International Journal of Secondary Education
2024, Vol. 12, No. 3, pp. 68-74
https://doi.org/10.11648/j.ijsedu.20241203.13

Review Article

Leading Change and Innovation Effectively in Secondary Schools: A Literature Review

Tesfaye Shibiru*, Mitiku Bekele

Educational Planning and Management, Education and Behavioral Sciences, Jimma University, Jimma, Ethiopia

Abstract

This literature review investigates the concepts of innovation and change within the context of secondary education, distinguishing between these concepts while highlighting their interconnectedness. It emphasizes the importance of leadership in driving innovation and change to better prepare students for the 21st-century workforce, enhance student engagement and achievement, and address issues of equity and inclusion. Effective leadership is shown to be crucial for fostering a culture of adaptability, creativity, and continuous improvement in schools. The review also explores various theoretical frameworks, including Fullan's educational change theory, Rogers' Diffusion of Innovation, and Lewin's process theory, to provide a comprehensive understanding of how change and innovation are implemented and sustained in educational settings. Challenges such as resistance to change, limited resources, and the need for teacher professional development are discussed, along with strategies to address these issues. Recent advancements in educational technology and the growing emphasis on equity-focused leadership are highlighted as key factors in shaping the future of secondary education. The review concludes by underscoring the necessity of visionary and resilient leadership to navigate the evolving educational landscape and create adaptive, innovative, and inclusive secondary schools.

Keywords

School Leaders, Change, Innovation, Secondary Schools

1. Introduction

The purpose of this literature is to explore and clarify the concepts of innovation and change, particularly in the context of secondary education. It aims to distinguish between innovation and change, highlighting their interconnectedness.

Furthermore, the literature highlights the significance of leading change and innovation in secondary schools by preparing students for the demands of the 21st-century workforce, enhancing student engagement and achievement, addressing equity and inclusion, meeting the needs of digital natives, and preparing students for future careers.

Moreover, the literature discusses the role of leadership in driving innovation and change, emphasizing the qualities of effective leaders and their impact on organizational success.

The task of leading change and innovation in secondary schools is not merely about implementing new policies or technologies; it's about inspiring a culture of adaptability, creativity, and continuous improvement. It highlights that innovation extends beyond technological advancements to include shifts in economic, social, and behavioral domains [1, 6, 14, 7]. Innovation is not just the introduction of entirely

*Corresponding author: tesfayeshibru082@gmail.com (Tesfaye Shibiru)

Received: 9 August 2024; **Accepted:** 7 September 2024; **Published:** 23 September 2024

new concepts but also the perception of something new by adopters, while change encompasses the application of new ideas.

Fullan argues that; effective leaders must possess the vision, resilience, and adaptability to lead their schools through times of uncertainty and upheaval by navigating change and fostering innovation in education [17]. This aligns with findings from a meta-analysis by [16], which highlights the significant impact of leadership on school improvement and student outcomes [19].

Moreover, recent developments in educational technology have opened up new possibilities for innovation in secondary education. The shift to remote and hybrid learning models during the pandemic (COVID-19) has accelerated the adoption of digital tools and online platforms in education. Research by Voogt explores how educational leaders can harness technology to enhance teaching and learning experiences, promote student engagement, and foster collaboration in secondary schools [41]).

Furthermore, the literature discusses the need for change, citing factors such as external and internal forces, technological, political, and cultural perspectives, and the ultimate goal of improving practices in educational institutions [4, 24, 35].

In addition to technological advancements, changing demographics and societal expectations are reshaping the educational landscape. The growing emphasis on equity, diversity, and inclusion calls for a reevaluation of traditional practices and the adoption of culturally responsive approaches to teaching and leadership. Recent work highlights the importance of equity-focused leadership in addressing disparities and promoting student success in secondary schools [2].

To sum up, the change and innovation process draws from Lewin's force-field model and Robbins' perspective on balancing driving and limiting forces to achieve effective change in secondary schools.

