

Increasing Teacher Ability in Implementing Mind Map Based E-Modules by Strengthening Students' Independent Learning Character through IHT at Banjarharjo Kalibawang Kulon Progo Public Elementary School for Academic Year 2022/2023

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ABSTRACT: The aim of this research is to improve the ability of teachers to apply Mind Mapp-based E-Modules by strengthening students' independent learning character through IHT and improving the ability of researchers to manage IHT at the Banjarharjo Kalibawang Kulon Progo State Elementary School for the 2021/2022 academic year. The type of research carried out was School Action Research (PTS) which was carried out over 2 cycles consisting of 2 meetings. The subjects of this research were 8 teachers consisting of class teachers and subject teachers at the Banjarharjo Kalibawang Kulon Progo Public Elementary School. Observation results regarding the feasibility of implementing E-modules in each cycle, cycle I 1st meeting: reached 2.71: percentage 67.81%; following the 2nd meeting it reached 3.36; percentage 83.95%; following cycle II, 1st meeting, the average score reached 3.54; percentage 88.38%; following the second cycle II meeting the average score was 3.69; the percentage reached 92.19%. Based on participant activities, the average score for cycle I of the 1st meeting reached 3.06; percentage 76.42%; next cycle I, second meeting, the average score was 3.39; percentage 84.84%; Following are the results from cycle II of the 1st meeting, an average score of 3.54 was obtained; percentage 88.61%; Furthermore, the results obtained in the second cycle of the second meeting were an average score of 3.70; percentage 92.50%; Results of participants' assessments of researchers/resource persons for cycles I and II, the average score obtained for cycle I of the 1st meeting; 81.08%; following the 2nd meeting 84.30%, then in cycle II the 1st meeting reached 88.43%; Following are the results of the second cycle II meeting, the average score is 90.44%.

Keywords: E-Module, Mind Map, In-House Training, students

INTRODUCTION

The success of the learning process is determined by many factors. Teaching materials are one of the important factors apart from educators, students, facilities, and other components [1]. Apart from that, so that teachers can achieve the expected competence in carrying out learning activities, teachers are required to have competence in their duties. One of them is that teachers must be able to use various teaching materials so that students do not become bored [2]. Choosing the right learning teaching materials in a learning process means that the teacher has arranged a learning strategy. Strategy is a careful plan of activities to achieve specific goals. However, there are still many teachers in schools or madrasas in general who still lack the ability to prepare teaching materials [3].

Based on the results of observations at the Banjarharjo Kalibawang Kulon Progo State Elementary School, the low quality of learning is due to a lack of teaching materials that can help students learn both through face-to-face and independent learning. The lack of innovation in making teaching materials is caused by a lack of guidance, training and making teaching materials from related agencies. Apart from that, most of them do not yet make their own teaching materials, so the learning process still



depends on books provided by the ministry of education and culture. This needs to receive serious attention from the school principal for guidance or training. The principal as an educational actor must be responsible for improving the quality of education, especially the ability of teachers so that learning can achieve its goals well.

This happens in almost all elementary schools in Kulon Progo district, which generally still depend on teaching materials that have been prepared by the Ministry of Education, so that teacher innovation and creativity in making teaching materials is still classified as low. So it is necessary to encourage the education department to always provide guidance and training so that teachers are able to create their own teaching materials that are in accordance with core competencies, basic competencies, and learning materials that are further developed by teachers at every elementary school level. remembering that the material in students' books is the initial part that can still be developed according to the characteristics of the material and students' thinking abilities. Where modules are one of the teaching materials that are often used because the preparation of modules is carried out systematically in language that is easily understood by students independently without a facilitator or teacher. The module consists of 2 forms, namely a printed module and an electronic module (e-module) which can be accessed online via the website [4].

