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DEVELOPMENT OF MIND MAPPING MEDIA TO INCREASE LEARNING MOTIVATION CLASS VII A STUDENTS SMP BAHRUL MAGHFIROH

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ABSTRACT

According to the findings of a pre-survey on social studies classes at SMP Bahrul Magfiroh class 7A, pupils who exhibit this problem exhibit very little enthusiasm to learn. This study aims to determine whether students are interested in learning about various topics. To this end, Mind Mapping media will be used as a learning tool to boost students' enthusiasm for learning. Utilising the ADDIE approach (analysis, design, development, application, and evaluation), mind mapping learning materials are developed through development research, often known as research and development (R&D). A proportion of 80% fell into the practicable group according to the media feasibility test conducted by media and material experts. According to the results of surveys given to 23 students, the presence of active and interactive learning materials influences 32.8% of student motivation. Thus, it can be said that using mapping media helps boost students' motivation to understand social studies material.

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INTRODUCTION

Professional advancement will continue to be facilitated by education as long as it stays current with the times. Education aims to enhance people's quality (Enike & Irawan, 2024). Education includes the development of moral values, abilities, and traits that will impact the calibre of human resources in addition to cognitive or knowledge mastery (Febrianto et al., 2021). Education is the primary means of ensuring sustainable development and is vital in producing high-quality human resources (HR) that are prepared to compete in future civilisations (Sanjaya, 2012).

Assert that education equips people with the knowledge and abilities to confront global issues, including social injustice, climate change, and technological advancements (Ghozal & Irawan, 2024). In addition to imparting knowledge, a high-quality education develops moral principles and character traits like empathy,

accountability, and integrity, which are crucial in both the social and professional spheres (Ummah, 2019). Therefore, education aims to develop people who are socially and environmentally conscious, as well as innovative and change-adaptive, in addition to imparting academic information. A brighter future for coming generations may be ensured by producing human resources prepared to tackle new problems and support sustainable development through high-quality education (Kulsum & Muhid, 2022).

Even though Indonesian education has advanced quickly, there is still much that may be improved. Thus, appropriate learning strategies are crucial for structured instruction in this situation. Plans or activities that use media or processes as tools to use resources and encourage learning are known as learning strategies (Sutikno, 2021). Successful teaching strategies are anticipated to boost students' enthusiasm for learning. It is because the process's learning methodologies have been adjusted to accommodate the requirements of different subjects, learners, and instructor experience levels (Baharuddin et al., 2022).

The application of learning methodologies can be aided by the dynamic fields of science and technology, which will necessitate a significant amount of technology-based learning. The requirement for ever-more-advanced technological innovation will impact innovation in education (Hasan et al., 2021). Using media in the classroom can boost pupils' drive to learn and foster creativity. Additionally, using educational media will help teachers create engaging curricula. Students can learn more successfully and efficiently if presented with more creative and varied material.

Two benefits of incorporating educational media into teaching and learning activities are enhancing learning outcomes and gradually introducing students to technology. Technology advancements will give students more access to the newest learning materials, which may boost their desire to learn (Irmayani, 2020). If learning activities are conducted without learning media, learners may become disinterested. Students' propensity to skip class, lack of engagement in the learning process, absences, and lack of excitement for learning are all signs of this. Thus, a lack of diversity in the educational process may lower students' enthusiasm to learn (Julhadi, 2021).

According to a pre-survey of class 7A social studies classes at Bahrul Magfiroh Junior High School, students who struggle academically lack interest in studying. It is demonstrated by those pupils who leave class before the session begins and don't even think twice about skipping it. It turns out that learning materials that are engaging and unique can predict this. When given engaging and motivating media and LKPD, students are more willing to participate in social studies lessons at the following meeting (Sagita et al., 2025). The pre-survey's findings inspired academics to look for strategies to boost student motivation. Considering that students are eager to learn about a broad range of subjects. This study will employ mind mapping or concept maps as a teaching tool to boost students' motivation. The fact that mind mapping is relatively simple to develop and offers a fundamental structure for presenting learning materials supports its usage as a teaching tool. Learning materials based on mind mapping can be created to help teachers and students communicate during class activities (Istarani,

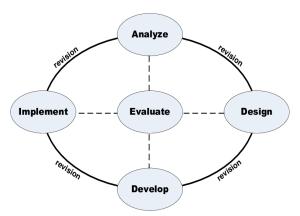
2014).

