DISCOVERY LEARNING MODEL IN INTEGRATED THEMATIC LEARNING FOR ELEMENTARY SCHOOL STUDENTS

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ABSTRACT

Discovery learning model is a learning model that develops the students' activities in learning by discovering and investigating their own knowledge, so that it is consistent with student-centered integrated thematic learning. The purpose of this study is to describe the Discovery Learning model in integrated thematic learning for elementary school students. This research uses comparative research by comparing some CAR existing literature studies using successful and appropriate Discovery Learning model, so it can be used in elementary school. Based on the descripton and result of the studies, it can be seen that Discovery Learning model can affect integrated yhematic learning in elementary school.

Keyword: *discovery learning; elementary school students; integrated thematic.*

INTRODUCTION

Integrated thematic learning is the learning process which combines various competencies from various subjects into various themes (Maistika, 2019). The themes are created in accordance with the learning, both for specific subjects and for various subjects. The integrated thematic learning allows students to be more active through directly involving them in the learning process because the main characteritics them thematic learning is student-centered, provides students with direct experience, does not divide the learning subjects, present concepts among the learning subjects and is flexible. Therefore, the learning process becomes meaningful for students.

The learning activities in thematic learning are based on a theme in which each theme covers several subjects combined into one theme (NA Sari, 2018). Besides, HJ Puspita (2016) mentions that integrated thematic learning is learning which combines various competencies from various subjects to in various themes. Pangastuti et al (2019) assert that integrated thematic learning uses themes to

make connection among several subjects to provide a meaningful learning experience for students. Through integrated thematic learning, students are expected to be active and can gain direct knowledge from various learning experiences. It is necessary for the teachers to play to role in designing integrated thematic learning activities. To achieve the learning objective, a suitable learning model should be applied to integrated thematic learning.

Several types of learning models that can be applied to integrated thematic learning include: direct instruction model, cooperative learning model, contextual learning model, discovery learning model, and problem based learning model (PBL). In lights of integrated thematic learning to enable students to be active in the learning process, discovery learning model is considered applicable to integrated thematic learning (Yullys 2020).

The use of the discovery learning model will change the teacher-centered learning process into the student-centered one. Discovery learning model is a learning model which makes students active in their learning activities. According to N.I Cintia et al (2018), the discovery learning model guides students to identify what they want to know by looking for the relevant information on their own and to organize what they have known and understood into the final form.

The advantage of discovery learning model is that it helps students to improve their cognitive skills and processes. The knowledge gained through this model is very personal and effective because it strengthens students' understanding, memory and transfer, improves students' ability to solve problems, helps students strengthen their self-concepts because they gained the trust by working work with others, encourage students' involvement in teaching and learning activities, encourage students to formulate t09-heir own hypotheses, and train students to learn independently. (Hosni: 2016)

Based on the observation conducted at SDN 22 Koto Tangah Kab.Agam, it was found that the teachers' lesson plan needed improvement because some probelms were identified in the lesson plan such as the formulation of learning objectives not in accordance with the the indicators, teachers' dominant part learning with expository teaching method making students bored in participating in

activities learning, less opportunity provided to students to ask or argue making them less active in the learning process, and more emphasis memorization learning. This phenomenon led the low students' learning outcomes. With the problems found, the appropriate learning model to be applied is discovery learning model.

The formulation of the learning objectives should correspond to the learning indicators. The teachers should use the learning model appropriate to integrated thematic learning so that students will get interested in following the learning process. Furthermore, in integrated thematic learning, the teachers should act as a facilitator because it is students who are more active in learning.

Discovery learning model aims to provide students with the opportunity to be actively involved in the learning process. According to NI Cintia et al (2018), the main features of Discovery Learning model are student-centered, encourage students to explore and solve problems, to connect and generalize knowledge, and ato incorporate the new knowledge and the already existing one.

Each learning model has its own steps to allow the well-structure learning process so that the learning objectives can be achieved. According to At-taubany (2017) the steps of Discovery Learning model are: stimulation (problem giving), problem statement, data collection, data processing, verification, and generalization (drawing conclusion).

In line with At-taubany, according to Yullys (2020), the steps of Discovery Learning model include: Stimulation in which the teachers begin the learning process by asking questions or problems or asking students to read or listen to descriptions that contain the problems; Problem Statement in which students were given the opportunity to identify various problem then choose them. The problems selected are usually the most interesting and flexible to solve. Next, the selected problem were formulated in the form of questions or hypotheses i.e statements as a temporary answer to the questions asked.

The next step is Data Collection to test hypothesis in which students are given the opportunity to collect various relevant information, read literature, observe objects, interview sources, conduct their own test and so on. After that,

Data Processing is the step in which all data and information are processed, randomized, classified, tabulated, calculated if necessary, and interpreted at a certain level of trust. The next step is verification based on the results of data processing and interpretation as well as the hypotheses testing. The final step is generalization based on the results of the verification in which students learn to draw certain conclusions or generalizations.

The problem formulation for this study is to find out the development of Classroom Action Research (CAR) on discovery learning model in integrated thematic learning for elementary school students.

