

Content Mastery Services to Develop Mind Mapping Skills of MAS AMALIYAH Sunggal Students

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Abstract. This research aims to determine the mind-mapping abilities of Madrasah Aliyah Swasta Amaliyah Sunggal before using content mastery services and after receiving content mastery services. Another aim is to introduce guidance and counseling teachers to good services in providing interesting learning methods for students. This research uses counseling guidance class action research, namely direct action carried out in special classes/places to improve service quality. Teachers or counselors want good service improvements and changes so that service goals can be achieved optimally. The service provided to improve students' mind-mapping skills at Madrasah Aliyah Swasta Amaliyah Sunggal is by using content mastery services. Content mastery services are services provided by guidance and counseling teachers to master certain abilities or competencies through teaching and learning activities. After receiving content mastery services, students are expected to be able to improve their learning outcomes by using mind maps. This research was carried out at the Madrasah Aliyah Swasta Amaliyah Sunggal with the research subjects being class X-5 students. Students' Mind-Mapping abilities have increased from before to after receiving content mastery services. This difference can be seen from the average value before the content mastery service was carried out, the score percentage was 21%, after the content mastery service was carried out in cycle I the score percentage was 69%, and after the implementation of cycle II, the score percentage rose to 85%. Thus, it can be concluded that the Content Mastery service for developing students' mind-mapping skills at the MAS Amaliyah Sunggal is being implemented well.

Keywords: Mind Mapping Skills, Content Mastery Services

1 Introduction

In the contemporary educational landscape, students face increasing challenges in processing, organizing, and retaining a vast amount of information presented across various subjects. The ability to effectively organize and synthesize information has become a crucial skill for academic success in the 21st century [1]. Therefore, student's ability to organize and understand information is becoming increasingly critical. Moreover, in learning, students are expected to be able to process the information they receive effectively.

Learning is a fundamental activity in the world of education. An individual who aims to achieve optimal learning outcomes should possess effective study habits and learning strategies. Effective study habits are not innate but rather developed through consistent practice. However,

in reality, many students, including university students, fail to achieve satisfactory results in their studies due to a lack of knowledge regarding effective learning techniques. One effective learning technique to enhance these abilities is mind mapping. As a visual learning technique, mind mapping offers a powerful tool for students to develop these crucial skills by engaging both hemispheres of the brain through the use of colors, images, and interconnected concepts [2].

Madrasah Aliyah Swasta (MAS) Amaliyah Sunggal is an Islamic private school that plays a significant role in shaping student's character through the school's culture [3]. Initial observations indicate that a majority of students still rely on traditional linear note-taking methods, which are less effective in aiding long-term comprehension and retention of information. This is reflected in the student's low ability to integrate and analyze information from various learning sources.

Madrasah Aliyah Swasta Amaliyah Sunggal, as an Islamic educational institution committed to developing students' potential, faces challenges in maximizing student's learning abilities. Previous research has shown that students at MAS Amaliyah Sunggal still encounter difficulties in several aspects of learning, such as the ability to translate noun phrases in English [4]. This indicates the need for the development of more effective teaching methods. Mind mapping has proven to be an effective technique for enhancing cognitive abilities and student learning outcomes at various educational levels [5]. This technique has also been successful in improving student's reading comprehension [6] and writing skills [7].

Content mastery services, as a component of guidance and counseling, hold significant potential in assisting students to develop mind-mapping skills. These services enable counselors to provide support to individuals or groups in acquiring specific abilities or competencies through structured and systematic learning activities [8]. Mind mapping is a technique for recording and organizing information that uses a combination of colors, images, and connected curved lines, mirroring the brain's natural way of processing information [9]. The integration of mind-mapping techniques into content mastery services is expected to have a positive impact on:

- a. Improved ability to organize information
- b. Development of student's creativity
- c. Optimization of the learning and memorization process
- d. Increased learning motivation
- e. Development of critical and analytical thinking skills.