Information is described and arranged in order using the visual method of mind mapping. This method provides a more effective, methodical, and comprehensible summary of concepts, ideas, or facts (Reza et al., 2021). The primary topic of a mind map is typically written in the middle of the page, with branches signifying supplementary concepts or subtopics. Use visuals, terms, or other symbols to help improve comprehension and illustrate each branch better (Sulfemi, 2019). Additionally, learning resources that use mind mapping might aid students in comprehending abstract concepts. Teachers may engage students and overcome inactive learners by employing mind mapping-based learning resources. It has been acknowledged that students require the creation of self-directed learning resources based on mind mapping. Its development is extremely desirable because to its full colours, dynamic display fluctuations, and brain-function-imitating development planning.

RESEARCH METHOD

The process is called development research or research and development (R&D). Research and development are used to create and validate products (Sugiyono, 2023). A product is said to be validated if it currently exists and the researcher has examined its validity or efficacy.

In a broad sense, product development might involve either developing new items that have never been produced or upgrading existing products to make them more useful, efficient, and effective. Mind mapping instructional materials are created using the ADDIE (Analysis, Design, Development, Implementation, and Evaluation) development paradigm (Cahyadi, 2019). The following is how the ADDIE model is applied in the product development process:



Picture 1. ADDIE Development Model

The steps taken in making mind mapping-based ADDIE model learning materials are as follows:

1. Analysis

Focus: Determine the need for a mind mapping tool for education.

Activity:

- a. Examine learning issues (e.g., learners struggle to understand content fully).
- b. Ascertain whether mind mapping works well for complex content that requires idea mapping.
- c. Determining learner traits (creative, visual, need help with learning structures).
- d. Checking the learning environment and curriculum (materials, objectives, and time).

2. Design

Focus: Creating mind mapping materials for educational purposes.

Activity:

- a. Set clear learning objectives that facilitate mind mapping (e.g., learners can map ideas about the human respiratory system).
- b. Choose a learning approach that relies on visual learning.
- c. Make a mind mapping template or spreadsheet.
- d. Create a rubric to evaluate the mind mapping results.
- e. Determine the instrument (color, paper, or digital programs such as Canva, iMind Map, and XMind).

3. Development

Focus: Creating educational resources and mind mapping media.

Activities:

- a. Create sample mind maps for educators and learners.
- b. Make a manual or video course on mind mapping.
- c. Create blank templates for learners to use.
- d. Give the first trial to a small group of learners to gauge their understanding and effectiveness.
- e. Adjusting based on comments.

4. Implementation

Focus: Implementing mind mapping media in the teaching-learning process.

Activity:

- a. The instructor explains mind mapping and gives examples.
- b. Using the information provided, learners create mind maps.
- c. The instructor directs the digital and manual creation process.
- d. In class, the results of mind mapping are collected and discussed.

5. Evaluation

Focus: Evaluating how well mind mapping works as a teaching aid.

Activity:

- a. Formative evaluation: Note how the map is constructed, comment on it, and adjust the approach as needed.
- b. Summative assessment: Apply criteria to evaluate the finished mind map (content, structure, creativity, and neatness).
- c. Collect opinions from learners on the benefits of mind mapping.
- d. Modify learning materials or approaches based on evaluation results.

A survey was distributed to subject matter experts and media professionals to collect data. After that, the data is analysed. A learning media feasibility study aims to gather information from assessments carried out by subject matter and media experts. These assessments produce quantitative data. The criteria and Likert scale ratings shown below are:

Table 1. Likert Scale

Score	Assessment	Symbol
4	Excellent	SB
3	Good	В
2	Fair	С
1	Poor	KB

Source: (Kurniawati & Judisseno, 2022)

Interviews, questionnaires, and documentation were all used in the data collection process. Class 7A at Bahrul Maghfiroh Junior High School served as the testing ground for the product. Twenty-three pupils participated in the trial as respondents. The following formula, taken from (Arikunto, 2011), is applied in the data processing process:

Each item's data formula

$$P = \frac{\Sigma x}{\Sigma x i} x \ 100\%$$

Description:

P = Percentage Validation

 $\Sigma x = \text{Total number of answers in all items}$

 $\Sigma xi = Total$ number of ideal values in all items

100 = Constant

The viability of learning material is subsequently assessed using the findings of the computations mentioned above. Table 2 displays the eligibility category as follows.

Table 2. Question scoring criteria

Percentage	Criteria	Description
1% - 20%	Not Very Usable	Very Unusable
21% - 40%	Not Usable	Unusable
41% - 60%	Less Usable	Needs Major Revision
61% - 80%	Feasible	Usable With Revision
81% - 100%	Very Usable	Usable Without Revision

Source: (Muhsan et al., 2022)

RESULTS AND DISCUSSION

Any tool or method that teachers can employ to provide students with information to boost their interest, focus, and engagement in the learning process is referred to as learning media. Using visual, auditory, or audio-visual resources in the

classroom can improve the teaching and learning process. Media is necessary to create a dynamic and engaging learning environment. Media should be tailored to the content, learner characteristics, and learning objectives throughout production. Enhancing students' comprehension of the material and helping them remember it are the primary goals of media use (Taihuttu, 2025).

