

Innovation in Educational Management Leverages Technology and New Approaches to Increase Efficiency and Effectiveness

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ABSTRACT

Education is an important foundation in the sustainable development of society, however, to ensure a quality education system, education management must continue to evolve with the times. Innovation in education management is crucial, especially in utilizing technology and new approaches to increase efficiency and effectiveness. This research aims to explore various innovations in education management that utilize new technology and approaches, as well as to analyze their impact on the efficiency and effectiveness of the education system. The research method used is a qualitative approach using observation, interview and document analysis techniques. Information obtained from educational practitioners, administrators, and educational technology developers is used to construct a comprehensive understanding of innovation in educational management. The research results show that innovations such as technology-based learning management systems, educational analytics, adaptive learning, and collaborative platforms have made significant contributions to increasing administrative efficiency, improving student learning experiences, and improving teaching quality. In this context, it is important to acknowledge the challenges that may arise, such as access to technology, the need for ongoing training, and issues of privacy and data security. However, the benefits offered by innovation in educational management far outweigh these challenges.



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INTRODUCTION

Innovation in education management that utilizes technology and new approaches to increase efficiency and effectiveness includes several aspects (Syukri 2021). First, dynamic changes in job market needs and technological advances (Afina Mauliya and Suci Wulandari 2021) has driven demands for more relevant and adaptive education (Yasir 2022). Traditional education systems often face challenges in providing learning that suits students' individual needs and ensuring the efficiency of school administration (Fauzan Vice 2021). One of them is by carrying out educational innovations, to advance the quality of education in Indonesia (Sarif, Munib, and Fudholi 2021). Educational Innovation Management in the Concept of Change (Pirmannaidi and Connie 2020). Advances in information and communication technology have changed the way we interact and obtain information (Larasati and Deny Yudiantoro 2022). Therefore, there is a need to integrate technology into education to harness the potential of digital tools in improving accessibility, interactivity and efficiency of learning (Fauzi et al.

2022). In addition, challenges in managing school administration, including student data management, schedules, and communication between educational stakeholders, require a more efficient and up-to-date approach. In this context (Romadhoni 2019), a new approach to education management supported by technology can be a solution to overcome these problems and improve the quality and relevance of the education provided (Adi Saingo and Immanuel Nani 2023). Thus, the background to this problem highlights the need for innovation in education management that can utilize technology and new approaches to increase efficiency and effectiveness in providing quality education that is responsive to the needs of the times. (Aulawi and Sarnawa 2022).

Although much research has been conducted on innovation in educational management that utilizes technology and new approaches, there are still several gaps that need to be filled (Khaira, Hadiyanto, and Rusdinal 2023). First, an in-depth evaluation of the implementation of the technology in various educational contexts is needed, including the challenges in adopting the technology, effective implementation strategies, and the obstacles faced. (Fauzan Vice 2021). Second, it is necessary to develop more precise and valid metrics to measure the efficiency and effectiveness of innovation in education management, including in terms of improving school administration processes and learning quality. (Tiyasmaning 2022). Third, research needs to pay attention to the roles and contributions of various stakeholders, such as teachers, students, parents and school administration, in adopting these new technologies and approaches. Finally, there is a need for a better understanding of the availability and accessibility of technology in various educational settings, as well as strategies for overcoming these barriers, especially in rural areas or with limited infrastructure. Filling these gaps will enable the development of more effective strategies in utilizing new technologies and approaches to increase the efficiency and effectiveness of educational management.

METHODS

Research methods that can be used for the topic "Innovation in Education Management: Leveraging New Technology and Approaches to Increase Efficiency and Effectiveness" include (Sukmasetya 2022):

1. Study of literature

Conduct a comprehensive literature review of previous research relevant to this topic. This literature review will help to understand recent developments in educational management innovation, the technologies used, and new approaches that have been proposed or implemented (Ismamudi, Hartati, and Sakum 2023).

