

LEARNING BASIC ECONOMIC SUBJECT BY USING GRAPHIC INTERACTIVE METHOD

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ABSTRACT

In the era of information technology that moves so fast, it affects people's lives a lot. The use of ICT in various sectors cannot be denied anymore. The education sector is also no exception where a combination of ICT and interactive graphics are used in teaching and learning sessions. Almost all parties involved in education use it including teachers and students. It becomes a teaching aid that provides many benefits to all parties. This systematic literature review explores the significance of integrating graphic interactive methods into basic economic education. Through an analysis of studies retrieved from the Mendeley database, key findings reveal the positive impact of these methods on learning outcomes, including increased student engagement and improved conceptual understanding. Student and instructor perspectives emphasize heightened motivation and satisfaction, while comparative analyses consistently demonstrate the superiority of graphic interactive methods over traditional approaches. Recommendations for educators include embracing variety, providing training, and fostering a student-centered approach, while curriculum developers are urged to align tools with learning objectives and consider cultural relevance. Overall, this research underscores the transformative potential of graphic interactive methods in enhancing economic education and preparing students for the complexities of the modern world.

Keywords: Information and Communication Technology, Graphic Interactive & Learning Economic Subjects

1.0 INTRODUCTION

In the rapidly evolving landscape of education, the significance of imparting basic economic education has become more pronounced than ever. Understanding the fundamental principles of economics equips individuals with the knowledge and skills essential for navigating the complexities of the modern world. This education empowers citizens to make informed decisions, fostering economic literacy that extends beyond the confines of the classroom. Basic economic education serves as a cornerstone for individuals to comprehend the intricate workings of economies, both on a micro and macro scale. As individuals transition into adulthood, they encounter numerous economic choices and challenges, ranging from personal financial decisions to broader societal issues. A solid foundation in economic principles provides the necessary tools to analyze and respond to these challenges effectively.

Moreover, economic literacy is crucial for civic engagement and informed citizenship. Understanding economic concepts such as supply and demand, inflation, and fiscal policies allows individuals to critically evaluate economic policies and participate meaningfully in

public discourse. As societies become increasingly interconnected, the ability to comprehend economic concepts becomes paramount for fostering a well-informed and economically responsible citizenry. The traditional approach to education, characterized by lectures and passive learning, is undergoing a transformative shift towards more interactive and engaging teaching methods. This shift is driven by the recognition that students learn more effectively when actively involved in the learning process. Interactive teaching methods, such as the use of technology, simulations, and hands-on activities, have been widely embraced to enhance the learning experience.

According to (Ferizat & Kuat, 2021), interactive teaching methods not only capture students' attention but also cater to diverse learning styles, promoting a deeper understanding of the subject matter. In the context of basic economic education, the integration of interactive methods aligns with the dynamic and evolving nature of economic principles. For instance, the use of simulations can provide students with real-world scenarios, allowing them to apply theoretical knowledge to practical situations, thereby reinforcing their understanding.

This shift towards interactivity is also supported by the principles of constructivism, as proposed by educational theorists like Piaget and Vygotsky (Year). The notion that learners actively construct their knowledge through interaction with the environment aligns with the philosophy of interactive teaching methods. By engaging students in the learning process, educators can facilitate the construction of a robust mental framework for economic concepts, fostering a more meaningful and lasting comprehension.

The importance of basic economic education is indisputable, laying the groundwork for informed decision-making and active participation in societal affairs. The concurrent shift towards interactive teaching methods reflects a pedagogical evolution that seeks to optimize the learning experience, making economic education more accessible, engaging, and relevant to the challenges of the 21st century. The purpose of this systematic literature review is twofold, aiming to delve into the significance of graphic interactive methods in the realm of basic economic education and to conduct a comprehensive analysis of the existing literature on this pertinent topic. The exploration of the significance of graphic interactive methods is imperative in understanding their impact on the pedagogical landscape, particularly in the domain of basic economic education. Graphic interactive methods encompass a spectrum of educational tools such as infographics, simulations, and interactive graphs, designed to engage learners actively in the learning process. By examining their significance, this review seeks to uncover the specific benefits these methods offer in enhancing the overall learning experience, as well as their potential to address the challenges posed by traditional teaching approaches.

The importance of exploring the significance lies in identifying the unique attributes of graphic interactive methods that contribute to the effectiveness of economic education. This exploration serves as the foundation for informed recommendations and insights, guiding educators, policymakers, and curriculum developers in integrating these methods into educational practices. The second objective of this review is to conduct a thorough analysis of the existing literature pertaining to graphic interactive methods in the context of basic economic education. By systematically reviewing published studies, articles, and scholarly works, the goal is to synthesize the current state of knowledge, identify key themes, and ascertain the overall consensus or discrepancies in the literature. This analysis not only provides a

comprehensive understanding of the existing body of work but also facilitates the identification of gaps or areas requiring further investigation.

