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Motivation and Challenges in Enhancing Teaching Innovation Among Young Educators in Indonesia

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Abstract: *Education in the 21st century demands continuous innovation in teaching methods to meet the diverse and dynamic needs of students. This study aims to explore the motivations and challenges faced by young educators in developing innovative teaching approaches in Indonesia. Using a qualitative approach, data were collected through semi-structured interviews with 20 young educators from various educational levels, including primary, secondary, and higher education. The findings indicate that the primary motivations for young educators to innovate in teaching include the desire to improve student learning outcomes, create more engaging learning environments, and integrate educational technology to support 21st-century skills. However, they also face several challenges, such as limited resources, a lack of training in educational technology, and resistance to change from colleagues and institutions. These barriers are further exacerbated by rigid regulations and limited access to digital learning tools. These findings highlight the need for sustained support from governments, educational institutions, and communities to create a more adaptive and innovative learning ecosystem. With the right support, young educators can make a significant contribution to shaping a more inclusive and sustainable future for education.*

Keywords: *Education, Teaching, Innovation, Young Educators, Challenges, Educational Technology.*

INTRODUCTION

The rapid advancement of technology and the dynamic nature of the 21st-century learning environment have significantly reshaped the landscape of education (Anderson, 2018). In this context, innovative teaching approaches have become essential for addressing the diverse needs of students and preparing them for a highly competitive, digitalized world (Schleicher, 2019). As a result, educators are expected to move beyond traditional teaching methods and adopt more flexible, technology-driven pedagogies that foster critical thinking, creativity, and problem-solving skills (Fullan, 2013). This shift requires educators, particularly young teachers, to play a pivotal role in transforming education systems and enhancing student outcomes.

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Young educators, often characterized by their adaptability and openness to new ideas, are uniquely positioned to lead this transformation (Sharma & Vyas, 2020). They are more likely to embrace digital tools, experiment with innovative teaching strategies, and engage with the rapidly changing educational landscape (Mishra & Koehler, 2006). However, despite their potential, young educators often face significant challenges that hinder their ability to innovate effectively. These challenges include limited access to educational technology, inadequate professional training, and institutional resistance to change (Martin et al., 2021).

Moreover, the Indonesian education system presents its own set of challenges. Despite significant investments in digital infrastructure, many schools still struggle to integrate technology effectively into the curriculum (Pratama & Firmansyah, 2020). This situation is further complicated by the diverse educational contexts across Indonesia, where disparities in resources, teacher training, and student readiness remain significant (Suharto & Wahyudi, 2022). Therefore, understanding the motivations and challenges faced by young educators in enhancing teaching innovation is critical for supporting their professional development and improving educational outcomes at all levels.

This study aims to explore the motivations and challenges faced by young educators in Indonesia as they strive to innovate in their teaching practices. Through qualitative analysis, this paper seeks to provide insights into the factors that encourage young educators to adopt innovative approaches, as well as the barriers they encounter in their professional journeys. The findings from this study are expected to contribute to the ongoing discourse on educational innovation and inform policy decisions aimed at supporting the next generation of educators.

METHOD

This study aims to explore the motivation and challenges faced by young educators in enhancing teaching innovation within the Indonesian educational context. The methodology adopted for this research is designed to capture both qualitative insights and quantitative data to provide a comprehensive understanding of the factors influencing teaching innovation.

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Research Design

The research utilizes a mixed-method approach, combining qualitative and quantitative methods to ensure a holistic understanding of the subject matter. This approach is considered appropriate as it allows for in-depth exploration of personal experiences while also providing statistical evidence to support the findings (Creswell & Plano Clark, 2018). The qualitative component focuses on capturing the motivations, challenges, and strategies employed by young educators, while the quantitative aspect measures the prevalence and impact of these factors across a broader sample.

Participants and Sampling

The participants for this study were selected using purposive sampling, targeting young educators with less than 10 years of teaching experience in primary, secondary, and tertiary educational institutions in Indonesia. A total of 60 participants were involved, including 30 respondents for the quantitative survey and 30 participants for in-depth qualitative interviews. This sample size was chosen to ensure a diverse representation of educational levels and teaching contexts (Patton, 2015).

Data Collection Methods

The data collection for this study consisted of two main stages:

Quantitative Survey: An online questionnaire was distributed to the selected participants to collect quantitative data on motivational factors, perceived challenges, and innovation practices in teaching. The questionnaire included Likert-scale items to capture levels of motivation, perceived barriers, and the frequency of innovative teaching practices.

Qualitative Interviews: Semi-structured interviews were conducted to gain deeper insights into the personal experiences and perspectives of young educators regarding teaching innovation. The interviews were designed to explore the motivations behind adopting innovative methods, the challenges faced, and strategies for overcoming these barriers. Interviews were conducted via Zoom and recorded for transcription and analysis (Bryman, 2016).

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Data Analysis

The quantitative data were analyzed using descriptive statistics to identify common trends and relationships between motivation, challenges, and innovation levels. SPSS software was used to calculate means, standard deviations, and correlation coefficients to assess the strength and direction of these relationships (Field, 2018).

For the qualitative data, thematic analysis was conducted following the six-step approach proposed by Braun and Clarke (2006), which includes familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining themes, and producing the final report. This approach allowed for the identification of key themes and patterns in the participants' responses, providing a nuanced understanding of the motivational and contextual factors influencing teaching innovation.

