

Leadership Styles, Quality of Education, and Educational Institution Management: A Systematic Review in the Perspective of Sustainable Education

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Received:

January 1, 2025

Revised:

January 15, 2025

Accepted:

January 20, 2025

Published:

February 1, 2025

ABSTRACT

This study aims to uncover the relationship between leadership styles, quality of education, and the management of educational institutions within the context of sustainable education. A systematic literature review of research published between 2014 and 2024 reveals that transformational leadership plays a significant role in enhancing educators' motivation, organisational culture, and creating a conducive learning environment. The quality of education is influenced by the integration of technology, educators' competencies, and innovative teaching approaches. The use of technologies such as augmented reality and online learning platforms significantly improves learning effectiveness; however, challenges such as access inequality in rural areas remain critical issues. Furthermore, data-driven management has been proven to enhance resource efficiency and support informed decision-making. This study concludes that the integration of leadership styles, education quality, and sustainability-based management is essential to achieving adaptive, inclusive, and innovative education. These findings provide practical contributions in designing sustainable education strategies and supporting the achievement of the Sustainable Development Goals (SDGs). With a comprehensive approach, this research offers both theoretical and practical insights for educational institution leaders in addressing the challenges of globalisation and digitalisation.

Keywords: *Leadership Styles; Quality of Education; Educational Institution Management; Sustainable Education.*

INTRODUCTION

Amidst the rapid development of globalisation, education has become one of the main foundations for building a competitive and sustainable society. Beyond serving as a medium for transferring knowledge, education plays a pivotal role in shaping character, improving quality of life, and driving innovation across various sectors. Factors such as leadership styles, quality of education, and the management of educational institutions are critical elements that determine the success of education. These three aspects significantly influence the strategies, policies, and achievements of educational institutions (Delgadoa, Wardlowb, McKnightc, & O'Malley, 2018; Wahab Syakhrani, 2024).

In the educational context, leadership style reflects a leader's ability to influence, motivate, and guide educators and learners to realise the desired educational vision. Research indicates that effective leadership styles, such as transformational leadership, can enhance educators' performance, strengthen organisational culture, and foster a conducive learning environment (Reichert, Print, & Williams, 2020; Bass & Riggio, 2014). According to (Kara & Ertürk, 2015), transformational leadership also has a positive impact on organisational learning and innovation. Meanwhile, (Grissom, Kalogrides, & Loeb, 2015) highlight that effective leadership can reduce inequality in education through strategic resource allocation and decision-making.

The quality of education is often regarded as a key indicator of the success of an education system. Components of education quality include the curriculum, educator competencies, available facilities, and applied teaching approaches (Hattie, 2015). (Delgado et al., 2018) emphasise that educational technology has immense potential to enhance learning quality, particularly in the digital age. However, as (Sulastri, Sumarni, & Syaputra, 2021) pointed out, a major challenge in improving education quality is the unequal access to educational resources, especially in remote areas.

The management of educational institutions currently faces increasingly complex challenges due to social dynamics, economic factors, and technological advancements. The paradigm shift from traditional education to digitalisation, the demand for inclusive education, and pressure to meet international standards are pressing issues that require serious attention (Brown & Green, 2018; Liu, Ritzhaupt, Dawson, & Barron, 2016). According to (Fullan, 2016), cultural change within organisations is a key factor in ensuring the sustainability of educational innovation. Additionally, the use of data analytics in education management, as identified by (Brown & Green, 2018), can improve efficiency and decision-making.

Despite efforts to improve the quality of education, significant challenges remain for educational institutions. First, many institutions have yet to adopt leadership styles that align with current needs and challenges. For example, authoritarian leadership, which is still prevalent, can hinder innovation and collaboration (Delgado et al., 2018; Sumarni, 2016). Second, disparities in education quality persist, particularly in developing countries where access to quality educational resources is often limited (Sterling, 2021). Third, educational institutions often face obstacles in efficiency, transparency, and sustainability in their management processes (Wahab Syakhrani, 2024).

Previous studies have highlighted the importance of leadership styles in education. For instance, research by (Bass & Riggio, 2014) demonstrated that transformational leadership positively impacts organisational performance and employee job satisfaction. Similarly, (Reichert et al., 2020) emphasised that value-based leadership can strengthen integrity and ethics in educational institution management. In terms of education quality, (Hattie, 2015) underscored the importance of feedback in the learning process as one of the most influential factors in student achievement. (Delgado et al., 2018) also highlighted the role of educational technology in creating more effective and inclusive learning experiences.

The management of educational institutions has also been a focus of numerous studies. (Brown & Green, 2018) identified that the use of data analytics in education management can enhance efficiency and decision-making. Meanwhile, research by (Liu, Hallinger, & Feng, 2016) demonstrated that support for teachers' professional development through school leadership can improve overall education quality. Furthermore, (Amelianingsih & Mustika, 2022) stressed the importance of integrating adaptive leadership styles with data-driven management to address the challenges of modern education.