In the madrasah setting, the use of mind mapping in teaching Arabic reading has shown an improvement in student's reading competence and fostered their creativity [10]. Considering the importance of developing students' religious character at MAS Amaliyah Sunggal [11] and the potential of mind mapping to enhance various learning skills, content mastery services focused on developing mind mapping abilities can be an effective solution. This approach is expected to help students better understand and master learning materials while developing their creative thinking skills [12]. This study focuses on the implementation of content mastery services to develop mind-mapping skills in students at MAS Amaliyah Sunggal, to improve their learning abilities and academic achievement. This study explores the effectiveness of a structured intervention in developing sustainable mind-mapping practices among students.

2 Research Method

In this study, the researcher employed the counseling guidance class action research method. The research was conducted at Madrasah Aliyah Swasta Amaliyah Sunggal with a sample of 33 students from grades X-5. This research involved providing content mastery services carried out in a classical service format with the aim of developing students' Mind-mapping abilities which will be implemented in several cycles where one cycle consists of 4 stages, namely: planning, action, observation and reflection. These four stages are presented in the following picture :

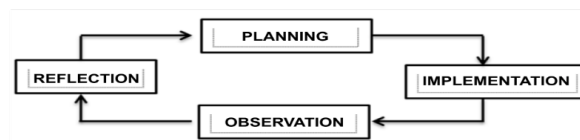


Fig. 1. Step of the counseling guidance class action research

Each cycle is implemented according to the changes to be achieved before the action is taken. In this research, if the first cycle is unsuccessful or has not yet been completed, then a second cycle is conducted. Under the nature of classroom action research, this research has research stages in the form of a cycle using the Kemmis and Taggart model [13].

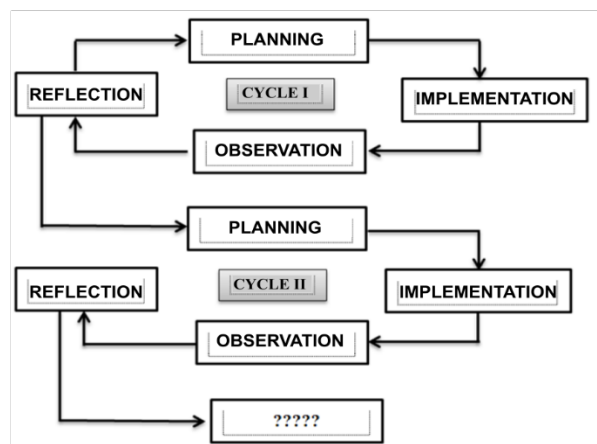


Fig 2. The Phases of the First and Second Cycles of the Study

To further validate the research findings obtained from the actions in Cycle I, the researcher repeated the research in Cycle II. This was carried out by the evaluation results of Cycle I. In practice, the procedure of this research is planning, action, observation, and reflection/evaluation.

The data collection techniques in this research involved observation and the use of instruments given to the students. The instrument used for data collection was a closed-ended questionnaire with a Likert scale measurement that had five answer choices: "Strongly Disagree," "Disagree," "Somewhat Agree," "Agree," and "Strongly Agree." To ensure the validity of the instrument, this research involved two material and media experts to measure the level of suitability of the product in terms of construct validity, following Sugiyono's guidelines (2014:176).

To determine changes in students' mind-mapping abilities through the implementation of content mastery services, the success rate can be measured based on specific percentage targets. The assessment criteria for each cycle are as follows:

Table 1. Criteria for Student's Mind-Mapping Ability Result

SCORE	Category
76-100	High
51-75	Medium
25-50	Low

Furthermore, to determine the changes occurring in students, the following formula can be used:

$$P = \frac{F}{n} \times 100\%$$

Fig. 3. The Formula for the Success Percentage

P = the total number of student improvement changes

F = the number of students who experienced changes

n = the total number of students

This percentage analysis is conducted to determine the success or failure of the actions taken in this study. It is assessed based on the percentage of success that is aimed for, as reflected in the improvement of student's mind-mapping abilities.

3 Results and Discussion

In the initial process, a needs analysis was carried out on the use of learning tools used in the lecture process. In the initial stage, the researcher conducted an interview with the school counselor regarding the student's ability to learn using mind-mapping and how the content mastery service is implemented at the school. After the interview, the results indicated that some students at MAS Amaliyah Sunggal had relatively low learning abilities in processing information, which was related to poorly organized notebooks. The content mastery service activities at the school were already running well. The initial survey results to assess the student's baseline conditions showed that 7 students were categorized as low, with a percentage score of 21%, 26 students were in the moderate category with a percentage of 78%, and no students were in the high category. Based on the observations during the pre-cycle, the researcher found that the student's mind-mapping abilities were still low and required efforts for improvement.

