

**PAPINSPIN LEARNING MEDIA DEVELOPMENT FOR ENERGY CHANGE
THEME FOR GRADE III STUDENTS OF MI NASRUDDIN DAMPIT****Moh. Khoridatul Huda**

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ABSTRACT

Write The motivation behind this research is instructors' suboptimal utilization of learning media, particularly in the thematic subjects of class III MI Nasruddin Dampit. This shortcoming has resulted in a disruption of the learning process and a decline in student learning outcomes, as they experience challenges in comprehending the material being taught, especially the energy change material. To address this issue, the researcher developed a product in the form of a spinner smart board learning media named PAPINSPIN (Papan Pintar Spinner), aimed at enhancing the effectiveness of learning energy change material for class 3 thematic subjects of MI Nasruddin Dampit. The product's feasibility and effectiveness were evaluated using Borg & Gall's Research and Development (RnD) research method. The research subjects were third-grade students, and data collection techniques included questionnaires, written tests, observations, and interviews. The results indicated that PAPINSPIN was a valid and effective learning support that significantly improved student learning outcomes. The product's feasibility was assessed by practitioners and media experts, and the results indicated that PAPINSPIN had a feasibility level of 92.5% and 88.34% for practitioners and media experts, respectively, both of which qualified as "very valid." The product's effectiveness was evident in small and medium group product trials, with percentage gains of 88.34% and 81.7%, respectively.

Keywords: Effectivity, Energy Change, SPINNE

INTRODUCTION

Education is crucial for shaping individuals into knowledgeable, responsible, and ethical citizens. Educators aim to impart knowledge and develop students' abilities and characters in line with the National Education System Law No. 20 of 2003. The curriculum plays a critical role in achieving educational goals, and the Indonesian curriculum has undergone several changes to meet the demands of changing times.

The 2013 curriculum is particularly noteworthy for its student-centered approach, allowing students to control their learning journey more while teachers are facilitators. The availability of learning resources, especially learning media, is critical to the success of the curriculum.

Educators can make learning more engaging by providing well-designed learning media and helping students achieve their full potential.

In summary, education is a powerful tool that can help shape the future of a nation. By providing students with access to quality education and learning resources, educators can help develop individuals who are knowledgeable, responsible, and can contribute positively to society.

An interview with a grade 3 teacher at Madrasah Ibtidaiyah Nasruddin Dampit, named Nasruddin Dampit on March 15, 2021, revealed that the use of learning media at the school has not been implemented optimally. According to the teacher, learning media has not been maximised, making it difficult for children to comprehend the material taught by the teacher regarding energy changes in subtheme 2, theme 6. Currently, the teaching and learning process only relies on thematic modules as learning resources that are integrated with the 2013 curriculum. Although the thematic modules are designed for independent learning, they tend to be incomplete, making it difficult for students to understand the material taught. Hence, media is required in the learning process to help students easily grasp the material taught.

In response to the challenges faced by educators, researchers have developed spinner smart board media as a tool to enhance learning activities. The spinner smart board is a visually engaging two-dimensional learning aid designed as a square-shaped smart board made of plywood and coated with sticker paper. PAPINSPIN media has a spinner that draws questions about energy change material specifically for class 3. Its appealing design aims to motivate students to take an active interest in learning and simplify comprehension of the material being taught. This study aims to develop PAPINSPIN learning media and evaluate its effectiveness in teaching energy change material to grade 3 students at the MI Nasruddin Dampit thematic school.

METHOD

The researcher uses the Borg and Gall R&D model modified by Sugiyono for research and development. This model comprises ten essential stages that are critical for the success of any R&D project. These stages include identifying potential problems, collecting, designing the product, validating the design, revising the design, testing the product, revising the product, testing its usage, revising the product again, and finally, mass producing it. Utilising this model ensures that the entire R&D process is conducted systematically and organised systematically and meets the desired quality standards.

The study subjects were grade III students at MI Nasruddin Dampit. The instruments in this study include questionnaires, tests, observations, and interviews to collect the data. In addition, the developed learning media, SPINNER, was validated by practical and media experts. The initial validation is 85%, indicating a revision, and the final practical validation results in 92,5% with no revision. The media expert was Aan Sulton, M.E.I.

of Universitas Islam Raden Rahmat (UNIRA) Malang gave the media 88,67% with small revision, and the final score was 88,34% with no revision needed.

The researcher conducted a field test on small (6 students) and medium-sized (12 students) groups of students in applying the SPINEER media in the learning process to analyse its effectiveness. The finding showed that the results of the pre-test of the small and medium groups were 56,67% and 52,5%, respectively. In contrast, using the SPINNER was effectively proven by the post-test results, 88,34 and 81,7% for small and medium groups, respectively. These discoveries proved that the SPINNER media significantly increased students' test results.

