Implementation of Mind Mapping Learning Model with Picture Media for the Theme of the Beauty of Togetherness Grade IV Madrasah Ibtidaiyah Al-Fitrarah Oesapa, Kupang

Abstract—Mind mapping is one of the learning models that learns the concept or technique of remembering things with the help of mind mapping (learning techniques using mind maps, recording learning material as outlined in diagrams containing interconnected symbols, codes, pictures and colors) so that the two parts of the human brain can be used optimally. Picture is one of the media that is used to convey messages visually. The objectives of this study are to find out: (1) development of student learning outcomes; affective domain, (2) activities by teachers and students, (3) teacher skills in managing learning, and (4) the students’ responses to the mind mapping learning model with picture media. The samples involved in this study were 28 students from grade IV of Madrasah Ibtidaiyah Al-Fitrarah. Data collection techniques used (1) pretest and posttest, (2) observation sheet of teacher and student activities, (3) observation sheet of teacher skills, and (4) response sheet of students. Meanwhile, data analysts used quantitative descriptive techniques. The results of this study show that: (1) Individual completeness scores increased from 19 students completed in the first cycle to 22 students completed in cycle II, and 25 students completed in cycle III. The percentage of classical completeness also showed an increase from 67% in cycle I, 78% in cycle II, and 89% in cycle III. There was also an increase in students’ attitude in the application of mind mapping learning model assisted with picture media as the learning processes in class IV starting from the first to the third cycle. The attitude enhancement consists of the aspects of honesty, discipline, responsibility (co-operative), caring, polite, friendly, mutual cooperation, cooperation, peace of mind, and responsiveness and proactivity in participating in learning; (2) The activities by teachers and students showed an increase to match the percentage of ideal time; (3) Teacher skills showed an increase seen from the acquisition in which a score of 2.55 in the first cycle with a moderate category, a score of 3.1 in the second cycle with a good category, and 3.46 in the third cycle with a good category; and (4) The response of students to the mind mapping learning model assisted with picture media could be classified to be good, 92 percent of samples thought that mind mapping learning model assisted with picture media could improve students’ understanding of the theme of the beauty of togetherness, and sub-theme of cultural diversity in my country.

Keywords: Implementation, Mind Mapping, Picture Media, Affective Study Result.

I. INTRODUCTION

Assessment of the learning process uses an authentic assessment approach that assesses the readiness of students, process, and learning outcomes as a whole. The integrated assessment of three components will illustrate the capacity, style, and learning outcomes of students who are able to produce instructional effects on aspects of knowledge and the impact of accompaniment (nurturant effect) on aspects attitude. Authentic assessment results are used by teachers to plan remedial learning programs, enrichments, or counseling services. In addition, authentic assessment results are used as material to improve the learning process in accordance with Education Assessment Standards. Evaluation of the learning process is carried out during the learning process using tools: observation sheets, peer questionnaires, recordings, anecdotal notes, and reflections. Evaluation of learning outcomes is carried out during the learning process and at the end of the lesson, a unit using methods and tools: oral/deed tests and written tests. The final evaluation results are obtained from a combination of process evaluation and the evaluation of learning outcomes.

Learning outcomes are certain competencies or abilities in the cognitive, affective, and psychomotor domains that are achieved by students after participating in the learning process. For elementary education, they are more emphasized on affective competence. Affective learning outcomes are competencies achieved by students related to emotions, such as feelings, values, appreciation, enthusiasm, interests, and attitudes. There are five categories of this domain ranging from simple behavior to the most complex one, namely: receiving (attending), responding, assessment (evaluating), organizing, and characterization. In the 2013 curriculum, there are affective and attitude terms which are interpreted differently (Kosasih, 2014). The realm of attitude means the same as attitude. Basic
attitude competencies as the basic competencies are in the core competencies (KI-1 and KI-2) with predetermined types.

The student learning outcomes of affective domain are the competencies or abilities of affective domains that are achieved by students after following the learning process. This domain is categorized as receiving (attending), responding, evaluating, organizing, and characterization. The results of affective learning about the theme of the beauty of togetherness, the sub-theme of cultural diversity of my people in class IV of the Al-Fitrarah MIS education unit, Oesapa, Kupang City are described as follows: From 28 students, it can be seen that the change in behavior which is reflected in austerity, accuracy and responsibility is only 11.2 percent, which is prominent, 16.8 percent is visible, and 72 percent is not visible. The researcher together with colleagues and class IV teachers identified why the problem arose. From the results of learning study, it is known that the learning model applied by the fourth-grade teacher is a conventional model, i.e. the teacher only made concept maps, without any drawing media.