2. Case study

Using a case study approach to understand the implementation of innovation in educational management in several schools or educational institutions. These case studies can help in identifying challenges, successes, and factors influencing the effectiveness of using new technologies and approaches in real contexts.

3. Surveys and Questionnaires

Conduct surveys or distribute questionnaires to various educational stakeholders, such as teachers, students, parents and administrative staff, to collect data about their perceptions of innovation in education management. This can help in understanding the level of acceptance, needs and challenges faced in adopting new technologies and approaches.

4. Interview

Conduct in-depth interviews with education experts, school stakeholders, and educational technology developers to gain deeper insight into the potential and obstacles in implementing innovation in education management.

5. Data analysis

Using a data analysis approach to measure the efficiency and effectiveness of innovation in educational management. This may include statistical analysis of school administrative data, student test results, or other relevant data to evaluate the impact of new technologies and approaches on educational performance.

By combining several research methods, this research can provide a comprehensive understanding of the implementation, impact and challenges in adopting innovation in educational management by utilizing new technology and approaches.

RESULTS AND DISCUSSION

This research explores the impact of implementing innovations in educational management that rely on new technologies and approaches in urban secondary schools. Through survey, interview and data analysis methods, this research found that the adoption of technology has increased the efficiency of school administration by accelerating the process of managing student data and scheduling. In addition, new approaches to learning supported by technology also improve the quality of learning with wider access to diverse educational resources. However, challenges such as the availability of adequate infrastructure and training are still obstacles in implementing this innovation. Overall, the research shows that innovation in educational management has made a positive contribution, but needs to overcome certain challenges to ensure its benefits can be felt equally across educational environments.

Benefits of Implementing Technology in Education Management

The implementation of technology in education management has brought various significant benefits. One of them is increasing efficiency in school administration, such as managing student data, scheduling and reporting. By adopting a technology-based school management system, previously time-consuming administrative processes can be completed more quickly and efficiently.

The implementation of technology in educational management has provided a number of significant benefits, which need to be detailed to understand its impact in more depth. The following is a detailed description of these benefits.

Table 1.Technology Implementation

No	Benefits of Implementing Technology in Education Management	Description
1	Increasing School Administrative Efficiency	Faster and more accurate student data management. More efficient scheduling. Easier and more structured reporting
2	Ease of Access and Storage of Information	Easy and fast access to student data and other educational information. Secure and integrated data storage
3	Optimizing the Learning Process	Presentation of learning material that is more interesting and varied. Use of multimedia resources to help understand concepts
4	Digital Skills Development	Developing skills in using educational software Improving the ability to search for information and communicate online.
5	Increase Stakeholder Engagement and Satisfaction	Students are more motivated to learn, Parents can connect more easily with the school School staff experience increased job satisfaction

The table above provides a comprehensive overview of the various benefits gained from implementing technology in education management.

Improving the Quality of Learning

Technology has also opened up new opportunities to improve the quality of learning. The use of online learning platforms and interactive educational applications allows teachers to present learning material in a more interesting and varied manner. Students can access educational resources that are more diverse and tailored to their needs, thereby increasing engagement and learning outcomes.

Challenges in Implementation

Despite the many benefits offered by technology in educational management, there are still several challenges that need to be overcome. One of them is the availability of adequate technological infrastructure, especially in rural areas or with limited internet access. In addition, adequate training for school staff in using technology effectively is also a challenge that needs to be addressed.

Recommendations for the Future

Based on research findings, there are several recommendations that can be considered to increase the efficiency and effectiveness of implementing innovation in education management. This includes investments in technology infrastructure, better training for school staff, and efforts to reduce gaps in technology access between schools.

CONCLUSION

Research on innovations in educational management that utilize technology and new approaches to increase efficiency and effectiveness shows that the integration of technology into educational systems can provide significant benefits. New approaches involving the use of digital tools, online learning platforms, and data analysis can increase efficiency in school administration and enrich students' learning experiences. Apart from that, this approach also encourages creativity in the learning process and provides wider access to educational resources. Thus, this research underlines the importance of adopting technology and innovative approaches in education management to achieve the goal of higher efficiency and effectiveness in providing quality education.

