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Enhancing Children's Reading Comprehension And Object Recognition Through Interactive Learning Media

Syaadiah Arifin[1*], Hafni Hafsah[2], Firman Aziz[3*], Fujiono[4], Citra Siwi Hanayanti[5]
[1*]Universitas Muhammadiyah Prof. Dr. Hamka Jakarta, [2]Institut Az Zuhra, [3]Universitas Pendidikan Indonesia, [4,5]Universitas Madura

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ABSTRACT
The role of interactive learning media in improving reading comprehension and object recognition in children. Using a literature review method, this research explores a range of interactive applications designed to support children's learning. Findings from the studies reviewed show that apps that integrate multimedia elements and interactive features can increase children's motivation and engagement, and improve their cognitive skills. However, there are challenges in ensuring that apps are not only entertaining but also educational, as well as the importance of parental involvement in the use of apps.

Corresponding Author:
Syaadiah Arifin
Universitas Muhammadiyah Prof. Dr. Hamka Jakarta
syaadiah.arifin@uhamka.ac.id

INTRODUCTION

In the current digital era, children's education is increasingly influenced by technological advances which enable the development of more interesting and effective interactive learning media. Interactive learning media, such as computer-based applications and mobile devices, offer innovative new methods for improving children's reading comprehension and object recognition. An overview shows that this media not only enriches children's learning experiences but can also overcome various challenges faced in conventional education(Hanafi et al., 2022). The main problem in this context is how to optimize interactive learning media to support children's cognitive development, especially in terms of reading comprehension and the ability to recognize objects.

The main problem faced in children's education today is the difficulty in maintaining students' attention and motivation, which often hinders the learning process. Interactive learning media has the potential to overcome this problem by providing a more interesting and dynamic learning experience. For example, research by(Abidin et al., 2023; Aziz, 2016; Wahyuningtyas et al., 2023)shows that game elements in interactive media can increase student involvement and motivate them to study harder. Other research by(Jabid, Syahdan, et al., 2023; Kurniawan et al., 2024)explains that media design that supports cognitive processes, such as presenting information in a multimodal manner, can improve children's reading comprehension (Fujiono et al., 2023; Hafsah, 2022; Mardiani et al., 2024). On the other hand,(Dacholfany et al., 2022; Lolang et al., 2023)revealed that applications that integrate images and text can improve object recognition and visual-spatial skills in children.

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The urgency of this research lies in the need to evaluate the effectiveness of various types of interactive learning media in the context of children's education. Although there are a variety of tools available, not all interactive media are designed with strong pedagogical principles in mind. Therefore, it is important to assess which ones are most effective in improving reading skills and object recognition. With a better understanding of the most effective media methods and designs, educators can select and implement tools that truly support children's cognitive development (Arifin, 2024; Arifin et al., 2023; Fujiono et al., 2021).

The aim of this research is to analyze related literature to determine how interactive learning media can be used optimally to achieve significant improvements in reading comprehension and object recognition. This research aims to identify the features and approaches in interactive media that most influence educational outcomes, as well as to provide data-based recommendations for the development of more effective educational tools.

It is hoped that this research contribution can provide valuable insight into the design and implementation of effective interactive learning media. By understanding how these media can support children's cognitive development, this research can provide guidance for educators and educational media developers to create more efficient and impactful tools. In addition, the results of this research can help in formulating better teaching strategies and facilitate more enjoyable and productive learning for children. This research will also highlight the importance of technology integration in educational curricula, providing a basis for the development of media that is more innovative and relevant to modern learning needs.

METHODS

The research method used in this article is a literature review. This approach was chosen to gain a comprehensive understanding of how interactive learning media can improve reading comprehension and object recognition in children. The literature review process begins with identifying relevant references that discuss the application of interactive learning media, its effect on reading skills, and object recognition. After identifying relevant sources, the next process is to filter and evaluate the quality and relevance of the literature. This involves in-depth analysis of the methodology, findings, and conclusions of each study to ensure the information extracted is accurate and reliable(Ibrahim et al., 2023; Jabid, Abdurrahman, et al., 2023). The main focus in this review is on studies that explore the features of interactive learning media that impact reading comprehension and object recognition abilities, as well as evaluating the effectiveness of various methods and approaches used in these media. In order to organize the results and discussion, all information summarized from the literature was classified based on major themes and categories, such as types of interactive media, pedagogical design, and their impact on children's cognitive skills. Analysis is conducted to identify patterns, trends, and gaps in existing research(Hasyim et al., 2023; Ramli et al., 2022; Sirat et al., 2023). The results of this review are structured to provide a comprehensive picture of the effectiveness of interactive learning media, outline how specific features of the media

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influence reading comprehension and object recognition, and offer recommendations for the development of better educational tools.