Mind mapping is a technique for visually presenting information through a methodically arranged mind map showing connections between ideas. The foundation of mind mapping is the brain's innately linked and non-linear thought processes. This method encourages learners' creativity and recall by utilising visual components including colours, images, symbols, and keywords (Aqwal, 2020). Because mind maps illustrate the connections between concepts, they help students comprehend and retain information. Students who learn best visually and kinesthetically may benefit from this approach.

Learning motivation is defined by Sardiman (2021) as both external and internal elements that motivate students to engage in learning activities. Learning motivation serves as the engine that propels and guides learning activities. High learning motivation learners exhibit tenacity, excitement for learning, and a willingness to study independently. Because they make learning more meaningful and pleasurable, engaging and interactive learning tools like mind mapping are thought to boost learning motivation.

The following are the study results at every stage of Bahrul Maghfiroh Junior High School's mind mapping learning material creation (Handoyo & Irawan, 2022).

Analysis

Curriculum analysis, instructional material analysis, and test subject analysis are the three primary phases of the analysis process (Mulyasari et al., 2023). Ensuring that the instructional materials created follow the relevant curriculum is the primary goal of the curriculum analysis stage. The Merdeka Curriculum is the curriculum utilised at Bahrul Maghfirog Junior High School. The curriculum's learning objectives and outcomes must be examined to ensure they are appropriate for the taught content. The capacity to analyse the impact of social culture based on geographic location and the types of social cultural diversity in society is one example of a relevant learning aim in the material on social cultural diversity in society.

Additionally, an examination of the necessary instructional resources was carried out. The analysis's findings demonstrated that instructional resources, including pictures, videos, and hands-on activities, help students comprehend the subject more readily. These findings led to the development of mind mapping-based teaching resources, which can deliver information engagingly and interactively, and suit students' learning styles. Lastly, the test subjects were analyzed to evaluate the instructional materials' efficacy. Feedback regarding the usefulness and efficiency of instructional materials in the learning process is crucial to obtain from this trial. The results of this trial will be used to make improvements and refine teaching materials to suit better

students' needs and characteristics (Cahyadi, 2019).

Design

The program's essential elements and structure are specified during the design phase. The design incorporates planning for the many educational programmes, architectural, visual style, and material requirements for the media (Ardiansyah, 2023). In this instance, the development team develops the user interface's look and feel and ensures that every visual and functional component is appropriate for its design. Much planning is done throughout the design stage to create a successful and efficient learning environment. To best accomplish the learning objectives, this stage focuses on deciding how the content will be presented, evaluated, and arranged.

Researchers will make a storyboard throughout the design phase. This step aims to help researchers create the mind maps that will be used. Additionally, researchers provide tools for mind mapping validation, such as materials, student response questionnaires, and media expert validators (Deriyan & Nurmairina, 2022). The purpose of instrument-based assessment is to ascertain if instructional materials are feasible.

Development

The development step is producing and preparing the learning materials generated in the first stage, which occurs after design. The first stage in this mind mapping exercise is gathering the required equipment and supplies. Supplies, drawing paper, colour markers, pencils, and rulers, must be ready if the material is hand-created. Digital media are created using software like Canva, XMind, or iMind Map. Additionally, pertinent instructional materials are gathered and arranged into primary concepts and subconcepts to aid with mind mapping (Adolph, 2024).

A hierarchical structure from the main idea to the branches of more specific concepts, using colours to distinguish concepts, and supporting symbols or images to reinforce understanding are all examples of learning visualisation principles considered when making mind maps (Premianti, 2021). The media's clarity, appeal, and capacity to aid in comprehension of the subject matter were then evaluated using a small sample of students. Based on the input from this initial trial, design and content changes were made to make the mind mapping media genuinely ready for general usage in the learning process.



Picture 1. Mind Mapping Cover



Picture 2. Teaching Material



Picture 3. Teaching Material

The validation results derived from questionnaires completed by material and media specialists are listed below. The following are the calculation results.