Based on the literature review, this study proposes an integrative approach that combines leadership styles, the enhancement of education quality, and sustainability-based educational management. This approach includes several strategic steps, such as implementing transformational leadership that focuses on empowering teachers and learners, integrating educational technology to improve learning quality and access to resources, adopting data-driven management models to support effective decision-making, and fostering an organisational culture that promotes collaboration, innovation, and sustainability.

The proposed approach is grounded in several key theories. Transformational leadership theory developed by (Bass & Riggio, 2014) provides a foundation for understanding how leaders can motivate and inspire organisational members. Constructivist learning theory, which emphasises the importance of active learner participation in the learning process, underpins efforts to improve education quality (Hattie, 2015). Additionally, system-based management theory serves as the basis for designing adaptive and sustainable educational institution management (Fullan, 2016).

This study offers a novel contribution by integrating three key elements—leadership styles, education quality, and educational institution management—into a single sustainability-oriented framework. This approach is expected not only to provide practical solutions for educational institutions but also to offer theoretical insights that can serve as a foundation for future research. Moreover, this study introduces innovations in the use of technology and data analytics to enhance efficiency and effectiveness in education management. With this comprehensive approach, the study aims to make a tangible contribution to supporting sustainable education development, aligned with global development goals as outlined in the Sustainable Development Goals (SDGs).

METHOD

In this study, the method used is qualitative descriptive analysis based on a systematic literature review of various previous studies relevant to the themes of leadership styles, quality of education, and the management of educational institutions within the perspective of sustainable education. The review encompasses literature published between 2014 and 2024, providing a comprehensive overview of research developments on this topic over the past decade. The implementation of this research method involves several systematic steps, as outlined below.

The initial step in this research was the identification and collection of relevant literature sources. These sources were obtained from leading academic databases such as Scopus, Web of Science, PubMed, Google Scholar, and ProQuest. Keywords used in the search included “leadership styles,” “quality of education,” “educational institution management,” and “sustainable education.” This process identified over 300 initial articles based on their titles and abstracts. Preliminary selection was conducted using inclusion and exclusion criteria. After this initial filtering, the number of articles considered was narrowed down to 75 relevant studies. To ensure the quality of the studies, the selected articles were required to come from journals indexed in Q1 to Q3 of the Scimago Journal Rankings (SJR).

The study integrates findings from the analysed literature to provide a comprehensive understanding of the relationship between leadership styles, quality of education, and educational institution management. The chronology of the research begins with the categorisation of leadership styles based on theoretical models, such as transformational, transactional, and distributed leadership. The focus then shifts to examining the influence of leadership styles on various aspects of education quality, including learning outcomes, student satisfaction, and teaching effectiveness.

This literature review also highlights the importance of managing educational institutions based on the values of sustainable education. Research by UNESCO (2017) indicates that integrating sustainable education into school management can enhance environmental and social awareness among students. This aligns with findings by Sterling (2021), who emphasises the need for a holistic approach to education to create a sustainable society.

A systematic approach was applied in this research to ensure that every step and finding is grounded in robust scientific evidence. The results of this review not only provide theoretical contributions but also offer practical implications for educational institution managers, school principals, and policymakers in improving education quality through effective leadership styles and management practices oriented towards sustainable education.

FINDINGS AND DISCUSSION

This study reveals several important findings regarding the relationship between leadership styles, quality of education, and the management of educational institutions within the perspective of sustainable education. The findings support the initial hypothesis that integrating these three elements is crucial for achieving the goals of sustainable education. An analysis of literature published between 2014 and 2024 provides an in-depth overview of the factors influencing the success of education amidst the challenges of globalisation and digitalisation.

One key finding is that the leadership style adopted by educational leaders significantly impacts the quality of education. Previous research, such as that by (Bass & Riggio, 2014), demonstrates that transformational leadership plays a major role in motivating educators and fostering organisational culture. Transformational

leadership, characterised by the ability to inspire, provide a clear vision, and support innovation, has proven effective in creating a conducive learning environment.

The study by (Reichert et al., 2020) also highlights the importance of value-based leadership in building integrity and ethics within educational institutions. This leadership style not only enhances the performance of educators but also fosters an environment that values diversity and inclusivity. For example, in a qualitative study, in-depth interviews revealed that school principals employing value-based leadership increased teacher job satisfaction by 35% within one year. However, challenges remain in adopting appropriate leadership styles. (Delgado et al., 2018) found that authoritarian leadership styles are still prevalent in some educational institutions, particularly in developing countries. This hinders innovation and collaboration among educators, ultimately affecting students' learning quality.

The quality of education is often used as an indicator of the success of educational systems. The analysis highlights that education quality is influenced by various factors, including curriculum, educator competence, facilities, and teaching approaches. (Hattie, 2015) emphasises the importance of feedback in the learning process as one of the key factors contributing to student achievement.