2. Method

2.1. Literature Collection

The reviewer searched the literature on leading change and innovation published in databases such as Web of Science, Research Gate, and Google Scholarly. To perform the search, the reviewer used the keywords “leading change and innovation.” The reviewer also used a snowballing approach to identify relevant literature by searching the list of references. The reviewer had collected literature related to innovation and change in these databases.

2.2. Concepts of Innovation and Change

Innovation is portrayed not solely as the introduction of entirely new concepts but rather as the perception of something new by those adopting it. Change encompasses the application of new ideas, whether they have never been attempted before or are now being put into practice. Importantly, innovation is not limited to technological advancements but extends to changes in economic and social environments, as well as shifts in human behavior across various roles in society [1].

Creativity is presented as a catalyst for generating new ideas across various domains, leading to innovations in products, processes, services, and thoughts. However, change does not necessarily equate to innovation; rather, innovation requires a readiness to embrace change and a sincere commitment to implementing new approaches.

Although change and innovation are similar, they actually have different content and functions. Change can be either planned or unplanned and encompasses both positive and negative aspects, while innovation typically proceeds in a planned manner and represents a discontinuous change [20].

Change also refers to the adoption of an innovation where the ultimate goal is to improve outcomes through an alteration of practices [6].

Change is the differentiation of something in a certain period of time which defines change as a constant part of societies and a phenomenon affecting development, innovation, reform, and people [11, 14]. Innovation is knowledge-based product, service, technological advancement, and sharing of process-oriented information [7].

To sum up, the literature distinguishes between change and innovation, noting that all innovations are products of change, but not all changes qualify as innovations. Change involves transitioning from a current state to a desired future state, incorporating new processes, systems, organizational structures, job roles, skills, knowledge, and attitudes.

3. Importance of Leading Change and Innovation in Secondary School

1. Preparation for 21st Century Skills: In today's rapidly changing world, students need to develop skills such as critical thinking, creativity, collaboration, and adaptability. The skills as essential for success in the 21st-century workforce [28]. Effective change and innovation in secondary schools can help cultivate these skills through innovative teaching methods and curriculum design [10].
2. Enhancing Student Engagement and Achievement: Research has shown that innovative teaching approaches, such as project-based learning, personalized learning, and the integration of technology, can significantly increase student engagement and academic achievement [9, 29]. By leading change and innovation, school leaders can create environments that foster deeper learning experiences and higher levels of student motivation.

1. Addressing Equity and Inclusion: Change and innovation in secondary schools can play a crucial role in addressing equity gaps and promoting inclusion. By implementing

culturally responsive teaching practices, providing targeted support for diverse learners, and creating inclusive school cultures, educators can ensure that all students have equal opportunities to succeed [19, 27]

2. Preparing Students for Future Careers: The jobs of the future will require individuals to be innovative, adaptable, and capable of continuous learning. By fostering a culture of innovation in secondary schools, educators can help students develop the skills and mindsets needed to thrive in a rapidly evolving job market [40]. This includes promoting entrepreneurial thinking, problem-solving skills, and a willingness to take risks.

4. Leading Innovation and Change in Schools

Innovation leadership involves introducing new inventions to solve future problems and generating new ideas for the benefit of individuals, groups, or organizations [37]. This implies that leaders should possess creativity and be proactive in seeking novel solutions.

The role of leaders in driving change within organizations would lead to effective leaders reinforce productive contributions, which enhance motivation, knowledge sharing, and alignment with organizational goals [4]. This underscores the importance of leadership in fostering a culture of adaptability and progress.

Kantabutra highlights the role of leaders in inspiring and providing direction to members of organizations [24]. They are responsible for shaping the organizational culture, values, and vision. This suggests that effective leadership involves not only setting goals but also cultivating a sense of purpose and direction among stakeholders.