Through the analysis of existing literature, this review aims to contribute to the ongoing scholarly discourse on the effectiveness of graphic interactive methods. By synthesizing diverse perspectives and findings, it seeks to offer valuable insights that can inform future research endeavors and educational practices.

2.0 LITERATURE REVIEW

A. Overview of Economic Education

1. Traditional Teaching Methods

Traditional teaching methods in economic education have historically relied on didactic approaches, often characterized by lectures, textbooks, and rote memorization. This conventional model, while imparting essential theoretical knowledge, has been critiqued for its limited ability to foster critical thinking and practical application (Xia & Li, 2022). The passive nature of learning in this paradigm may hinder students' ability to connect economic concepts with real-world scenarios, potentially impeding the development of a deep and lasting understanding.

2. Evolution towards Interactive Learning

In response to the limitations of traditional methods, there has been a notable evolution towards interactive learning approaches in economic education (Mayasari, 2021). This shift recognizes the importance of actively engaging students in the learning process to enhance comprehension and retention. Interactive learning methods encompass a variety of strategies, including collaborative activities, case studies, and technology integration. This evolution reflects a pedagogical response to the dynamic nature of the field, emphasizing the need for students to not only grasp theoretical concepts but also apply them in practical contexts.

B. Theoretical Framework

1. Cognitive Load Theory

Cognitive load theory posits that learning is most effective when aligned with the cognitive capacity of the learner (Skulmowski & Xu, 2021). In the context of graphic interactive methods, this theory suggests that the visual and interactive elements can optimize cognitive resources, reducing extraneous cognitive load and promoting more efficient learning.

2. Constructivism in Education

Constructivism emphasizes the active role of learners in constructing their own understanding through interaction with the learning environment (Suhendi et al., 2021). Graphic interactive methods align with constructivist principles by providing opportunities for students to explore, experiment, and build their knowledge through hands-on experiences in economic education.

3.0 METHODOLOGY

To conduct a comprehensive review of the existing literature on the use of graphic interactive methods in basic economic education, a rigorous and systematic approach was employed. The primary database utilized for this review was Mendeley, a robust academic platform encompassing a diverse range of scholarly articles, journals, and conference papers. The search strategy involved the use of carefully selected keywords and terms to ensure the retrieval of relevant studies. These keywords included combinations of "graphic interactive methods," "economic education," "infographics," "simulations," "interactive learning," and related terms. The search aimed to encompass a broad spectrum of literature that addressed the intersection of graphic interactive methods and basic economic education. To maintain the integrity and relevance of the literature included in the review, specific inclusion and exclusion criteria were established. Relevant studies were included based on their focus on the application and impact of graphic interactive methods in basic economic education. Studies that provided insights into the pedagogical benefits, student outcomes, and comparative analyses with traditional teaching methods were considered. On the other hand, studies that did not directly address the use of graphic interactive methods in economic education or lacked empirical evidence were excluded.

The process of data extraction involved systematically collecting pertinent information from the selected studies. Variables extracted included study design, sample size, participant demographics, types of graphic interactive methods employed, and key findings related to the impact on learning outcomes. Additionally, details about the theoretical frameworks underpinning the studies were noted, providing a holistic understanding of the research context. The synthesis of data involved a qualitative analysis of the key themes, patterns, and findings across the selected studies. The approach was iterative, allowing for the identification of commonalities and discrepancies in the literature. The overarching goal was to distill meaningful insights from the diverse range of studies and to provide a coherent narrative that addresses the research question: How do graphic interactive methods enhance learning in basic economic subjects? By synthesizing the data, this review aims to contribute to the existing body of knowledge and offer practical implications for educators, policymakers, and future research directions.

4.0 FINDINGS

A. Overview of Retrieved Studies

1. Number of Studies Included

The systematic search on Mendeley yielded a total of 20 studies that met the predetermined inclusion criteria. This comprehensive pool of studies reflects the growing interest in exploring the intersection of graphic interactive methods and basic economic education.

2. Publication Years and Geographic Distribution

The retrieved studies span a range of publication years (2023), showcasing the evolving nature of research in this field. The distribution reveals a balanced representation, with studies emerging from diverse geographical locations, underscoring the global relevance and applicability of graphic interactive methods in economic education.

B. Common Themes and Trends

The synthesis of the literature revealed several common themes and trends, providing valuable insights into the effectiveness of graphic interactive methods in basic economic education.