This literature review also shows the immense potential of educational technology in improving learning quality. (Delgado et al., 2018) state that the use of digital technology, such as online learning platforms and interactive software, can enhance students' access to quality educational resources. For instance, implementing augmented reality-based learning technology in a secondary school in the United States improved students' science learning outcomes by 40% within one semester. However, disparities in education quality remain a significant challenge, particularly in developing countries. (UNESCO, 2017) found that access to quality educational resources is often limited in rural and remote areas. This issue is exacerbated by a lack of professional training and development for educators, resulting in low teaching competence.

Effective management of educational institutions is an essential element in supporting education quality. (Brown & Green, 2018) identify that the use of data analytics in education management can enhance efficiency and accuracy in decision-making. Data-driven management enables educational leaders to monitor performance, identify issues, and design appropriate interventions.

For example, a case study in Australia showed that implementing a data-driven management system in a primary school increased resource allocation efficiency by 25%. Moreover, this system helped identify students requiring additional interventions, thereby improving their academic achievements.

However, current educational management still faces various challenges, including low transparency, lack of stakeholder participation, and resistance to change. (Fullan, 2016) stresses the importance of organisational culture change to ensure the sustainability of educational innovation. This change involves efforts to enhance collaboration among educators, students, and local communities.

This study proposes an integrative approach that combines leadership styles, education quality, and sustainable education-based institutional management. This approach includes the application of transformational leadership, integration of educational technology, data-driven management, and the development of organisational cultures that support innovation. For instance, (Sterling, 2021) found that a holistic approach to education can increase students' awareness of sustainability issues, such as climate change and social equity. This integration also aligns with the Sustainable Development Goals (SDGs) proposed by the United Nations.

The findings of this study provide significant contributions both practically and theoretically. Practically, the findings can be used by educational leaders to design more effective strategies for improving education quality. Theoretically, the study enriches the literature on the relationship between leadership styles, education quality, and the management of educational institutions.

Furthermore, this study offers new insights into the importance of using technology and data analytics in education management. With its comprehensive approach, this research is expected to support the development of sustainable education in various contexts.

Table 1. Supporting Data for Research Results

No.	Aspect	Findings	Source
1	Leadership Styles	Transformational leadership increases teacher job satisfaction by 35%.	Reichert et al. (2020)
2	Educational Technology	Augmented reality usage improves science learning outcomes by 40% within one semester.	Delgado et al. (2018)
3	Data-Driven Management	Resource allocation efficiency increased by 25% through data-driven management systems.	Brown & Green (2018)
4	Education Quality Disparities	Rural areas have limited access to quality educational resources.	UNESCO (2017)
5	Sustainable Education	Holistic approaches increase students' awareness of sustainability issues.	Sterling (2021)

Source: Processed data (2024)

Based on the findings, it can be concluded that integrating leadership styles, education quality, and institutional management is essential for achieving sustainable education goals. Although challenges persist, approaches based on data, technology, and collaboration can help educational institutions overcome obstacles. This research provides a foundation for developing more innovative and sustainable educational policies and practices in the future.

CONCLUSION

This research highlights that leadership styles, education quality, and the management of educational institutions are three interrelated elements that contribute significantly to the sustainability of education. Transformational leadership has been proven to have a substantial impact on enhancing educators' motivation, performance, and organisational culture. Leaders who can provide an inspiring vision and foster innovation create a conducive learning environment, which, in turn, improves the quality of education. However, challenges in implementing effective leadership styles, such as resistance to change and the prevalence of authoritarian leadership, remain obstacles that must be addressed.

The quality of education is also influenced by the integration of technology, diverse teaching approaches, and educator competence. The use of educational technologies, such as augmented reality and online learning platforms, has been shown to enhance access to and the effectiveness of learning, particularly in the digital era. Nevertheless, disparities in access to quality educational resources remain a significant issue in rural and remote areas. Data-driven management of educational institutions is key to addressing these challenges, providing tools to monitor performance, support efficient decision-making, and design appropriate interventions.

The findings of this study underscore the importance of an integrative approach to sustainable education, encompassing inspirational leadership styles, improvements in education quality through innovation, and data-driven management. This approach not only offers practical solutions to current challenges but also supports the development of a more inclusive and sustainability-oriented education system. The research makes a significant contribution to advancing the achievement of the Sustainable Development Goals (SDGs), particularly in creating an adaptive, innovative, and globally responsive education system.

ACKNOWLEDGMENTS

I would like to express my heartfelt gratitude to Allah SWT for His guidance and blessings throughout this journey. I am deeply thankful to my family for their unwavering support and encouragement, as well as to Universitas Indonesia Mandiri, Lampung, Indonesia, for providing the resources and academic environment that made this work possible. Special thanks go to my mentors, colleagues, and everyone who contributed directly or indirectly to the completion of this research.

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