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The Use Of The Addie Model In Developing Teaching Materials In Elementary Schools: A Literature Study

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Article

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Abstract

The development of teaching materials in elementary schools is one of the efforts to improve the quality of learning and help students better understand learning content. One of the most widely used models in developing teaching materials is the ADDIE model because it has systematic stages and is easy to apply. This article aims to review the use of the ADDIE model in developing teaching materials in elementary schools through a literature study. The method used is a literature review by collecting various sources such as books, journals, and relevant research findings. The results of the study show that the ADDIE model, which consists of the stages of analysis, design, development, implementation, and evaluation, can help produce more structured teaching materials that are in accordance with the needs of elementary school students. In addition, several studies show that the use of the ADDIE model can increase students' learning motivation and understanding in the learning process.

INTRODUCTION

Elementary school education is an important level of education that plays a crucial role in developing students' basic abilities, including knowledge, skills, and attitudes. At this stage, the learning process needs to be designed in an engaging way and aligned with students' developmental characteristics so that learning objectives can be optimally achieved. According to Law No. 20 of 2003 concerning the National Education System, education is a conscious and planned effort to create a learning atmosphere and learning process so that students actively develop their potential. Therefore, teachers need to create learning experiences that support students' holistic development.

One important component in the learning process is teaching materials. According to Majid (2013), teaching materials are all forms of materials used to assist teachers in carrying out teaching and learning activities in the classroom.

Teaching materials not only function as a source of information but also help students understand learning content more easily and systematically. Meanwhile, Prastowo (2015) explains that teaching materials are systematically arranged sets of learning content that enable students to learn independently or together with the teacher.

In elementary school learning, the use of less engaging teaching materials often causes students to have difficulty understanding learning content. Elementary school students tend to be more interested in learning that involves pictures, colors, activities, and interactive media. Therefore, teachers are required to develop innovative teaching materials that are appropriate to students' characteristics. According to Hamalik (2011), the use of appropriate media and teaching materials can increase learning motivation and help students understand the material more effectively.

The development of science and technology has also encouraged innovation in the development of teaching materials. One widely used method in education is Research and Development (R&D). Sugiyono (2019) states that R&D is a research method used to produce certain products and test their effectiveness. In education, the resulting products may include modules, learning media, instructional tools, and teaching materials.

One development model widely used in educational research is the ADDIE model. The ADDIE model consists of five main stages: analysis, design, development, implementation, and evaluation. This model is developed systematically, making it easier for researchers and teachers to design and develop teaching materials that meet learning needs.

ADDIE = Analysis + Design + Development + Implementation + Evaluation

Branch (2009) explains that the ADDIE model is a simple, systematic, and flexible instructional design approach that can be used in various forms of learning development. In addition, Tegeh and Kirna (2013) state that the ADDIE model is effective for developing teaching materials because each stage is carried out in a structured manner from needs analysis to product evaluation.

Various studies show that the ADDIE model can produce teaching materials that are valid, practical, and effective for use in elementary school learning. The development of teaching materials using the ADDIE model is also considered capable of increasing learning motivation, student engagement, and students' understanding of learning content. Therefore, the ADDIE model is one of the relevant development models to be used in elementary education.

Based on the explanation above, this article aims to review the use of the ADDIE model in developing teaching materials in elementary schools through a literature

study. This review is expected to provide an understanding of the stages of the ADDIE model and its application in producing innovative teaching materials that are in accordance with students' needs.

METHOD

This study uses a literature review method. According to Zed (2014), a literature study is a research method conducted by collecting various written sources, then reading, noting, and processing them to obtain data relevant to the topic under study. This method is used to understand concepts, theories, and previous research findings related to the use of the ADDIE model in developing teaching materials in elementary schools.