Based on the results of initial observations carried out by the principal after reflecting, he took steps to improve teacher quality by taking action through IHT. In house training/IHT is a training program held in one's own place, as an effort to increase teacher competence, in carrying out their work to optimize existing potentials [5]. implementing E-Modules at the elementary school level based on Mind Maps can strengthen independent character because the application of Mind Maps can help someone to organize one's thoughts, clarify concepts, and understand information well [6]. So, to overcome this problem, researchers conducted research with the title: "Increasing Teacher Capacity in Implementing Mind Map-Based E-Modules by strengthening students' independent learning character through IHT at Banjarharjo Kalibawang Kulon Progo Public Elementary School." The aim of this research is: Increasing the suitability of teachers in implementing Mind Map-based e-modules by strengthening students' independent learning character through In House Training/IHT. Increasing teacher activity in implementing Mind Map-based E-Modules by strengthening students' independent learning character through In House Training/IHT, and increasing the ability of school principals (researchers) in managing In House Training in implementing Mind Map-based E-Modules by Strengthening Independent Learning Character Learners.

RESEARCH METHODS

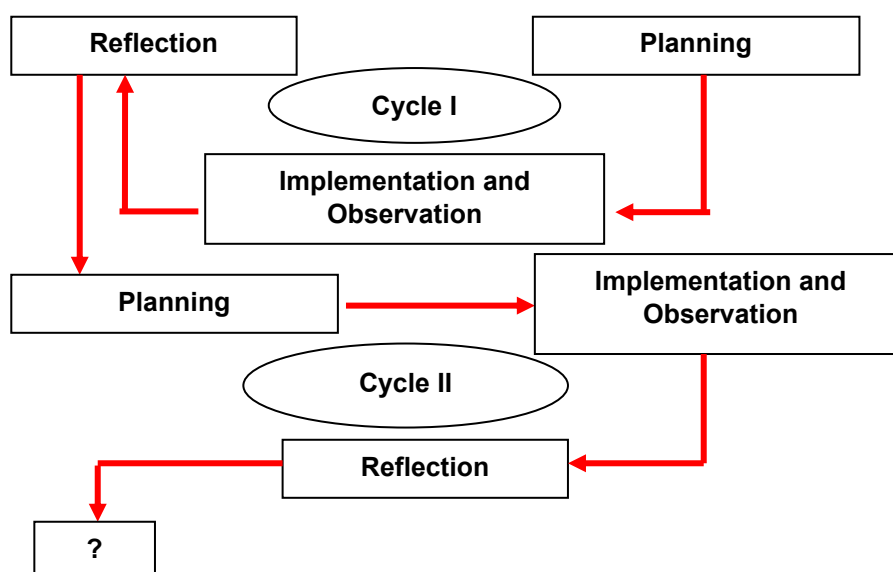


FIGURE 1. Research Design

The type of research used was school action research conducted at the Banjarharjo Kalibawang Kulon Progo State Elementary School from January to April 2023. The research subjects were 8 teachers at the Banjarharjo Kalibawang Kulon Progo State Elementary School, consisting of 2 male

and 6 female teachers. The research consists of 3 stages, namely planning, action and observation, as well as reflection with a research design that refers to research conducted by Kemmis and Taggart [7]. Figure 1 shows the research design that will be carried out.

The data collection technique is carried out by observing using participant (teacher) activity observation sheets during IHT activities. The data analysis technique uses quantitative and qualitative descriptive analysis which is calculated based on average, percentage, value conversion and category assignment. The data analysis process goes through several stages of analysis, namely: Presenting the researcher's data, and drawing conclusions and verifying the data.

RESULTS AND DISCUSSION

1. Results of research on the feasibility of implementing a Mind Map Based E-Model

The feasibility of the e-module can be seen from the results of observations of participants. The results of the analysis and evaluation of IHT participants consist of several assessment components including e-module design with 4 assessment aspects, graphics with 4 aspects consisting of 30 indicators, each indicator is given a minimum score of 1 and a maximum of 4. After observing the first cycle and In cycle II, the results were obtained based on Table 1.