In order to overcome this learning problem, the researchers develop mind mapping learning models assisted by picture media, so that the students have balanced affective, cognitive, and conative abilities. The advantage of the mind mapping learning model is that the students utilize two hemispheres of the brain, namely the left brain and right brain in a balanced way. As a result, students are more active and creative, enthusiastic and interesting, giving a visual impression as a comprehensive picture of the material, more efficient, effective, not only showing the facts but also showing the relationship between these facts. This research questions are formulated as follows 1) Can the application of the mind learning model assisted with picture media on the theme of the beauty of togetherness, the sub-theme of diversity of my nation’s culture improve the affective learning outcomes of grade IV students of the MIS Al-Fitrarah Oesapa education unit? 2) How is the development of affective learning outcomes of grade IV students of the Al-Fitrarah MIS Oesapa in learning the theme of the beauty of togetherness, the subtheme of my nation’s cultural diversity by applying a picture-assisted mind map learning model?

This study aims to 1) find out the learning outcomes of emotional development (affective) grade IV learners of the MIS Al-Fitrarah Oesapa through the application of mind learning models assisted with picture media, and 2) find the development of affective learning outcomes of grade IV students of MIS Al-Fitrarah Oesapa in learning the theme of Beautiful Togetherness, the sub-theme of cultural diversity of the nation with a mind learning model assisted with mind mapping.

II. METHOD

This study used a class action research design with two cycles. Each cycle consists of several meetings, through the stages of action planning, implementation, observation, and reflection. In general, the flow of implementation of this class action research has been described by Kemmis and Taggart (in Fatchan, 2009). The procedure of conducting this class action research was carried out in several cycles if the first and second cycles had not yet reached the 80% achievement indicator by classifying the affective assessment and would be continued on the third cycle and so on. Data collected in this study were (1) students’ affective domain data, (2) students’ attitude domain data in group discussions, (3) teacher performance in facilitating students with a mind map-based learning model supported by picture media. Sources of data from students in grade IV of MIS Al-Fitrarah Oesapa were 28 people, and its teacher. The data analysis technique was performed by using an analysis of student performance aspects, based on the observation rubric.

III. RESULT AND DISCUSSION

The results of the first cycle were obtained by researchers only at the first and second meetings. The reason was that in the first and second meetings there were group work on the core activities, so that the researchers could observe the activities of students (especially attitudes) during the learning process in grade IV. The results of the assessment in the realm of attitude that is by means of researchers filling in the affective domain (individual) assessment sheet (attitude) during the first and second meeting learning takes place in grade IV. The results of attitude assessment can be seen in the first category activities of students by researchers at the first meeting, 19 students behaved very well (A), none of the students behaved well (B), and five students behaved sufficiently (C). Four students behaved sufficiently (C) because of the weak-getting affective domain score equal to 2 from a maximum score of 5 for responsibility, caring, mutual cooperation, cooperation, as well as responsive and proactive. Based on the results of attitude assessment, it can also be seen in the first category result of students’ attitude assessment by researchers at the second meeting, 17 students behaved very well (A), none of the students behaved well (B), and 11 students behaved sufficiently (C). None of students behaved sufficiently (C) because they were weak - getting an affective domain score equal to 2 from a maximum score of 5 for responsibility, caring, mutual cooperation, cooperation, and responsive and proactive. Regarding the affective outcomes of students, the completeness of student learning outcomes in the affective domain after the implementation of the first cycle was 67%.

The completeness of the learning outcomes exceeds the minimum target of 50%. It means the research objectives (after the implementation of the first cycle) have been achieved. The implementation of actions at the first and second meetings was considered unsuccessful because it had not achieved 100%. This failure was also supported by the shortcomings of teachers in the first cycle of learning (the first to third meetings) in grade IV. Therefore, the implementation of CAR in the first cycle in grade IV MI Al-Fitrarah Oesapa was not in line with expectations reviewed based on the results of the students’ affective domain assessment.
The observations of teacher activities by the second observer show that the implementation of teacher activities in the class only reached 65% at the first, second and third meetings, meaning that the teacher has not created a pleasant learning atmosphere, not mastered the material, and used too fast intonation. Then, the shortage of teachers in the first cycle was corrected in the second cycle and students’ incompleteness in the realm of attitude was corrected in the second cycle.

The second cycle at the fourth and fifth meetings shows that there was group work on the core activities, so that the researchers could examine student activities (especially attitudes) during learning processes. This observation was carried out by the researcher filling in the affective domain (individual) assessment sheet (attitude) during the fourth and fifth meetings. The results of the attitude assessment can be seen that the results in first domain category of students by the researchers at the fourth meeting, 22 students behaved very well (A), none of the students behaved well (B), and two students behaved sufficiently (C). One student behaved sufficiently (C) because it was weak - getting an affective domain score equaled to 2 from a maximum score of 5 for responsibility, caring, mutual cooperation, cooperation, as well as responsive and proactive. Based on the results of attitude assessment, it can also be seen that the results of attitude assessment in the first category activities of students at the fifth meeting showed that 22 students behaved very well (A), none of the students behaved well (B), and 6 students behaved sufficiently (C). There were no students who behaved sufficiently (C) because they were weak - getting an affective domain score equaled to 2 from a maximum score of 5 for responsibility, caring, mutual cooperation, cooperation, and responsive and proactive. Regarding the affective outcomes of students, the completeness of student learning outcomes in the affective domain after the implementation of the second cycle was 78%. The completeness of the learning outcomes was less than the expected target of 80% for that was continued in the third cycle. Implementation of classroom action research in the second cycle in class IV MI Al-Fitrarah Oesapa has not been in line with expectations reviewed based on the assessment result of the affective domain of students.

