be worthy to use. Learning model is said to be good if it is valid, practical and efficient [9]. Furthermore Nieveen explains the aspects of validity associated with two things: 1) whether the developed model is based on a strong theoretical rationale; and 2) whether there is internal consistency of the developed component means that the components developed are interconnected. The theoretical rational aspects of the PAI inkuiri learning model are developed on the basis of clear theories. The model development procedure using the ADDIE consists of the stage of analysis, design, development, implementation and evaluation [10]. Learning models should have syntax, social systems, reaction principles, support systems and instructional and accompanist impacts [11]. This PAI inkuiri learning model was based on constructivism theory.

2) *Validity of the Educator Manual Book*: Based on the assessment of the Educator Working Manual Book (BPKP) as a development product, it was categorized as very valid, because the book already had characteristics (describes) a book: the first, learning content had been related to SK, KD, indicator, learning objectives and subject matter. Second, learning activities conducted by the educator in the learning process included the syntax or the learning stages of the initial, core and closing activities in accordance with the step of the inkuiri learning model. Third, the book used an easy-to-understand language and the packaging attracted readers. This is in accordance with the provisions of the central offices of the Department of National Education (2004) there are four aspects of the provision in writing a book: a) the content or material aspects, b) aspects of the presentation of the material, c) the language and readability aspects and, d) the graphic aspect.

Permendikbud No. 65 of 2013 on the Standard Process of Primary and Secondary Education mentioned the preparation of learning tools. Books as a series of learning tools must certainly provide benefits for teachers, especially students. Depdiknas (2008a: 12) explained "The book is a written material that presents the science of the mind of its author." Further explained from the same source (Depdiknas, 2008a: 12), that: Book as written material is a book containing a science knowledge of the results of the analysis of the curriculum in written form. While a good book is a book written with a good language and easy to understand, presented attractively equipped with pictures and descriptions, the contents of the book also describes something in accordance with the idea of the author. The limitations above explain that book as one of the printed teaching materials is the knowledge that based on curriculum analysis, prepared to facilitate the

teacher in learning and the students in achieving the curriculum competencies, by paying attention to the linguistic, and reflects the idea of the author as part of the study plan. Study plan is designed in the form of syllabus and RPP which refers to the standard content. In addition, study plan also prepares of media and learning resources, assessment tools and learning scenarios.

3) *Validity of Student Working Manual Book: Based on the assessment of the 3 validators about student working manual book it is known that the guidebook of students working categorized very valid in accordance with the material. This is because the cover of the book was interesting, and it could draw the attention of learners, from the content side it helped learners to understand the material, the steps of learning method was clear enough, giving many opportunities to the participants to actively learn (contribute) in convey his opinion, used clear command, the language was easy to understand and the image accordance with the subject matter.*

B. Product Practicality Development of PAI Inkuiri Learning Model

1) *Practical Implementation of PAI Inkuiri Learning Model: In this research, practicality assessment is conducted on product development of PAI inkuiri learning model which included instructional implementation, practicality of educator manual and practicality student work manual. Result of the research showed the implementation model of PAI inkuiri learning practically. This means that the PAI inkuiri learning model can be applied and used by PAI educators. It also showed that this model had met the second criterion of a product that is worthy of use in accordance with the opinion of Nieveen, a learning model is said to be good if it is valid, practical and efficient [8]. The observation of the inkuiri learning process of PAI encompasses the syntactic aspects of the social system, and the principle of reaction. The results showed that the three aspects are practical, meaning the syntax, social system and reaction principle have been done well.*

2) *Educator's Manual and Learners Practicality: The Workbook of Educators and Learners are a guide for educators and learners in the execution of learning models of PAI. The results showed that the Workbook Educators and learners categorized practical, so they can use it in learning PAI.*

There are several arguments that can be put forward about the practicality of the Educator's Workbook and the learner 1) Both of books include basic competencies, learning objectives and indicators, 2) the stages of learning are easy to implement, 3) the presentation of the material through inquiry encourages learners' active learning, 4) strategies and methods used are easily understood and implemented, 5) allocation of time used in accordance with the existing syllabus and activities undertaken.

Based on the results of this research and discussion can be stated that the Workbook Educator can be used in learning PAI. Thus, it can be said that learning PAI by using inquiry

learning model can a) increase learning activities of learners and b) train learners solve a problem (critical thinking)

C. Product Effectiveness Development of PAI Inkuiri Learning Model

Product Effectiveness the development of PAI Inquiry Learning Model is viewed from the aspects of the process and learning outcomes.