TABLE 1. Results of observations from cycles I and II of IHT participants regarding the feasibility of implementing the Mind Mapp Based E-Model at SD Negeri Banjarharjo Kalibawang Kulon Progo

No.	Aspect	ΣAverage Score			
		Cycle I		Cycle II	
		1 st meeting	2 nd meeting	1 st meeting	2 nd meeting
A	Eligibility of content	2.97	3.31	3.53	3.67
B	Linguistic Feasibility	2.58	3.29	3.50	3.63
C	Eligibility Benefits	2.53	3.42	3.56	3.70
D	Graphic Eligibility	2.77	3.41	3.55	3.75
Number of average values		2.71	3.36	3.54	3.69
Percentage (%)		67.81	83.95	88.38	92.19
Conversion value		2	3	4	4
Category		Less Agree	Agree	Strongly Agree	Strongly Agree

Table 1 shows the results of research in cycles I and II in implementing Mind Map-based e-modules by strengthening students' independent learning character through IHT. The results of the research showed that for several components of content feasibility assessment which included 4 aspects, the average score for cycle I at the 1st meeting reached 2.71 with a percentage of 67.81%. The 2nd meeting reached 3.36 with a percentage of 83.95% where there was an increase of 16.14% from the 1st meeting to the 2nd meeting. Meanwhile, in cycle II at the 1st meeting the average score reached 3.54 with a percentage of 88.38% which showed an increase of 4.43% when compared to cycle I of the 2nd meeting. then in cycle II at the 2nd meeting the average score reached 3.69 with a percentage reaching 92.19%. This shows that there is an increase of 3.81%. The results of research on the feasibility of implementing mind map-based e-modules by IHT participants show that the category strongly agrees. The research results show that the application of mind map-based e-modules can help teachers in carrying out the learning process on.

The results of observations from cycles I and II on IHT Participants' Activities in the Implementation of the Mind Map-Based E-Model at SD Negeri Banjarharjo Kalibawang Kulon Progo, which consists of several assessment components, namely 3 aspects, can be seen in Table 2.

Based on Table 2 above, it shows that the participants' activities in participating in IHT activities in the Application of the Mind Map Based E-Model can build their own knowledge and skills in IHT activities. Activities will make learning effective. Resource persons do not only convey knowledge and skills, however, resource persons can encourage participants to actively participate in IHT activities. This research used an observation instrument consisting of 3 aspects and 17

indicators, each indicator was given a minimum value of 1 and a maximum of 4. The results of the research showed that the average score for cycle I at the 1st meeting reached 3.06 with a percentage of 76.42% in the Active category. Furthermore, in cycle I at the 2nd meeting the average score reached 3.39 with a percentage reaching 84.84%. When compared with the 1st meeting there was an increase of 8.42%. Meanwhile, in the second cycle at the 1st meeting, an average score of 3.54 was obtained with a percentage reaching 88.61%. When compared with cycle I at the 2nd meeting there was an increase of 3.77%. Furthermore, in the second cycle, at the second meeting, the average score reached 3.70 with a percentage reaching 92.50%. When compared with the next meeting in cycle II, at the 1st meeting there was an increase of 3.89%. This research shows that there is development at each meeting so that the final result is very active.

TABLE 2. Results of observations from cycles I and II of IHT Participants' Activities in Implementing Mind Mapp-Based E-Models at SD Negeri Banjarharjo Kalibawang Kulon Progo

No.	Aspect	Σ Average Value in Cycle I		Σ Average Value in Cycle II	
		1 st meeting	2 nd meeting	1 st meeting	2 nd meeting
1	Module Characteristics	3.15	3.46	3.49	3.66
2	E-Module Preparation Procedure	2.96	3.38	3.58	3.75
3	Mind Map Based	3.06	3.34	3.56	3.69
Number of average values		3.06	3.39	3.54	3.70
Percentage (%)		76.42	84.84	88.61	92.50
Conversion value		3	3	4	4
Category		Active	Active	Very active	Very active

Therefore, the results of this research indicate that IHT can increase participant activity in participating in IHT activities in implementing mind map-based e-modules by strengthening students' independent learning character. Apart from that, the IHT activities show that the activity participants are very complex. IHT activities can be created by carrying out fun learning activities by presenting a variety of teaching materials and learning models using e-modules which further stimulate students' independent learning activities. In this way, students will be more active in learning activities.