Rowold and Obiwuru argue that successful leaders are creative, innovative, and willing to take risks [35, 30]. Innovation leaders exhibit optimism and inspire others to embrace change. This implies that leaders must be visionary and proactive in driving organizational innovation.

Leadership is a notion that requires supervisory skills such as taking more responsibility than the administrators do, gaining a visionary point of view, and making an impact. Schools need an effective leader in order to develop a shared and supported vision or visions.

In the management process, the style of the leader is effective for both the organization and its employees. Effective school leadership is crucial for improving educational outcomes [26, 31]. Leadership style influences both organizational effectiveness and employee satisfaction. This suggests that leadership plays a pivotal role in shaping the educational environment and promoting success.

The value of visionary leadership is fostering innovation and stakeholder engagement [33]. Visionary leaders anticipate challenges and obstacles, thereby strengthening the organization's competitive advantage. This underscores the importance of leadership in driving innovation and strategic planning.

Leadership is someone who has the ability to inspire, guide, and implement programs that have been established together to advance education into a quality school education and synergize to innovate [45].

Leading change is a fundamental aspect of leadership [43]. Managers and administrators must guide collective efforts to adapt to evolving circumstances. This implies that leadership involves not only setting goals but also navigating complex organizational transformations.

The researcher's stated that importance of managing innovation effectively for improving organizational performance [12, 3]. Leaders play a key role in fostering an environment conducive to innovation. This suggests that leadership influences the success of innovation initiatives and organizational outcomes.

The study identified that impact of environmental factors and stakeholder involvement on educational quality. This implies that effective leadership involves collaboration with various stakeholders to address challenges and promote innovation [39].

The study highlights, the importance of innovative leadership in the era of globalization [42]. Leaders must innovate and develop policies to meet the challenges of complex, quality competition. This implies that leadership is essential for navigating global trends and driving educational excellence.

Finally, the intertwined nature of leadership and innovation in organizational management, particularly in educational contexts, Effective leaders inspire change, foster creativity, and navigate complex challenges to achieve organizational goals and promote excellence in education.

5. Theory of Change and Innovation

The review discusses different influential theories related to educational change and innovation diffusion: Fullan's educational change theory, Rogers' Diffusion of Innovation, and Lewin's process theory. Fullan's theory outlines three phases of educational change: initiation, implementation, and institutionalization. This theory provides a framework for understanding the process of introducing and embedding innovations in educational settings.

On the other hand, diffusion of innovation theory presents crucial factors for the dissemination of innovations, including the properties of the innovation, the adopters, the communication channels by which the innovation is disseminated, time, and the social system in which the adopter lives and works [34]. The theory has also been adopted in education research to, for example, determine the degree to which institutional strategy, structure, and support decisions facilitate or impede blended learning adoption among faculty to understand pre-service teachers' perspective of the diffusion of ICTs in education; and to understand factors affecting teachers' adoption of game-based learning in schools [32, 36].

Furthermore, recent advancements in educational technology, as explored by researchers present exciting opportunities for innovation in teaching and learning. By leveraging digital tools and online platforms, educational leaders can enhance student engagement, promote collaboration, and create dynamic learning environments in secondary schools [38].

Diffusion is the process by which an innovation is communicated through certain channels over time among members of a social system [34]. It is a social change, a process by which alteration occurs in the structure of a social system involving interpersonal communication relationships. The main elements in the diffusion of new ideas are: (1) an innovation; (2) communicated through certain channels; (3) over time; and (4) among members of a social system [34]. Adoption of an innovation depends on three general factors: the innovation itself, the adopters, and the ways in which the innovation is disseminated. An innovation is an idea or a practice perceived as new among the adopters, and the characteristics of an innovation as perceived by the members of a social system determine its rate of adoption [34].

Lastly, Lewin's process theories force-field model propose that the change process can be divided into three phases [44]:

Unfreeze; people come to realize that the old ways of doing things are no longer adequate.