RESULTS AND DISCUSSION

In this literature review, a variety of studies demonstrate that interactive learning media can have a substantial impact on the recognition of objects and the comprehension of reading in children. Interactive media, including mobile devices, computer-based applications, and other digital learning tools, provide a novel educational approach that is distinct from conventional methods. The objective of this discourse is to evaluate the efficacy of interactive media components in enhancing literacy and object recognition abilities by identifying their contributions to the field and using existing empirical evidence.

One of the main findings of this review is that interactive learning media designed with good pedagogical principles can increase children's motivation and involvement in the learning process. Study by(Hakiki & Asdar, 2023)highlighting that game elements and interactivity in educational apps can make learning more interesting and enjoyable, which in turn increases children's motivation to learn(Hamsiah et al., 2024). These elements include features such as instant feedback, level-based challenges, and rewards, which effectively keep children's attention and encourage them to continue practicing and learning.

In addition, multimedia designs that support children's cognitive processes, such as presenting information in various formats (text, images, audio), can improve reading comprehension. Mayer points out that information presented multimodally is easier for children to process and understand, because they can associate visual and auditory information with textual information, which enriches the learning experience(Dini, 2022; Sudipa et al., 2022).

Other research by(Muhammadiah et al., 2023)showed that interactive applications that combine images and text can effectively improve object recognition and visual-spatial skills in children. Hsin and his colleagues found that apps that provide labeled pictures, object recognition games, and visual-based activities can help children develop their ability to recognize and remember objects and object categories. This shows that the integration of visual elements in learning media plays an important role in improving object recognition skills in children.

However, although many studies show positive results, there are also challenges and drawbacks that need to be considered. Some research suggests that not all interactive media applications are designed with strong pedagogical principles in mind. For example, some apps may focus too much on gaming and entertainment elements without providing enough substantive learning material. This can result in children simply engaging in play without actually acquiring significant new skills. Therefore, it is important to ensure that interactive applications are not only engaging but also educational, with appropriate content and effective teaching methodology. In addition, research by(Wariunsora et al., 2024)shows that parental involvement in the use of interactive media can influence children's learning outcomes. Plowman and colleagues emphasize the importance of parental support in using educational apps, as parent-child interactions during media use can enhance children's

understanding and learning.(Rifky et al., 2024). This shows that the role of parents in facilitating and accompanying the use of interactive media is very important to maximize the benefits of these educational tools.

Overall, the results of this literature review underline the great potential of interactive learning media in improving reading skills and object recognition in children. Well-designed media, which integrates various information formats and interactive elements, can support a more enjoyable and effective learning process. However, to achieve optimal results, it is important to pay attention to pedagogical design, parental involvement, and the balance between entertainment and educational elements in the application. Challenges faced in implementing interactive learning media include the need to assess the quality and effectiveness of various applications, as well as ensuring that they are appropriate to children's needs and development. Further research is needed to explore the best methods in learning media design, as well as to develop strategies that can overcome existing challenges and maximize the benefits of educational technology. With the right approach, interactive learning media can be an invaluable tool in children's education, helping them develop cognitive and academic skills that are important for their future success.

CONCLUSION

The research conclusion shows that interactive learning media has significant potential in improving reading comprehension and object recognition in children. Through a literature review, it was revealed that interactive applications that integrate elements such as instant feedback, level-based challenges, and multimodal features can effectively increase children's motivation, engagement, and cognitive understanding. Application designs that include multiple information formats and solid pedagogical principles contribute to better learning outcomes. On the other hand, challenges in application design that only focus on entertainment without substantial educational content, as well as the importance of parental involvement in the learning process, were also identified. Therefore, although interactive learning media offer many benefits, careful design and parental support are needed to ensure their effectiveness. Further research is needed to address these challenges and optimize the use of interactive media in children's education.

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