METHODS

This study used comparative research in which some existing literatures on CAR Discovery Learning were compared. How other researchers create successful and appropriate Discovery Learning model were studied, so it could be used in the elementary school. The existing literatures and studies were compared by reviewing each of them including author name, article title, year of article, journal name, research subject (sample), place (location) of research, method (type) of research, research findings, studied topic, context used, and improved abilities.

FINDINGS

The findings of this study were derived 30 scientific research journals related to discovery learning model in integrated thematic learning. The journals studied were 20 Indonesian journals and 10 international journals. Among the 30 journals, 6 were reviewed due their scientific appeal. These 6 journals were compared, so that the findings of this study could be revealed.

Based on the research conducted by Made (2019), it was found that the application of discovery learning (Discovery Learning) successfully improved students' IPA (natural sciences) learning outcome. The material under study was the solar system with the context of improving students' learning outcomes. Based on the researcher's observations and experiences as IPA teachers, students'

learning outcomes were still under KKM (minimum passing score criteria), so he tried to overcome this problem by improving the quality of the learning process through the implementation of discovery learning model. The research conducted was classroom action research. Actions were designed in cycles, from the planning stage to reflection, through following the action research model from Kemmis and Mc. Taggart (1988).

Another research by Aprilia (2019) focuisng on learning using Discovery Learning model with the help of video found that this model influenced and improved students' activities in the learning process, motivated them to learn, and improved their learning outcome. The context used was to design effective and meaningful learning. The use of discovery learning model will change the teacher-centered learning process to the student-centered one. This study used quantitative research method because the quantitative research used statistical data the answer to the research problems thereby making the research findings organized, systematic, and accurate.

Sigit (2018) found that learning using discovery learning model could improve students' learning outcome for PKN (Civics education) subject for fourth grade, especially on the topic of the central government system. The type of research used in this study was classroom action research (CAR). CAR was used because the research was held in the classroom and focused on the problems that occured in the classroom or on the teaching-learning process. Based on the test results, both pre test, post test cycle 1 and cycle 2, there was a significant improvement in students' learning outcome.

Based on the research by Rahmatina et al (2019), the integrated thematic learning process for fourth grade students at SDN 04 Birugo Bukittinggi could be improved by using Discovery Learning model. It is because the characteristics of Discovery Learning model which can help students in finding their own concepts and facts to increase their interest in the learning process. The application of discovery learning model in accordance with the learning plan was implemented through three steps, namely the pre-learning activities, whilst learning core

activities, and post learning activities using discovery learning model by Shah (in Kemendikbud, 2014).

The research findings by Edi et al (2018) revealed that discovery learning model improved students' critical thinking skills and encouraged then to solve problems actively so that students can develop their scientific thinking skils including observing,questioning, reasoning, and experimenting. The learning outcome in each cycle improved well. Students' learning outcome in history subject improved, in which 80% of them passed the mininum passing score criteria i.e 75. Through classroom action research method, the learning process consists of three cycles using discovery learning model and scientific approaches . The learning process that focuses on the ability to solve problems is relevant to the development of the current situation.

In Jurnal PGSD , Resnani (2019) through her study on the application of discovery learning model in thematic learning for fifth grade students at SDIT Generasi Rabbani Bengkulu found that this learning model increased the learning activities of both teacher and students. It was be seen from the observation results of each cycle that continued to increase. This research conducted was in the form of Classroom Action Research, a reflective research with the aims to improve and enhance the teachers' professional skills in the learning activities. The research data were collected through observation sheets and test. The data were analyzed by using percentages and average score. The observation was conducted on the teachers and students with the aim to describe their learning activities as well as to find out the effectiveness of the implementation of the discovery learning model during the learning activities.

Based on the above descriptions and research findings, , it can be undesrtood that discovery learning model can improve students' activities, achievements and learning outcomes. Therefore, the researchers used discovery learning model on theme 8 "*daerah tempat tinggalku*" subtheme 2 "*keunikan daerah tempat tinggalku*" for fourth grade students by using foootball as the media to support the learning activities.

DISCUSSION

Based on the aforementioned description, Discovery Learning model can improve students' learning outcomes as well as teacher activities. The success of these studies is because discovery learning learning model has been implemented in accordance with its steps or syntax. According L.D Sigiti Discovery learning model theory defines learning as the learning process in which students are not presented with a lesson in its final form, but rather they should organize the lesson themselves. Teachers act as a mentor by giving students the opportunity to learn actively.

N.I Cintia argues that discovery learning model encourages students to discover their own knowledge actively, so it will make them feel challenged and interested in identifying problems with an experiment, and mastering integrated thematic learning materials. Therefore, discovery learning model is obviously applicable d to integrated thematic learning for elementary school students.

CONCLUSION

From the above discussion, it can be concluded that discovery learning model in integrated thematic learning for elementary school students is effectively used to improve students' learning activities and learning outcome. It is because the characteristics of discovery learning model that can help students to find their own concept and the fact. Hence, it is highly applicable in elementary schools.In tables and pictures, Tahoma font size 11 must be used and vertical lines must not be drawn. When the contents of the table cannot fit into the two column, authors can make it into a column, Number of the table and the title must be written above the table, and the number of the picture and the title must be written under the picture. The table and the picture must be explained in the text.

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