Changing, people look for new ways of doing things and select a promising approach and

After refreezing, the new approach is implemented, and it becomes established.

Generally, Fullan's educational change theory, Rogers' Diffusion of Innovation, and Lewin's process theory provide frameworks for understanding the phases of change, the process of change, the innovation process, and the factors influencing the adoption of innovations within educational contexts.

6. Change and Innovation in Schools

Education becomes dysfunctional when there is no change according to the need for time [15]. To sustain advancements in terms of the future of the country and society, educational institutions should be open to change and innovation processes, as education creates inputs for other organizations. Individuals and institutions can benefit from models developed for the healthy functioning of change in educational organizations [20]. The competencies of school administrators in innovation management are also considered important in ensuring the sustainability of innovation in schools. As methods of supporting and encouraging innovations may not be sufficient, school administrators should also have innovation management competencies to ensure their adoption and implementation. These competencies also enable us to benefit from innovation effectively [7].

According to Fullan,"real change, whether desired or not, represents a serious personal and collective experience characterized by ambivalence and uncertainty, and if the change works out, it can result in a sense of mastery, accomplishment, and professional growth" (p. 23) [18]. For innovation to be sustained within an organization, support must be provided to those responsible for the implementation of change. Innovation cannot stand alone.

The school should be an effective organization that requires a significant change from "unconnected thinking to systems thinking, from perceived reality to information-driven reality, and from individual autonomy to collective autonomy and collective accountability" (p. 1) [46]. There are two categories of schools: those that succeed and those that do not [13]. For organizations to lead successful change, schools should create a learning community [17]. Consequently, this type of learning community requires organizational change [17]. Fullan possess that one of the main reasons that change fails is that there is no underlying conception that grounds what would happen with new structures [17].

A central focus of scholarly research on educational change has indicated that change is a complex process. There is ample research evidence that building the capacity of organizations to learn through professional learning communities can be powerful in establishing collegial trust, organizational change, continuous improvement, and ultimately improving student learning outcomes [23].

7. Types of Change

Change with external or internal dynamics is classified as structure, technology, strategy, roles or attitudes, and economics or people [8].

Structure: Changes related to the structure include authority relations, coordination of mechanisms, and redesign of work and control areas.

Technological: It is related to business processes, business methods, networked workstations, human resource information systems, inventory and order processing systems, sales tracking systems, or an intranet with groupware for communication and idea sharing among employees.

Economics or People: Internal changes in an organization may emphasize economics or people, which are counted as attitudes, expectations, perceptions, and behaviors [5, 17]. The economics approach seeks to improve financial performance with changes such as downsizing, restructuring, and adjustments in compensation and incentives. The people approach seeks to improve human capability, commitment, and creativity by increasing individual and organizational learning, strengthening cultural values that support flexibility and innovation, and empowering people to initiate improvements.

Strategy: Changes for a company include the introduction of new products or services, entering new markets, using new forms of marketing, initiating Internet sales in addition to direct sales, forming alliances or joint ventures with other organizations, and modifying relationships with suppliers.

Roles and attitudes: The attitude-centered approach in-

volves changing attitudes and values with persuasive appeals, training programs, team-building activities, or a culture change program. The leader seeks to convert resisters into change agents who will transmit the vision to other people in the organization. The assumption is that when work role require people to act in a different way, they will change their attitudes to be consistent with the new behavior [43].

8. Reasons for Resistance to Change and Innovation

Factors regarding resistance to change and innovation include uncertainty, anxieties toward personal or organizational loss, habits, and individuals that are not ready for change and innovation [8]. Robins added that the solutions to eliminate this situation are seen as ensuring that the individuals of the organization participate in the decision-making process regarding change and innovation, informing them about the process and giving feedback about the implementation of the innovation plan, strengthening communication in the process of change and innovation, and honoring those who strive for the healthy progress of this process [8].