1) *Active Learning Student: The result showed that the PAI inkuiri learning model could enable the learners to be active student. Activity was shown by the following indicators: (1) Aspects of students' learning experiences were active. This proves that the students focused to the lesson (concentration), tried to understand the questions (problems), thought, analyzed, and sought information to get the solution, and issued an opinion on the question based on the provided source. (2) Interaction of learners in learning was classified as active (good). This showed that learners were active in group discussions. (3) Aspects of communication of learners in issuing their opinions was active (good). This indicates that the learner expressed his opinion and provided suggestions. (4) The reflection aspect of learners were active (good). This showed that active learners asked questions and provided explanations and reasons if other groups asked questions and received feedback.*

Student learning activity is a series of activities of students both physically and mentally interconnected during the learning process so as to create optimal learning". Some of the advantages possessed in inquiry strategy, and it is recommended, these advantages are: 1) Inquiry learning strategy is strategy to emphasizes the development of cognitive, affective, and psychomotor aspects in balance, so that learning through strategy this is considered more meaningful [3]. The findings of this study were also supported by the results of research conducted by Farida at SMP NU 01 Muallimin Waleri semester 1 academic year 2010-2011. The results of her research stated that: 1) Inquiry learning can improve students' learning outcomes and psychomotor, 2) Inquiry learning strategies can provide space for students to learn in accordance with their learning style, 3) Inquiry strategy is a strategy that considered in accordance with the development of modern learning psychology which thinks learning is a process of behavior changing based on experience. The results of research conducted by Atta Ilaah and Ernawati also strengthen this research, the research of Atta Illah was at SMP Miftahul Imam Bandung, with the title Application of Inquiry Model in Learning PAI to Increase Student Learning Activity, and research conducted by Ernawati the title was Implementation Inquiry in the study of Qur'an Hadith in class XI MAN 1 Kandangan, both of this studies stated that the model of inquiry learning can increase the activities of learners maximally, here the students in the process of learning search and find knowledge (material) by themselves or in groups, meaning the inquiry model puts the learner as the subject of learning.

2) *Learning Outcomes: Student learning outcomes are an instructional impact, a direct impact of the inkuiri learning*

model in PAI subjects. In this study the effectiveness of inquiry learning model is done by comparing the value of pre-test with post-test value. The research findings showed that there was a significant difference between the value of pre-test and post-test value. The mean value of pre-test was 72.88 and the post-test average was 79.96. The main purpose of inquiry learning was the development of thinking skills where inquiry was oriented to process and learning outcomes so that ultimately could improve student achievement and learning outcomes [12]. Inquiry can provide a broad experience for the students and at the same time increase the wide understanding in various subject matter with the activity of searching, investigating a problem, the students are required to be active in doing inquiry steps, this is thought to have an impact on learning outcomes. Furthermore Yunus Abidin said the use of inquiry learning can develop aspects of thinking (knowledge) in depth and thorough by constructing their own knowledge.

Based on the findings and discussion of the research proved that the inquiry learning model in PAI subjects was effective on improving the activity and learning outcomes of learners. The results of this study also showed that the inquiry learning model of PAI had fulfilled 3 (three) criteria of goodness and feasibility of a product development could be used that were valid, practical and effective.

VI. RESEARCH LIMITATIONS

The results of this study indicated that the inquiry learning model PAI had met 3 (three) criteria of goodness and feasibility of a product that were valid, practical and effective. Nevertheless, this study had the following limitations: 1). The development of inquiry learning model of PAI was still limited to material that was story (story), it had not ready on aspect of aqidah, morals, jurisprudence, and Al-Qur'an & Al-Hadith [13, 14]. 2). The assessment of the effectiveness and effectiveness of the PAI inquiry learning model were conducted through a limited trial of SDN 31 Lima Batusangkar, so the possibility of a difference in outcomes could be due to the differences in the characteristics of each school. 3) The effectiveness of PAI inquiry learning model was still limited to learning activeness aspect and learning outcomes, whereas in the form of affective and psychomotor aspects were not yet covered in this model

VII. CONCLUSION

Based on the results of the research on the development of inquiry learning model on the subjects of Islamic Religious Education in elementary school can be drawn as the following conclusions:

- Learning of Islamic Education (PAI) at the State Elementary School located in Lima Kaum Batusangkar used KTSP curriculum, it was based on Permendiknas no. 24 of 2006 on standards of contents and competency standards of graduates, despite the enactment of the curriculum in 2013.
- Learning of Islamic Religious Education at SDN located in Kecamatan Lima Kaum Batusangkar

generally still emphasizes low level cognitive aspect by using less varied learning model.

- The development of inquiry learning model in PAI subjects using the ADDIE development model consists of: 1) Conducting needs analysis of inquiry model development, 2) designing inquiry model, 3) Developing inquiry model, 4) Implementing inquiry model, and 5) Assess the implementation of the inquiry learning model.
- The inquiry learning model in PAI subjects was eligible to use after validator assessment and the results were stated to be very valid, practical and effective on the basis of the set criteria.
- The results of the model development that consist of the Inquiry Learning Model Book, the educator manual and the work manual of the students, were very valid category, after being assessed by the validator. Learning Model Book averaged 0.847 with a very valid category. The educator work manual with an average score of 0.889 was very valid and the Student Working Guidebook with an average value of 0.879 was very valid.
- The result of the development of PAI inquiry learning model was very practical. The implementation aspect of the learning model got an average grade of 3.23 categorized very practical. While the practical aspects of educator work manual with an average score of 3.32 was very practical, and the practicality of the workbook of learners with an average score of 3.08 was in the practical category.
- The results of the development of inquiry learning model in PAI subjects were declared effective after effectiveness test by looking at the liveliness aspect of learners and learning outcomes. With the application of PAM inquiry model, the liveliness of the learner was 70.95 with active category. While the effectiveness of the value of learning results showed that there was a significant difference between the value of pre-test and post-test with the number 4734. Thus, the PAI inquiry learning model was effective for use in PAI learning.

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