THEMES AND TRENDS	DESCRIPTION	SOURCES
Effectiveness Of Graphic Interactive Methods	A predominant theme across the studies is the positive impact of graphic interactive methods on learning outcomes. These methods, including infographics, simulations, and interactive graphs, were consistently associated with increased student engagement and improved conceptual understanding. The visual appeal and interactive nature of these tools were reported to enhance students' ability to grasp complex economic concepts, contributing to a more effective learning experience.	Akolzina, M. K. (2023), He, B., Tong, X., Tang, M., & Wang, L. (2023), Hwang, G. J., Chen, H. C., Hsu, C. Y., & Hwang, G. H. (2023), Shi, M., Zhuo, X., Mao, T., Zhu, D., & Shao, X. (2023) Silva, D., Voltoline, R., Wu, S. T. (2023) & Zheng, J. (2023).
STUDENT AND INSTRUCTOR PERSPECTIVES	Another recurring theme revolves around the perspectives of both students and instructors regarding the use of graphic interactive methods. Students expressed a high level of satisfaction with these methods, noting increased motivation and a deeper connection with the course content. Instructors, too, acknowledged the benefits, citing improved student participation and a more dynamic classroom environment	Daniel A, & Suleiman, I.A. (2023), Hayta, N., Karabağ, Ş. G., & Gövercin, A. (2023), Knodt, J., Pan, Z., Wu, K., & Gao, X. (2024), Li, J., Shao, J., Wang, W., & Xie, W. (2023), Sun, Y., & Ke, L. (2023) & Wang, J., Xiang, N., Kukreja, N., Yu, L., & Liang, H. N. (2023).
COMPARATIVE ANALYSIS WITH TRADITIONAL METHODS	Several studies conducted comparative analyses between graphic interactive methods and traditional teaching approaches. The findings consistently suggested that graphic interactive methods outperformed traditional methods in terms of student engagement, knowledge retention, and overall learning outcomes. The interactive and dynamic nature of these	Hrytsenko, L., & Gorinchoi, R. (2023), Liu, H., Dai, H., Chen, J., Xu, J., Tao, Y., & Lin, H. (2023), MaćKowski, M., Brzoza, P., Kawulok, M., Meisel, R., & Spinczyk, D. (2023). Malbos, E., Borwell, B., Einig-Iscaín, M., Korchia, T., Cantalupi, R., Boyer,

	<p>methods was identified as a key factor contributing to their superiority over traditional approaches. However,</p>	<p>L., & Lancon, C. (2023). Rosnah, R., P Petrus, Fonnice E. Hasan, Teguh Faturrahman, Rita Irma, Evi Kusumawati, & I Made Rai Sudarsono. (2023).</p>
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5.0 DISCUSSION

The synthesis of findings from the reviewed studies illuminates several key insights into the impact of graphic interactive methods on basic economic education. The first and overarching theme underscores the effectiveness of these methods in enhancing learning outcomes. Across studies by Akolzina (2023), He et al. (2023), Hwang et al. (2023), Shi et al. (2023), and Silva et al. (2023), the consensus is that graphic interactive tools, such as infographics, simulations, and interactive graphs, consistently contribute to increased student engagement and improved conceptual understanding. The visual appeal and interactive nature of these tools were identified as pivotal components that elevate the learning experience, aiding students in comprehending complex economic concepts more effectively.

Additionally, student and instructor perspectives emerged as a recurrent theme. Studies by Daniel and Suleiman (2023), Hayta et al. (2023), Knodt et al. (2024), Li et al. (2023), Sun and Ke (2023), and Wang et al. (2023) collectively emphasize that students express a high level of satisfaction with graphic interactive methods. These students reported increased motivation and a deeper connection with course content, indicating that the incorporation of interactive tools positively influences the student experience. Instructors, too, recognized the benefits, noting improved student participation and a more dynamic classroom environment, reinforcing the notion that graphic interactive methods create a positive and engaging learning atmosphere.

While the overall patterns in the findings highlight the positive impact of graphic interactive methods, it is crucial to acknowledge certain nuances and potential inconsistencies. Notably, the studies by Hrytsenko and Gorinchoi (2023), Liu et al. (2023), MaćKowski et al. (2023), Malbos et al. (2023), and Rosnah et al. (2023) delve into comparative analyses between graphic interactive methods and traditional teaching approaches. These studies consistently suggest that graphic interactive methods tend to outperform traditional methods in terms of student engagement, knowledge retention, and overall learning outcomes. However, it is imperative to recognize that the effectiveness of these methods may vary based on contextual factors, instructional design, and the specific learning objectives of the course.

In conclusion, the synthesis of findings underscores the positive impact of graphic interactive methods on basic economic education, with students and instructors alike expressing satisfaction with these innovative approaches. Comparative analyses further support the superiority of graphic interactive methods over traditional approaches, highlighting the potential for transforming the educational landscape in the field of economics. However, caution should be exercised in generalizing these findings, and further research may be warranted to explore specific contextual factors influencing the effectiveness of these methods.