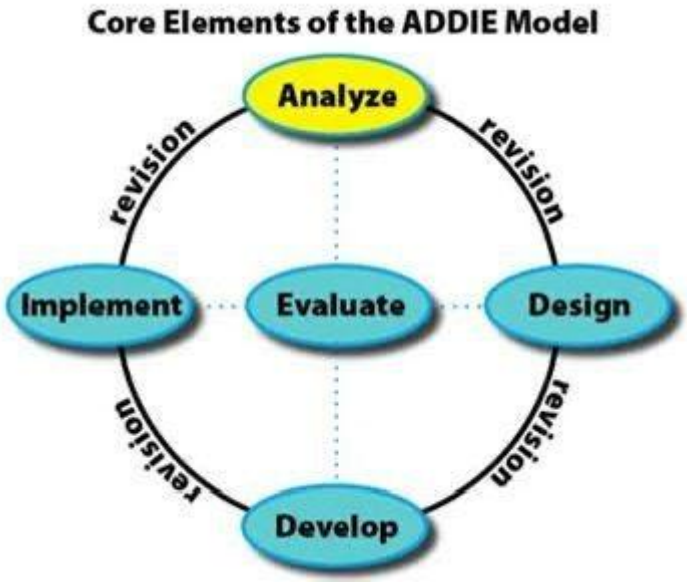

Figure 1.1 ADDIE model stages

Source: https://share.google/hl2PkmyNg2KFIYfNL

The data sources in this study come from various scientific literature, such as books, national journals, research articles, and other relevant documents related to development research and the ADDIE model. The selected literature is based on topic relevance, content relationship, and source clarity to ensure the data is valid and supports the research discussion.

Data collection techniques were carried out through documentation of various references related to the ADDIE model and the development of teaching materials in elementary schools. According to Sugiyono (2019), documentation is a data collection technique involving notes, books, journals, and other supporting

documents. In this study, the researcher collected and reviewed previous studies discussing the application of the ADDIE model in developing teaching materials.

The research procedure consisted of several steps: identifying the research topic, collecting literature sources, selecting relevant literature, analyzing data, and compiling the results. At the initial stage, the researcher determined the focus of the study on the use of the ADDIE model in developing teaching materials in elementary schools. Next, relevant references were collected and selected according to the research objectives.

The data were analyzed using qualitative descriptive analysis. According to Moleong (2017), qualitative descriptive analysis involves systematically describing data to provide a clear picture of a phenomenon. In this study, the analysis was conducted by comparing and connecting previous research findings on the use of the ADDIE model in developing teaching materials in elementary schools. The results of the analysis were then systematically organized to draw conclusions in line with the research objectives.

RESULTS AND DISCUSSION

Results

Based on several studies reviewed, the ADDIE model is frequently used in the development of teaching materials in elementary schools. This model is considered helpful because its steps are clearly structured, making it easier for teachers and researchers to develop learning products. The use of the ADDIE model is not only applied to learning modules but also to digital learning media, thematic teaching materials, and other instructional tools. The ADDIE model consists of five stages: analysis, design, development, implementation, and evaluation.

ADDIE = Analysis + Design + Development + Implementation + Evaluation

The first stage is analysis. This stage involves analyzing learning needs, student characteristics, and problems that arise during the learning process. Branch (2009) explains that the analysis stage serves as the foundation for determining the product to be developed. In elementary school learning, this stage is important because each student has different learning needs and abilities.

The next stage is design. At this stage, the developer begins to design teaching materials, determine learning objectives, select content, and prepare the product format. According to Pribadi (2016), the design stage helps ensure that the development process is more directed and aligned with the intended learning goals.

The next stage is development. At this stage, the design is transformed into a complete learning product. The product is then validated by material experts and media experts before being used in learning. Tegeh and Kirna (2013) stated that the development stage aims to produce a product that is feasible and can be used in teaching and learning activities.

Several studies have shown positive results from the use of the ADDIE model. Research conducted by Tegeh and Kirna (2013) showed that the ADDIE model is able to produce teaching materials that are valid and practical for use in learning. The study also explained that each stage in the ADDIE model helps make the development process more systematic.

Another study was conducted by Mulyasari, Irvan, and Doly (2023) on the development of teaching materials on solid geometry. The results showed that the developed teaching materials obtained very good validation results and helped students understand mathematics concepts more easily. In addition, Widiana (2016) in her research on the development of project assessment in elementary school science learning explained that the use of the ADDIE model helped teachers produce more effective learning tools. Students were also observed to be more active during the learning process.

A similar study was conducted by Nawali, Savika, Mufidah, and Susilawati (2024). The study showed that learning media developed using the ADDIE model became more engaging and were able to increase students' learning motivation in elementary schools.