Resistance to change occurs within a school; employees contain when:

The proposed change is not feasible. Individuals who lack self-confidence will be reluctant to give up established procedures for new ones that may be too difficult to master.

Change is not cost-effective. Resources are necessary to implement change, and resources already invested in doing things the traditional way will be lost.

Competence: Workers no longer feel that they know what to do or how to manage. People sometimes become embarrassed when they are faced with new tasks because they don't know how to do them. It is hard to admit you don't know how to do something.

The proposed change is not necessary. A change is likely to be resisted if there is no clear evidence of a serious problem or opportunity that would justify a major change.

8.1. Change Would Cause Personal Losses

Major changes in organizations invariably result in some shift in power and status for individuals and subunits. Some jobs may be eliminated or modified, resulting in layoffs or transfers to new locations. People responsible for activities that will be cut back or eliminated may lose the basis for their current status and power.

8.2. The Proposed Change Is Inconsistent with Values

If a proposed change is viewed as unethical, illegal, or inconsistent with strong beliefs about proper behavior, it is more likely to be resisted. When the values violated by a proposed change are embedded in a strong organizational culture, resistance will be widespread.

8.3. Leaders Are Not Trusted

In some organizations, change is resisted because the leaders who propose it are distrusted, and this distrust can magnify the effect of other sources of resistance.

Sense of direction: employees lose an understanding of where they are going and why they are going there. Meaning and mission often become unclear.

As school leaders, it is important to know what kinds of changes are being dealt with in the school setting.

9. Challenges of Leading Change and Innovation

Leading change and innovation in secondary schools can be a complex endeavor, often fraught with challenges.

Resistance to Change: Educators, administrators, and staff may resist changes to established practices and curriculum. This resistance can stem from fear of the unknown, concerns about increased workload, or attachment to traditional methods [22].

Limited Resources: Secondary schools often operate within tight budgets and resource constraints. Implementing innovative programs or initiatives may require additional funding, staff, or infrastructure, which may not always be readily available [17].

Teacher Professional Development: Effective implementation of change and innovation often requires extensive professional development for teachers. However, arranging and conducting high-quality training sessions while balancing existing responsibilities can be challenging [21].

Parent and Community Expectations: Parents and the local community may have strong opinions about educational practices and may resist changes that they perceive as too radical or experimental.

Assessment and Accountability: Traditional assessment methods may not align with innovative teaching approaches. Balancing the need for accountability with the desire for innovation can be challenging.

Adapting Technological Advances: Integrating new technologies into the curriculum requires ongoing investment, training, and, support. Additionally, ensuring equitable access to technology for all students can pose challenges [25]. Addressing these challenges requires a strategic and collaborative approach, with a focus on communication, stakeholder engagement, and continuous learning and adaptation.

10. Conclusion

The literature on innovation and change in secondary education emphasizes the critical role that effective leadership

plays in driving successful transformations within schools. Innovation, while often associated with technological advancements, extends beyond this to encompass shifts in economic, social, and behavioral domains. Change involves the implementation of new ideas and practices, which, although not always groundbreaking, are essential for progress and adaptation.

The role of school leaders in fostering a culture of innovation and managing change is paramount. Leaders must exhibit vision, resilience, and adaptability to navigate the complexities of educational reform and inspire their teams to embrace new approaches. Successful innovation in secondary education centers on preparing students with the skills required for the 21st-century workforce, enhancing engagement and achievement, addressing equity and inclusion, and adapting to evolving societal needs.

Challenges such as resistance to change, limited resources, and balancing traditional assessment methods with innovative practices present significant obstacles. However, with strategic leadership and a collaborative approach, these challenges can be effectively managed. The integration of innovative technologies, alongside a commitment to professional development and stakeholder engagement, is crucial for achieving sustainable improvements in educational outcomes.