RESULTS AND DISCUSSION

The PAPINSPIN media was created to improve student learning outcomes by developing effective educational products with the help of researchers. By utilising the PAPINSPIN media, students are expected to be more engaged in their learning process and better understand the concept of energy change. The reason behind creating the Smart Board Spinner was the lack of use of learning media in thematic subjects, specifically energy change material for grade 3 students in MI Nasruddin Dampit, which resulted in low student learning outcomes. The development of this product was based on the PAPINSPIN Learning Media model design, which has proven to be highly successful. The development research consisted of 10 stages, including potential and problems, data collection, product design, design validation, usage trials, product revisions, product trials, design revisions, product revisions, and mass production. The research successfully completed eight stages and concluded with product trials.

In this study, the researcher confidently began with an initial observation to identify the best teaching and learning activities for grade 3 students at Madrasah Ibtidaiyah Nasruddin Dampit. An interview was conducted with Mrs Tika Dwi Lestari, a thematic subject teacher. The researcher conducted a pretest and created a lesson plan and a spinner smart board learning media called PAPINSPIN. The feasibility of using PAPINSPIN learning media was confidently validated by experts, with a percentage of 88.34% from media experts and 92.5% from practitioners, indicating a high level of validity.

After obtaining approval through expert validation, the researcher confidently conducted small and medium-group field trials. Students were given a post-test after using PAPINSPIN learning media and confidently obtained a percentage of 88.34% for small groups and 81.7% for medium groups. These results confidently demonstrate that PAPINSPIN learning media is highly effective for teaching energy change material in grade 3.

Spinner Smart Board Learning Media is a visually appealing two-dimensional learning aid that attracts students' interest and encourages them to learn. The PAPINSPIN learning media consists of a captivating background, a media title, a spinner for selecting questions, a space for posting questions and answers, question banks and answer banks with relevant questions and answers, and manuals. All these elements have been

designed using the Corel Draw X6 software by researchers with great attention to detail.

Advantages and Disadvantages of Spinner Smart Board Media

a. Advantages of PAPINSPIN Media

1. This tool is an excellent resource for students, as it presents them with a challenge they can overcome by spinning the spinner to understand the problem. 2. Students can easily understand and apply concepts related to Energy Change. 3. Attractive design can foster students' interest in learning, especially for thematic learning of the "Energy Change" material. 4. "Energy and its Changes" in the material "Energy Change" is very appropriate because students can know and understand about changes in energy around them. 5. Can be used individually or in groups.

b. Disadvantages of PAPINSPIN Media

1. Creating media for teaching Class 3 "Energy Change" can be challenging and time-consuming, and the limited use of Spinner Smart Board Media in this area is a testament to that. 2. Creating media for teaching Class 3 "Energy Change" can be challenging and time-consuming, and the limited use of Spinner Smart Board Media in this area is a testament to that.



Figure 1. PAPINSPIN Media

Effectiveness

The efficacy of PANPINSPIN learning media products can be measured by analysing the results of students' writing tests. A clear difference can be observed by comparing the test results before and after using Spinner

Smart Board media. The feedback from students who used this media has been overwhelmingly positive, making them more active and enthusiastic during their learning activities. This aligns with the psychological function of learning media, which significantly improves students' attention and evokes feelings and emotions, leading to acceptance or rejection of something. (Munadi, Y., 2012).

PAPINSPIN learning media has been proven effective in improving student learning outcomes. Learning outcomes refer to the real changes in student behaviour after completing the teaching and learning process in line with the learning objectives (Jihad, A. et al. (2013) Learning Evaluation). In the pre-test results, the small group of students scored only 56.67%, while the medium group scored 52.5% with a very small category. However, after using the PAPINSPIN learning media, researchers conducted a written test and found that the post-test scores of the small group of students increased to 88.34%, while the medium group scored 81.7%, with good categories, indicating a significant improvement in students' cognitive learning outcomes. Therefore, it can be concluded that the Smart Board Spinner learning media is extremely helpful in students' learning process, particularly in the "Energy Change" topic, and can significantly improve their learning outcomes. Consequently, the media is appropriate for use in grade 3 MI Nasruddin Dampit.

CONCLUSION

PAPINSPIN is a two-dimensional visual learning media designed to support students' learning process. The quality of the Spinner Smart Board learning media for Grade 3 is exemplary, meeting all the valid criteria and rendering it suitable for use without any revisions. This fact is well-evidenced by the validation results obtained from experts. The media expert validation assessment yielded 88.34%, while the practitioner scored 92.5%.

The PAPINSPIN learning media is particularly effective in teaching the complex subject of energy change in 3rd grade. The results of the small group pre-test were 56.67%, while the post-test showed a percentage of 88.34%. Similarly, the medium group pre-test results showed a percentage of 52.5%, while the post-test results showed 81.7%. These results demonstrate a significant improvement in student learning outcomes, indicating that the PAPINSPIN learning media is a highly effective tool for enhancing students' understanding of the material taught.

In conclusion, the Spinner Smart Board learning media is an asset for any educational institution that aims to improve student learning outcomes. The media's high-quality design, excellent validation scores, and effective teaching of complex subjects like energy change make it an ideal choice for educators looking to enhance their students' understanding of scientific concepts.

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