3.1 Results of Cycle I Action Research

3.1.1 Planning Stage

The researcher prepared Cycle I with several activities in the learning process and research instruments. The activities included planning, which involved creating a Content Mastery Service Plan (RPL) with the topic "Development." The researcher, as the implementer, explained and provided an understanding of the title related to the theme. After delivering the service, the researcher prepared research instruments (observation and questionnaires), and developed evaluation tools to assess the student's success rate in each cycle with the implementation of the content mastery service. Additionally, the researcher prepared Laiseq (immediate assessment) and attendance sheets for classroom meetings, which lasted for one lesson period.

3.1.2 Implementation of Cycle I Actions

This cycle was conducted in two meetings. The first meeting was held on Wednesday, February 7, 2024, from 9:15 AM to 10:00 AM WIB. The steps involved in providing content mastery services were as follows: In the first cycle meeting, the researcher implemented content mastery services according to Service Implementation (RPL) and observation guidelines, with a 100% match percentage. The researcher entered the classroom along with the guidance counselor to introduce the researcher and provide services to the class. The school was equipped with adequate facilities, so the researcher directly provided content mastery services to students regarding Mind Mapping. Before starting, the researcher filled in the student attendance list and started the activity with a duration of 1 lesson hour. The following activities were carried out by the researcher:

- a. Introduction Stage. In this stage, the researcher greeted the students and thanked them for participating in the content mastery service activity titled "Mind-Mapping." The researcher then invited the students to pray for the smooth running of the service to increase student's motivation to learn. Afterward, the researcher explained what Mind Mapping is, how to create a Mind Map, its uses, and the benefits of Mind Mapping in developing student's learning abilities. The material presented by the researcher was given in the form of text and video tutorials on creating mind maps. Questions and answers were conducted with the students as a form of assessment carried out by the researcher to determine whether the students understood all the material presented by the researcher in the form of content mastery services. The questions and answers conducted by the researcher were a form of observation.
- b. Exploration Stage. In this stage, the researcher explained to the students about the ongoing activity and asked about the student's readiness to participate in the service activity. During the implementation of the service, it was found that there was a problem with the students of MAS Amaliyah Sunggal, namely that many students were disorganized and noisy, indicating a lack of student interest in participating in the service activities. During the ongoing process of providing content mastery services, some students already understood the explanation given about how to create a Mind Map and had sufficient interest in participating in the service activities. This was evident from the fact that the previously noisy students were now conducive during the content mastery service delivery process.

- c. Development Stage. In the activities that the researcher would carry out to improve student's mind-mapping abilities by implementing content mastery services, the researcher used a question-and-answer strategy as an approach with students in providing services. Thus, creating a dynamic between the researcher and the students. The researcher provided games to alleviate student boredom. However, in this first meeting, the service delivery process was slow, as many students were still engrossed in themselves and playing with their classmates.
- d. Closing Stage. Before ending the activity, the researcher invited the students to conclude the content mastery service activity and ended the activity with a prayer. Then continued with a closing greeting, marking the completion of the first meeting in Cycle I.

3.1.3 Observation

Based on the content mastery service activities to see the improvement in student's mind-mapping abilities, both before and after being given the content mastery service, it can be concluded that there is a change in student's mind-mapping abilities. Based on the data analysis, it can be explained that 21 students already have mind-mapping abilities in the high category with a percentage of 64%, 12 students who have mind-mapping abilities in the medium category, and no students who have mind-mapping abilities in the low category. From these calculation results, it can be seen that student's mind-mapping abilities have improved from the initial condition through content mastery services. Based on observations in Cycle I, the researcher saw that student's mind-mapping abilities increased by 69%.

3.1.4 Reflection

Based on the research results in Cycle I, the researcher conducted a reflection and evaluation of all stages of the activities in Cycle I, starting from the implementation of the activities to the assessment. Based on the description of the criteria for the success of the content mastery service implementation, it went well, but the results achieved were not yet following the set standards, so it will proceed to Cycle II.