Table 3. Media Feasibility Test Results by Media Experts

No.	Assessment Aspect	Score
1.	Usability	15
2.	Image Quality	18
3.	Display Quality	16
4.	Word and Language Usage	15
5.	Media Quality	16
	Total Score	80

Percentage	80%
Criteria	Feasible

Source: Researcher Data (2025)

Media specialists performed a feasibility test to gather information and suggestions from qualified validators to guarantee that the learning media produced is a high-quality, appropriate product. Media expert validators generated a total score of 80% with respectable categories or criteria. The learning media received an overall percentage of 80% with a practical category based on the feasibility test results conducted by professional validators. It demonstrates how well mind mapping is a teaching tool for social and cultural diversity. It is due to its excellent usability, display quality, image quality, media quality, and the use of words and language, all of which will help teachers and learners in their educational endeavors.

Table 4. Feasibility Test of Learning Media by Material Experts

No.	Assessment Aspect	Score
1.	Drawing Aspect	22
2.	Content	30
3.	Language And Communication	28
	Total	80
	Percentage	80%
	Category	Feasible

Source: Researcher Data (2025)

Based on the findings of the feasibility test carried out by the material expert validator, the learning media received an overall percentage of 80% with a respectable category. It demonstrates that mind mapping can be used as a teaching tool for sociocultural diversity content in the community. In terms of language and communication, learning design, and content, the media produced is efficient, which will help teachers provide material and students comprehend it.

Implementation

Mind mapping learning resources in the classroom start at the implementation stage. The instructor begins by reviewing the fundamentals of mind mapping, its educational advantages, and how to make one. The instructor also gives examples of mind maps created digitally and manually so that students grasp the intended outcomes. After that, students are told to make mind maps using the provided content, with the main thought at the centre and branches of related ideas formed following the material's structure. The instructor actively assists students in making mind maps, offering direction as required, and making sure that each student understands how to arrange information graphically. For students who choose to make mind maps digitally, the instructor also offers technical guidance on using the selected programme. After every

student has finished their assignment, the mind mapping data is gathered to be examined and discussed in class. This conversation seeks to enhance comprehension of the material, contrast students' thought processes, and promote reflection and advancement in the following mind map (Sam, 2008).

Table 4. Learning Motivation Questionnaire

No.	Name	Score
1.	AFA	31
2.	AIS	35
3.	AYA	38
4.	ABN	36
5.	AVF	32
6.	AFM	38
7.	BAR	28
8.	BAS	36
9.	DFAS	32
10.	FAF	37
11.	MAE	28
12.	MAP	30
13.	MAM	37
14.	MAA	30
15.	MBS	30
16.	MDP	26
17.	MHA	30
18.	MHF	35
19.	MH	37
20.	MYZ	28
21.	MYA	27
22.	PAS	38
23.	SA	37
	Total	756
	Average	32,8

Source: Researcher Data (2025)

According to a questionnaire administered to all 23 students in a single class, learners' motivation has increased since using mind mapping learning resources. This learning media can be supported by the previously given questionnaire data, which indicates that the average percentage of learning motivation is 32.8%. We may conclude that the learning media element influenced 32.8% of learners' learning motivation. Therefore, it is indisputable that each person's drive originates internally. In this study, however, learning motivation is also impacted by fewer diverse learning materials.





Picture 4. Implementation of Learning Media for Students

Evaluation

The assessment phase is crucial in figuring out how well the mind mapping resources function as a teaching tool and as a foundation for further improvement. Formative and summative assessments are the two categories of evaluation (Efendi et al., 2024). During the formative assessment phase of the media design and deployment process, teachers monitor students' engagement and the difficulties they encounter, and offer prompt feedback for swift improvement. Mind mapping guarantees that students fully comprehend the material and that the learning process proceeds smoothly.

A summative evaluation is carried out following the conclusion of the learning session. The created assessment criteria, which address areas including neatness, visual creativity, concept integration, and content, will be used by teachers to evaluate students' mind maps. The students' reflections are gathered to determine how much the mind mapping tool aided the students' comprehension of the material. The evaluation step, according to Phafiandita et al. (2022), is used to determine how well the media satisfy the learning objectives and is taken into account when developing or revising mind mapping materials that are more effective and meet learners' requirements in the future.

CONCLUSION

Based on the study of difficulties, needs, and potential, learning materials that can increase learners' motivation to learn are needed. Students expect engaging, creative, and modern teaching methods or media to boost their learning motivation in class. The implementation of this research has successfully satisfied the goal of using mind mapping learning media to increase learning motivation, training, and knowledge expansion. With a practicable category, the media feasibility test based on material experts and the media feasibility test conducted by media experts achieved an 80% success rate. According to the survey's findings, an average of 32.8% of respondents said that using educational media in the classroom significantly affected their motivation to learn. This study emphasises how crucial it is to use interesting media, boost student participation in the school, and increase self-esteem so that students can further their learning.

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