Ultimately, the process of leading change and innovation in secondary schools is a dynamic and ongoing endeavor. It requires a clear vision, effective management strategies, and a willingness to continuously adapt to meet the needs of students and the demands of a rapidly changing world.

Abbreviations

ICT Information Communication Technology

Conflicts of Interest

The authors declare no conflicts of interest.

References

[1] Akram, T., Lei, S., & Haider, M. J. (2016). The impact of relational leadership on employee innovative work behavior in IT industry of China. Arab Economic and Business Journal, 11(2), 153–161.

[2] Anderson, E., & Lochhead, S. (2023). Shared goals, methods, and learning: Partnering for equity-focused, systems-level improvement. Improving America's Schools Together: How District University Partnership and Continuous Improvement Can Transform Education, Rowman & Littlefield, Washington DC, 219–239.

[3] Argon, T., & Dilekçi, Ü. (2014). The Relationship Between Teachers' Perceptions on School Principals' Management Styles and The Schools Corporate Reputation. Turkish Studies, 9, 2.

[4] Azanza, G., Moriano, J. A., & Molero, F. (2013). Authentic leadership and organizational culture as drivers of employees' job satisfaction. Revista de Psicología Del Trabajo y de Las Organizaciones, 29(2), 45–50.

[5] Beer, M., & Nohria, N. (2000). Cracking the code of change. Harvard Business Review, 78(3), 133–141.

[6] Brown, K., & Osborne, S. (2012). Managing change and innovation in public service organizations. Routledge.

[7] Bülbül, T. (2012). Okullarda yenilik yönetimi ölçeği'nin geliştirilmesi: Geçerlik ve güvenirlik çalışması. Kuram ve Uygulamada Eğitim Bilimleri, 12(1), 157–175.

[8] Coulter, M. (2012). Stephen P. Robbins. Management. Pearson.

[9] Darling-Hammond, L., Zielezinski, M. B., & Goldman, S. (2014). Using technology to support at-risk students' learning. Alliance for Excellent Education Washington, DC.

[10] Dede, C. (2010). Comparing frameworks for 21st century skills. 21st Century Skills: Rethinking How Students Learn, 20(2010), 51–76.

[11] Demirtaş, H. (2012). İlköğretim okullarının değişime açıklığı. İlköğretim Online, 11(1), 18–34.

[12] Douglas, M. A., Overstreet, R. E., & Hazen, B. T. (2016). Art of the possible or fool's errand? Diffusion of large-scale management innovation. Business Horizons, 59(4), 379–389.

[13] DuFour, R., DuFour, R. B., Eaker, R. E., & Karhanek, G. (2004). Whatever it takes: How professional learning communities respond when kids don't learn. Solution Tree Bloomington, IN.

[14] Erdogan, B., & Liden, R. C. (2002). Social exchanges in the workplace. Leadership, 65(114), 175–186.

[15] Erdoğan, İ. (2000). Eğitimde değişim yönetimi [Change Method in Education]. Ankara: Pegem A Yay.

[16] Fallon, G. (2019). Leading futures: Global perspectives on educational leadership. Canadian Journal of Educational Administration and Policy, 189.

[17] Fullan, M. (2007). Leading in a culture of change. John Wiley & Sons.

[18] Fullan, M. (2015). The new meaning of educational change. Teachers college press.

[19] Gay, G. (2018). Culturally responsive teaching: Theory, research, and practice. teachers college press.

[20] Güçlü, N., & Şehitoğlu, E. T. (2006). Örgütsel değişim yönetimi. Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi, 13, 240–254.

[21] Guskey, T. R. (2021). Professional learning with staying power. Educational Leadership, 78(5), 54–59.

[22] Hargreaves, T., & Middlemiss, L. (2020). The importance of social relations in shaping energy demand. Nature Energy, 5(3), 195–201.

[23] Hord, S. M. (2004). Learning together, leading together: Changing schools through professional learning communities. Teachers College Press.