5.1 Implications for Practice

The synthesis of findings from the reviewed studies offers valuable insights that carry practical implications for educators seeking to enhance basic economic education through the incorporation of graphic interactive methods. Firstly, educators are encouraged to embrace the diversity of graphic interactive tools, including infographics, simulations, and interactive graphs. Each of these methods brings a unique set of advantages to the learning environment. Akolzina (2023) and Hwang et al. (2023) highlight the importance of variety in instructional design, allowing educators to cater to diverse learning preferences and maximize the benefits of different graphic interactive approaches. By integrating a mix of these tools, educators can create a dynamic and engaging learning environment that resonates with a broad spectrum of students.

Secondly, a crucial recommendation is the provision of adequate training and support for educators in utilizing graphic interactive methods. As noted by Daniel and Suleiman (2023) and Knodt et al. (2024), the successful implementation of these tools requires instructors to be proficient in their use. Workshops, training programs, and resources that guide educators on how to effectively integrate and navigate these tools can contribute to their confidence and competence in incorporating graphic interactive methods into their teaching practices.

Moreover, fostering a student-centered approach is paramount. The findings from studies by He et al. (2023) and Sun and Ke (2023) emphasize the positive impact on student motivation and satisfaction. Educators should actively seek feedback from students, adapting their instructional methods based on the students' experiences and preferences. Creating a collaborative and inclusive learning environment, where students feel actively involved in their education, can further amplify the benefits of graphic interactive methods.

The integration of graphic interactive methods into the curriculum necessitates a thoughtful and strategic approach. The studies by Hrytsenko and Gorinchoi (2023) and Liu et al. (2023) highlight the superiority of graphic interactive methods over traditional approaches, indicating the potential for transformative changes in the curriculum design.

To achieve successful integration, curriculum developers should consider aligning graphic interactive methods with the economic education curriculum's specific learning objectives and outcomes. MaćKowski et al. (2023) suggest that the selection of interactive tools should be purposeful, ensuring that they complement and enhance the content being delivered. For instance, simulations can be integrated into modules that require students to apply economic theories to real-world scenarios, fostering a deeper understanding of practical implications.

Additionally, the studies by Malbos et al. (2023) and Rosnah et al. (2023) emphasize the global applicability of graphic interactive methods. Curriculum developers should consider the cultural and contextual relevance of these tools to ensure inclusivity and effectiveness across diverse student populations. This involves adapting content and examples to resonate with various cultural backgrounds and socioeconomic contexts, thereby promoting a more inclusive and equitable learning experience.

In conclusion, the implications for practice suggest that the successful integration of graphic interactive methods requires a nuanced and adaptable approach by educators and curriculum developers. By embracing variety, providing training, prioritizing student-centered learning, and aligning tools with specific learning objectives, educators can create a more engaging and

effective educational experience in basic economic subjects. Similarly, the integration of these methods into the curriculum demands careful consideration of learning objectives, cultural relevance, and purposeful tool selection to ensure a transformative impact on economic education.

6.0 CONCLUSION

In conclusion, the systematic literature review has provided a comprehensive understanding of the significance of incorporating graphic interactive methods into basic economic education. The synthesis of findings from a diverse array of studies reveals a consistent theme of the positive impact of these methods on learning outcomes. Graphic interactive tools, including infographics, simulations, and interactive graphs, have demonstrated their effectiveness in enhancing student engagement, improving conceptual understanding, and fostering a more dynamic learning experience.

Students and instructors alike express high levels of satisfaction with graphic interactive methods, emphasizing increased motivation and a deeper connection with course content. The comparative analyses conducted in various studies consistently indicate that these methods outperform traditional teaching approaches in terms of student engagement, knowledge retention, and overall learning outcomes. However, it is important to recognize the nuances and potential contextual variations in the effectiveness of these methods.

The implications for practice underscore the need for educators to embrace the diversity of graphic interactive tools, providing a variety of instructional approaches to cater to different learning preferences. Adequate training and support for educators are crucial for the successful implementation of these tools. Fostering a student-centered approach and actively seeking feedback from students contribute to a more collaborative and inclusive learning environment.

For curriculum developers, the integration of graphic interactive methods demands purposeful alignment with specific learning objectives and consideration of cultural relevance. The global applicability of these tools suggests their potential to enhance economic education across diverse student populations.

In essence, the synthesis of findings encourages a shift towards more dynamic and interactive teaching methods in basic economic education. The positive outcomes observed in the reviewed studies suggest that the incorporation of graphic interactive methods has the potential to not only improve learning outcomes but also transform the educational landscape in the field of economics. As we navigate the complexities of the 21st century, embracing innovative and engaging pedagogical approaches becomes increasingly imperative to equip students with the knowledge and skills necessary for active participation in the economic realities of our interconnected world.

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