Based on the observations, the results of teacher activity assessment by the second observer show that the implementation of teacher activities in the class only reached 100% at the fourth meeting. The teacher at the fourth meeting could guide the students well. The teacher was able to direct students towards better understanding. The teacher was able to master the learning materials well. The lack of teachers at the fourth meeting was not found by the second observer. Teacher should be able to improve teaching techniques and better classroom management. Furthermore, the implementation of teacher activities in class at the fifth meeting has increased. Teacher showed 100% both at the fourth meeting the fifth meeting. The strengths of the teacher at the fifth meeting included mastering the class very well, creating a conducive learning atmosphere, mastering the learning material very well, managing time effectively. The implementation of teacher’s activities in class has reached 100% at the sixth meeting. The strengths of teacher at the sixth meeting included mastering the class, being good at learning material, and overcoming rowdy learners with a personal approach.

The observations of attitude assessment were carried out by researchers only at the seventh and eighth meetings since there was group work on the core activities, so that the researchers could observe the activities of students (especially attitudes) during learning processes. This observation was carried out by the researcher filling in the affective domain (individual) assessment sheet (attitude) during the learning at the seventh and eighth meetings. The results of attitude assessment can be seen in the first category result of students’ attitude assessment by researchers at the first meeting showed that 25 students behaved very well (A), none of the students behaved well (B), and two students behaved sufficiently (C). One student behaves sufficiently (C) because it was weak - getting an affective domain score equal to 2 from a maximum score of 5 - for responsibility, caring, mutual cooperation, cooperation, as well as responsive and proactive. Based on the results of attitude assessment, the results of observations of the first category activities of students by researchers at the second meeting showed that 25 students behaved very well (A), none of the students behaved well (B), and 3 students behaved sufficiently (C). There was no students who behaved sufficiently (C) because it was weak - getting an affective domain score equal to 2 from a maximum score of 5 - for responsibility, caring, mutual cooperation, cooperation, and responsive and proactive. Regarding the students’ affective outcomes, the completeness of student learning outcomes in the affective domain after the first cycle implementation was 89%. Completeness of learning outcomes has exceeded the expected target of 80% for this cycle to stop because it has reached the expected target. Implementation of classroom action research in the third cycle in class IV MIS Al-Fitrarah Oesapa was in line with expectations reviewed based on observations of teacher activity and assessment of the affective domain of students.

Based on the affective value of grade IV students from the first cycle to the third cycle, it can be concluded that there has been an increase in the students attitude in the application of mind mapping learning assisted with picture media, along with the learning meetings in class IV starting from the first cycle to the third cycle. The attitude enhancement consists of honesty, discipline, responsibility (co-participatory), caring, polite, environmentally friendly, mutual cooperation, cooperation, peace-loving, and responsive and proactive in participating in mind mapping learning with picture media. Therefore, it can be concluded that starting from the first cycle to the third there has been an increase in the activity of grade IV students reviewed based on the grade IV students’ affective, even though there were grade IV students who behaved sufficiently (C) during the initial application of mind mapping learning in the first cycle (first and second meeting) in grade IV.

Based on the experience of grade VI MIS Al-Fitrarah Oesapa students who participated in learning processes from the first to the ninth meeting with mind mapping learning assisted with picture media, all students (100%) gave positive responses to the learning model. This is in line with Sumarmi (2012) stating that a mind map is based on learning model using diagrams to
represent words, ideas, tasks, or other items that are connected to and arranged around central keywords. Mind map-based learning is one of the models in learning students by utilizing visual picture, picture, graphic infrastructure, words to form impressions (Buzan, 2003). Furthermore, it is said that utilizing picture and text when someone notes or releases an idea in the mind is a sign that someone has used the two hemispheres of brain synergistically; mind maps balance the right hemisphere of brain (divergent thinking patterns) and the left hemisphere (convergent thinking patterns). Mind map learning is a constructivism learning in which students organize and present facts, concepts, principles, procedures, ideas or other ideas in the form of non-linear radial-hierarchical diagrams (Buzan, 2004).

IV. CONCLUSION

Based on the results, it is recommended that in using mind mapping learning models assisted with picture media, students should be motivated so that a meaningful learning desire arises. In learning with a mind mapping learning model assisted with picture media, the teacher should pay attention to students’ readiness to learn with good mastery of class and timeliness. In learning with the mind mapping learning model assisted with picture media, an interesting task is given to LKPD so that the participants feel interested and enthusiastic about learning.

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