[24] Kantabutra, S. (2010). Vision effects: a critical gap in educational leadership research. International Journal of Educational Management, 24(5), 376–390.

[25] Koehler, J. (2021). Examining the Effects of the COVID-19 Pandemic and Social Distancing on Children and Their Play and Social Development. The University of Alabama at Birmingham.

[26] Korkmaz, M. (2005). Effects of leadership styles and emotions on teachers' performance. Educational Administration: Theory and Practice, 43, 401–422.

[27] Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: aka the remix. Harvard Educational Review, 84(1), 74–84.

[28] Leaders, Y. G. (2016). World economic forum annual meeting 2016 mastering the fourth industrial revolution.

[29] Means, B., Toyama, Y., Murphy, R., & Baki, M. (2013). The effectiveness of online and blended learning: A meta-analysis of the empirical literature. Teachers College Record, 115(3), 1–47.

[30] Obiwuru, T. C., Okwu, A. T., Akpa, V. O., & Nwankwere, I. A. (2011). Effects of leadership style on organizational performance: A survey of selected small scale enterprises in Ikosi-Ketu council development area of Lagos State, Nigeria. Australian Journal of Business and Management Research, 1(7), 100.

[31] Point, B., Nusche, D., & Moorman, H. (2008). Improving school leadership policy and practice. Preliminary version. Education and Training Policy Division, OECD.

[32] Porter, W. W., & Graham, C. R. (2016). Institutional drivers and barriers to faculty adoption of blended learning in higher education. British Journal of Educational Technology, 47(4), 748–762.

[33] Ray Gehani, R. (2013). Innovative strategic leader transforming from a low-cost strategy to product differentiation strategy. Journal of Technology Management & Innovation, 8(2), 144–155.

[34] Rogers, E. M., Singhal, A., & Quinlan, M. M. (2014). Diffusion of innovations. In An integrated approach to communication theory and research (pp. 432–448). Routledge.

[35] Rowold, J. (2011). Relationship between leadership behaviors and performance: The moderating role of a work team's level of age, gender, and cultural heterogeneity. Leadership & Organization Development Journal, 32(6), 628–647.

[36] Sahin, S. (2012). Pre-service teachers' perspectives of the diffusion of information and communications technologies (ICTs) and the effect of case-based discussions (CBDs). Computers & Education, 59(4), 1089–1098.

[37] Şen, A., & Eren, E. (2012). Innovative leadership for the twenty-first century. Procedia-Social and Behavioral Sciences, 41, 1–14.

[38] Stumbrienė, D., Jevsikova, T., & Kontvainė, V. (2024). Key factors influencing teachers' motivation to transfer technology-enabled educational innovation. Education and Information Technologies, 29(2), 1697–1731.

[39] Toytok, E. H. (2016). School Leaders' Innovation Managements and Organizational Stress: A Relational Model Study. Universal Journal of Educational Research, 4(n12A), 173–179.

[40] Trilling, B., & Fadel, C. (2012). 21st century skills: Learning for life in our times. John Wiley & Sons.

[41] Voogt, J. (2018). Second handbook of information technology in primary and secondary education. (No Title).

[42] Williams, S. M. (2015). The future of principal preparation and principal evaluation: Reflections of the current policy context for school leaders. Journal of Research on Leadership Education, 10(3), 222–225.

[43] Yukl, G. (2013a). Leadership in Organisation Eigtht Edition.

[44] Yukl, G. (2013b). Leadership in organizations 8th ed. Pearson Education, Inc.

[45] Zekan, S. B., Peronja, I., & Russo, A. (2012). Linking theory with practice: Students perceptions of leaders and leadership characteristics. Procedia-Social and Behavioral Sciences, 41, 237–242.

[46] Zmuda, K., & Kuklis, R. (2006). Kline, 2004. Transforming Schools: Creating a Culture of Continuous Improvement. Alexandria, VA: ASCD.