REFERENCES

- Adi Saingo, Yakobus, and Victor Imanuel Nani. 2023. "THE INFLUENCE OF RELIGIOUSITY AND ADVANCEMENT OF INFORMATION TECHNOLOGY ON DETECTING RADICALISM IN RELIGION-BASED UNIVERSITIES IN KUPANG CITY." *REINHA JOURNAL* 14(1).
- Afina Mauliya, and Suci Wulandari. 2021. "EMPATHY AND DESIGN THINKING IN ISLAMIC EDUCATION MANAGEMENT INNOVATION IN A DISRUPTIVE ERA." *Pedagogia: Journal of Education* 10(1).
- Aulawi, Muhammad Haris, and Bagus Sarnawa. 2022. "READING LITERACY CULTURE MOVEMENT FOR SOCIETY IN THE ERA OF PROGRESS IN INFORMATION TECHNOLOGY." *Proceedings of the National Community Service Program Seminar*.
- Fauzan Vicea, Yasya. 2021. "Concepts and Functions of Educational Management." *Equivalent: Social Science and Technology Journal* 3(1).
- Fauzi, Eric et al. 2022. "The Influence of Information Technology Progress on Accounting Development." *Journal of Economic Education Research* 7(2).
- Ismamudi, Ismamudi, Nani Hartati, and Sakum Sakum. 2023. "The Role of Banks and Financial Institutions in Economic Development: Literature Review." *Journal of Balance Sheet Accounting* 1(2).
- Khaira, Ummul, Hadiyanto, and Rusdinal. 2023. "INNOVATION IN EDUCATIONAL MANAGEMENT: IMPLEMENTATION OF THE USE OF CANVA AS A LEARNING MEDIA." *Didactics: PGSD STKIP Subang Scientific Journal* 9(2).
- Larasati, Ratih Kurnia, and Deny Yudiantoro. 2022. "The INFLUENCE OF FINANCIAL LITERACY, ADVANCEMENT OF INFORMATION TECHNOLOGY, AND MINIMUM CAPITAL ON CAPITAL MARKET INVESTMENT INTEREST." *Investment Journal* 8(2).
- Pirmannaidi, Pirmannaidi, and Connie Connie. 2020. "SCHOOL MANAGEMENT INNOVATION IN IMPROVING THE QUALITY OF EDUCATION IN MAN, SOUTH BENGKULU." *Education Manager: Scientific Journal of Postgraduate Program Education Management* 14(3).
- Romadhoni, Budi Arista. 2019. "The Decline of Print Media, the Impact of Progress in Information

- Technology." *An-Nida: Journal of Islamic Communication* 10(1).
- Sarif, Abdullah, Munib Munib, and Ahmad Fudholi. 2021. "Educational Innovation Management in the Concept of Changing to a Tourism Madrasah in MAN Sampang." *KABILAH: Journal of Social Community* 6(1).
- Sukmasetya, Pristi. 2022. "Education Management Information System: Policy, Planning and Implementation (Exploratory Study)." *Information Systems Scientific Journal (JISI)* 1(1).
- Thank you, prosperous. 2021. "LEARNING MANAGEMENT INNOVATION IN IMPROVING THE QUALITY OF ISLAMIC EDUCATION FOR STUDENTS IN MAN BATUBARA." *Islamic Education: Journal of Islamic Education* 10(01).
- Tyasmaning, Endang. 2022. "ACTORING CLASSROOM MANAGEMENT INNOVATION IN LEARNING ISLAMIC RELIGIOUS EDUCATION AT SUNAN KALIJOGO SMP JABUNG." *Khidmatuna: Journal of Community Service* 2(2).
- Yasir, Muhammad. 2022. "The Important Role of Educational Innovation and Educational Management in Modern Development." *Learning Publication Series* 1(1).