The next stage is implementation, which is the stage of using the product in classroom learning. At this stage, teachers and students use the developed teaching materials to examine their level of practicality and effectiveness. From several reviewed studies, ADDIE-based teaching materials were found to make students more active and more interested in participating in learning activities.

The final stage is evaluation. At this stage, an assessment of the entire product development process is conducted. Evaluation is carried out to identify weaknesses in the teaching materials so that they can be improved and refined. Branch (2009) explains that evaluation in the ADDIE model is conducted continuously so that the resulting product truly meets learning needs.

In general, the results of various studies show that the ADDIE model can be effectively used in the development of teaching materials in elementary schools. Its clear and structured steps make this model relatively easy to apply, both by teachers and researchers, so that the resulting teaching materials are more aligned with students' needs and learning objectives.

Discussion

The use of the ADDIE model in developing teaching materials in elementary schools has a positive impact on the learning process. This model helps teachers design teaching materials in a more structured way because each stage is carried out step by step, starting from needs analysis to product evaluation. With clear steps, the developed teaching materials can be adjusted to the conditions and needs of students in the classroom.

At the analysis stage, teachers first identify students' learning difficulties, materials that are considered difficult to understand, and classroom learning needs. Branch (2009) explains that needs analysis is an important part of instructional product development because it determines the direction of the development process. In elementary school learning, this stage is essential considering that students have different abilities and characteristics.

The design and development stages help teachers produce more engaging teaching materials for students. The use of pictures, colors, illustrations, and learning activities makes students more interested in participating in learning. Hamalik (2011) states that the appropriate use of media and teaching materials can help students understand content more easily and increase their learning motivation.

Several studies also show positive results regarding the use of the ADDIE model. Research by Mulyasari, Irvan, and Doly (2023) shows that mathematics teaching materials developed using the ADDIE model can help students better understand solid geometry concepts. In addition, research by Nawali et al. (2024) explains that ADDIE-based learning media make students more active and more engaged during the learning process.

The study by Widiana (2016) also shows that learning tools developed using the ADDIE model can increase student learning activity in elementary schools. This indicates that teaching materials developed through systematic stages are more effective in learning compared to materials prepared without a clear development process.

Although it has many advantages, the use of the ADDIE model also has several challenges. The development process requires a relatively long time because each stage must be carried out carefully. In addition, teachers need to have the ability to design teaching materials so that the resulting product truly meets learning objectives. However, the simple and easy-to-understand steps of the ADDIE model make it widely used in development research in elementary schools.

Overall, the ADDIE model can be an effective development model for producing teaching materials in elementary schools. Its systematic stages help teachers develop teaching materials that are more appropriate, engaging, and aligned with students' needs so that the learning process can run better.

CONCLUSION

Based on the results of the literature review, it can be concluded that the ADDIE model is an effective development model for producing teaching materials in elementary schools. This model consists of five stages, namely analysis, design, development, implementation, and evaluation, which are interrelated in the instructional product development process. The use of the ADDIE model helps teachers and researchers develop teaching materials in a more systematic and structured way. Through the analysis stage, developers can identify students' needs and learning difficulties so that the teaching materials produced are more in line with elementary school students' characteristics. In addition, the design and development stages allow teaching materials to be designed in a more attractive and easy-to-understand format for students.

Several previous studies also show that teaching materials developed using the ADDIE model can increase students' learning motivation, engagement, and understanding of learning content. Although the development process requires a relatively long time, the ADDIE model is still widely used because its steps are easy to understand and can be applied in various types of teaching material development in elementary schools. Therefore, the ADDIE model can be considered an appropriate alternative development model for producing feasible, effective, and student-centered teaching materials in elementary schools.

SUGGESTIONS

Based on the results of this study, the use of the ADDIE model in developing teaching materials in elementary schools can be used as an alternative for teachers in creating more engaging and student-centered learning. Therefore, teachers are expected to be more creative in developing teaching materials by utilizing the stages of the ADDIE model so that the learning process becomes more effective.

In addition, this study is expected to serve as a reference for future researchers who wish to examine the development of teaching materials using the ADDIE model in different subjects or educational levels. Future researchers are also encouraged to conduct more in-depth studies on the effectiveness of the ADDIE model on student learning outcomes.

For schools, the results of this study are expected to support the improvement of learning quality through the use of more innovative teaching materials that are aligned with the development of elementary school students.

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