3.1.5 Evaluation

In this cycle, the researcher reflected on and evaluated the stages of the activities conducted, from implementation to assessment. Based on the success criteria for implementing content mastery services in improving student's mind-mapping abilities, the process has not been as successful as expected and has not yet reached the target of 80%.

3.2 Results of Cycle II Action Research

3.2.1 Planning Stage

The researcher prepares for Cycle II by creating a Service Implementation Plan (RPL) for content mastery with the main topic discussing the theme "Development." The researcher, as the facilitator, explains and provides an understanding of the topic related to the theme using mind-mapping media, conducted directly and openly. After the service is provided, the researcher prepares research instruments (observations and surveys to assess student development), as well as evaluation tools to measure the success level of students in each cycle, with the implementation of content mastery services. This cycle consists of two meetings, each lasting 1 lesson period (1 x 45 minutes).

3.2.2 Implementation of Cycle II Actions

This cycle was carried out with two meetings. The meetings began on Thursday, March 7, 2024, from 09:00 to 09:45 WIB. In Cycle II, the researcher implemented content mastery services according to the service implementation plan (RPL) and observation guidelines, with the conformity percentage reaching 100%. At this stage, the activities carried out by the researcher/service provider were similar to those in Cycle I, based on the results of the observations, where the improvement in student's abilities had not fully increased because many students were still categorized as high. Therefore, in the second meeting of this cycle, improvements will be made.

- a. Introduction Stage: In this stage, the researcher greets the students and thanks them for participating in the activity, which is the provision of content mastery services with the topic "Effective Learning Methods Using Mind Mapping." The researcher then invites the students to pray for the smooth running of the session and to boost their learning motivation. Afterward, attendance is taken, and the researcher provides the material, explains it, and aims to achieve the goals of the material. The delivery of the material is supported by the use of mind-mapping media. The chosen material for Mind Mapping is part of effective learning methods, which include learning through discussion rather than just memorization.
- b. Exploration Stage: The researcher asks the students to briefly explain the material from the previous session. The researcher then allows some students to review the previous meeting, selected randomly. Randomly selecting students is intended to help them gain more confidence in expressing their opinions.
- c. Development Stage: The researcher explains new material on the topic of "Effective Learning," including what is meant by effective learning and how to learn effectively to make understanding easier. The purpose of this explanation is to help students learn properly without wasting time on unnecessary matters. In this second meeting, students showed enthusiasm while listening to the material, which was reflected in the number of students asking questions about their potential. This created a livelier classroom atmosphere.
- d. Conclusion Stage: Before ending the session, the researcher invites the students to summarize the content of the service activity and provides immediate feedback for the service evaluation. The researcher then distributes a learning motivation questionnaire to the students to assess whether their motivation has increased after the session,

concluding with a prayer. The meeting is then formally closed with a farewell greeting, signaling the completion of the second meeting in Cycle I.

3.2.3 Observation

Based on the content mastery service activity to assess the level of student ability development after the service, it can be concluded that the students now have a high level of mind mapping ability. According to the data analysis, it can be explained that 28 students have a high level of mind mapping ability, 5 students with a moderate level, and no students in the low category. From these results, it is clear that the student's mind-mapping abilities have improved through the content mastery service, showing progress compared to the results of Cycle I.

3.2.4 Reflection

Based on the implementation of Cycle II, the reflection results show an improvement in student's mind-mapping abilities. There are 28 students in the high category, representing 85%, 5 students in the moderate category, representing 15%, and no students in the low category. This finding can be considered complete as it has reached 85%. Therefore, the data from this study are sufficient for analysis in an academic paper, by the established procedures.

3.3 Results of Cycle I and Cycle II Actions: Content Mastery Services to Develop Mind Mapping Skills of MAS AMALIYAH Sunggal Students

At the beginning of the study, student's understanding of mind mapping was still minimal, as evidenced by the pre-cycle conducted by the researcher before implementing Cycle I and II actions. The initial results from the distribution of the questionnaire showed that 7 students were in the low category, representing 21%. Mind mapping has proven to be an effective strategy for improving students' comprehension and retention of academic subject matter [14]. This visual technique empowers learners to organize information, discern key connections, and engage more deeply with the course material. Therefore, the researcher will present a diagram to observe the development of students' mind-mapping skills from the pre-cycle through to the Cycle II action stage.