2. Results of participants' assessment of researchers in managing IHT using the Mind Map Based E-Model

The classification of IHT activities in cycles I and II by the researcher shows that the participants' abilities are very complex and must be able to be controlled by the researcher considering that this activity includes the ability to manage an activity. IHT participant activities can be created by carrying out fun activities by presenting a variety of activity models that further stimulate participant activity. In this way, participants will be more active in IHT activities in implementing mind map-based e-modules by strengthening students' independent learning character. The research results are presented in Table 3.

Based on the assessment results, it shows that the ability of managing IHT activities needs to be improved. There were several aspects of participants' questions that had not been explored so participants had to find their own answers. This did not reduce participants' enthusiasm, but participants would be more independent.

From the statement above, based on the participants' assessment of the sources, the results of which are contained in Table 3 can illustrate the researchers' ability to manage IHT in cycles I and II. The average score obtained in cycle I for the 1st meeting was 81.08%, the 2nd meeting was 84.30%. Furthermore, the achievement of the second cycle assessment at the 1st meeting reached 88.43%. When compared to the previous cycle, there was an increase of 4.13%. Then the results of cycle II at the 2nd meeting, the average score was 90.44%. When compared with the

second cycle of the 1st meeting, there was an increase of 2.01%. Based on the results above, it shows that the IHT management carried out by the researchers showed significant development in the participants' abilities in implementing mind map-based e-modules by strengthening the students' independent learning character.

TABLE 3. Results of participants' assessments of researchers in cycles I and II in the management of IHT Implementation of Mind Map Based E-Model at SD Negeri Banjarharjo Kalibawang Kulon Progo Academic Year 2022-2023

No.	Aspect	Σ Average Value in Cycle I		Σ Average Value in Cycle II	
		1 st meeting	2 nd meeting	1 st meeting	2 nd meeting
1.	Preliminary activities	84.27	87.77	90.67	91.63
2.	Core activities	78.05	81.29	86.73	89.23
3.	Closing Activities	80.93	83,85	87.90	90.48
Number of average values		81.08	84.30	88.43	90.44
Percentage		81.08	84.30	88.43	90.44
Conversion value		3	3	4	4
Category		Satisfying	Satisfying	Very satisfactory	Very satisfactory

CONCLUSION

The research results show that there is an increase in participants' feasibility in implementing Mind Map-based e-modules and increases in participants' activity in each activity. The research results regarding the feasibility of implementing e-modules in cycle I for the 1st meeting reached 2.71 with a percentage of 67.81%, for the 2nd meeting it reached 3.36 with a percentage of 83.95%. In cycle II at the 1st meeting the average score reached 3.54 with a percentage of 88.38%, at the 2nd meeting the score was 3.69 with a percentage of 92.19%. Based on participant activities, the average score obtained for cycle I at the 1st meeting reached 3.06 with a percentage of 76.42%. Furthermore, in cycle I at the 2nd meeting the average score reached 3.39 with a percentage of 84.84%. Cycle II at the 1st meeting obtained an average score of 3.54 with a percentage of 88.61%. Furthermore, at the 2nd meeting the average score was 3.70 with a percentage of 92.50%. The results of participants' assessments of resource persons for cycles I and II reached an average value for cycle I at the 1st meeting of 81.08% while at the 2nd meeting it reached 84.30%. Furthermore, cycle II at the 1st meeting reached 88.43%, and at the 2nd meeting reached 90.44%.

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