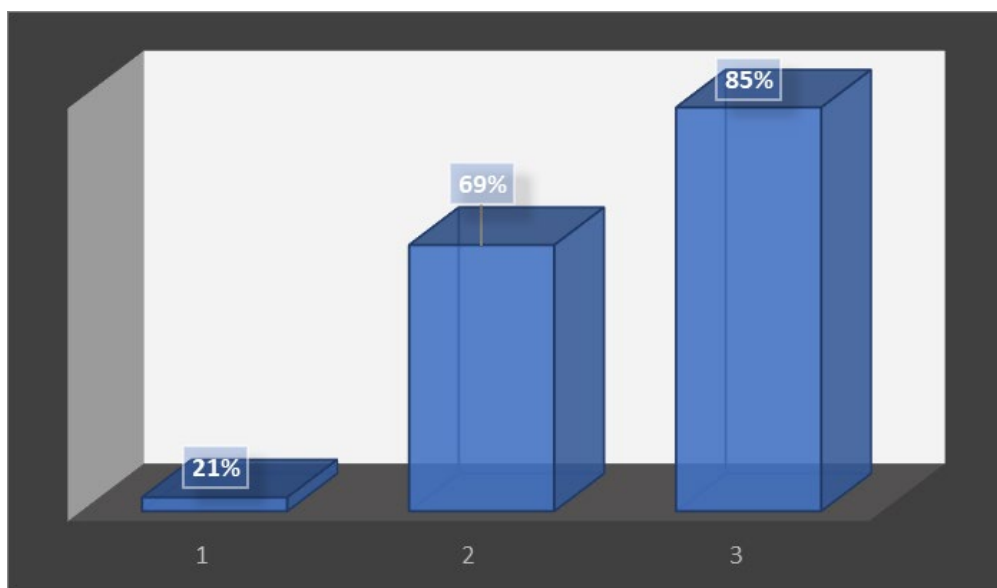


Fig. 4. Results of Cycle I and Cycle II Mind Mapping Development of MAS Amaliyah Sunggal Students

The figure shows that improvements occurred in each cycle that was conducted. The lack of student's mind mapping skills is evident from the pre-action and pre-test diagram, which showed 21%, categorized as low. After implementing content mastery services over two meetings in Cycle I, the improvement reached 69%, which is categorized as high. Following the actions in Cycle II, which was conducted over four meetings, the score increased to 85%. Thus, it can be concluded that there was an improvement from Cycle I to Cycle II, resulting in satisfactory outcomes. When compared to the target score of 80%, the results surpassed the set target for Grades X-5. This indicates that content mastery services are significant in developing the mind-mapping skills of MAS Amaliyah Sunggal students.

This study demonstrates that content mastery services can enhance student's mind-mapping ability to organize information, develop creativity, optimize learning and memory processes, increase learning motivation, and develop critical and analytical thinking skills. As such, the findings provide a significant contribution to education and school counseling services, particularly in the learning domain. It is hoped that this research can serve as a reference for other schools in providing counseling and guidance services.

4 Conclusion

Based on the results of the study, it can be concluded that the implementation of content mastery services successfully improved the mind-mapping skills of MAS Amaliyah students. This is evident from the initial condition before participating in the content mastery services, where students' mind mapping skills were generally low, with a percentage of 21%, and 7 students were classified in the low category. After Cycle I, there was an improvement, with 21 students classified in the high category, achieving a percentage of 69%. In Cycle II, students' mind mapping skills further improved, with 28 students classified in the high category, achieving a percentage of 85%. This result is satisfactory and exceeds the target score of 80%.

Through content mastery services, students have learned how to create and explore mind maps, which helps them understand and organize information more effectively. Additionally, these services have enhanced student's abilities to take actions related to the content they have learned. The results of this program indicate that using mind mapping as a learning strategy can improve student's academic performance and assist them in tackling academic and professional challenges in the future.

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