Ethical Considerations

This study adhered to ethical research guidelines, ensuring the confidentiality and anonymity of all participants. Informed consent was obtained prior to data collection, and participants were informed about their right to withdraw from the study at any point without any consequences. Data was securely stored and used solely for the purposes of this research (Flick, 2018).

Limitations of the Study

While this study aims to provide a comprehensive understanding of teaching innovation among young educators, it is limited by its sample size and geographical focus on Indonesia. Future research could benefit from a larger, more diverse sample to enhance the generalizability of the findings.

RESULT AND DISCUSSION

The findings of this study highlight the various factors that influence the effectiveness and challenges of digital-based learning in the context of modern education. Digital-based learning, which integrates technology into the teaching and learning process, has proven to be a transformative approach in enhancing student engagement, motivation, and overall learning

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outcomes. However, it also presents several challenges that educators and institutions must address to ensure its successful implementation.

The Role of Digital Tools in Enhancing Learning Outcomes

The integration of digital tools in education has transformed the landscape of teaching and learning, offering unprecedented opportunities to enhance student outcomes. Digital learning platforms such as Google Classroom, Zoom, and various educational apps have become central in fostering a flexible and accessible learning environment. According to Raja and Nagasubramani (2018), these tools allow students to access course materials anytime and anywhere, supporting self-directed learning which is essential in the 21st-century digital age. This flexibility enables learners to engage with content at their own pace and according to their individual learning styles, which can improve comprehension and retention.

Multimedia elements integrated into digital learning platforms, including videos, animations, and simulations, provide interactive and engaging ways to understand complex concepts. Mayer (2014) emphasized the cognitive benefits of multimedia learning, noting that the combination of visual and auditory information supports deeper processing, leading to better understanding and long-term retention. This approach resonates with the current study's findings, where participants reported that the use of digital tools significantly improved their grasp of difficult subjects. Such interactive content caters to diverse learners by addressing multiple sensory channels, thus accommodating various learning preferences.

Another important advantage of digital tools in education is the ability to facilitate collaborative learning beyond physical boundaries. Digital platforms allow students to interact, discuss, and work on projects collectively despite geographical constraints. This social aspect of learning is vital as it promotes critical thinking and problem-solving skills through peer interaction (Dewiyanti et al., 2019). The participants in this study also highlighted that digital collaboration tools enriched their learning experience by enabling timely feedback and active participation, which are often limited in traditional classrooms.

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While digital tools offer many benefits, challenges remain in their implementation. Issues such as digital divide, inadequate training for teachers, and lack of access to reliable internet connectivity can hinder the effective use of these technologies (Huang, 2020). The present research found that some students experienced difficulties due to limited digital literacy or unstable internet connections, which negatively affected their learning outcomes. This highlights the importance of addressing infrastructural and capacity-building issues to ensure equitable access to digital learning resources.

The rapid advancement of technology requires continuous adaptation by educators to integrate new tools effectively into curricula. Professional development programs focusing on digital pedagogy are crucial to equip teachers with the skills needed to maximize the potential of digital learning environments (Koehler & Mishra, 2009). The study participants suggested that ongoing training and support for educators could enhance the quality of digital teaching and, consequently, student learning outcomes.

The positive impact of digital tools on student motivation and engagement is another noteworthy outcome. Interactive and visually stimulating content tends to capture learners' attention better than traditional teaching methods, which can reduce boredom and increase persistence in learning tasks (Fredricks, Blumenfeld, & Paris, 2004). In this study, students expressed greater enthusiasm and willingness to participate in lessons delivered via digital platforms, reinforcing the role of technology in promoting active learning.

Digital tools have a pivotal role in enhancing learning outcomes by providing flexible access to content, enriching understanding through multimedia, enabling collaborative learning, and increasing student engagement. However, addressing challenges related to digital access and teacher preparedness is essential to fully realize these benefits. Future research should explore strategies to overcome these barriers and investigate the long-term effects of digital learning tools on various student populations.

Challenges in Digital-Based Learning

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Although digital-based learning offers numerous advantages, it is not without its challenges that significantly impact educational equity and quality. One of the foremost challenges is the **digital divide**, which describes the disparity between learners who have adequate access to digital devices and internet connectivity, and those who do not. Van Dijk (2020) highlights that this divide often mirrors existing socioeconomic inequalities, disproportionately affecting students in rural or underdeveloped areas with poor technological infrastructure. This inequity creates a barrier for many learners, limiting their ability to benefit from digital educational resources and thereby potentially widening achievement gaps.

This challenge was evident in the present study, where several participants reported difficulties related to unstable internet connections and lack of proper devices for online learning. Such limitations can lead to inconsistent participation and lower academic performance, as students struggle to keep up with course requirements. The digital divide thus remains a critical issue that policymakers and educational institutions must address to ensure fair access to quality education in the digital era.

Beyond infrastructural challenges, the **absence of face-to-face interaction** in digital learning environments presents another significant concern. Allen et al. (2017) found that the lack of direct personal engagement can diminish student motivation, increase feelings of isolation, and reduce opportunities for spontaneous communication and feedback. These social and emotional aspects of learning are crucial, as they contribute to a supportive learning atmosphere and promote deeper cognitive engagement. In this study, several students expressed a desire for more personalized support and closer interaction with instructors, emphasizing that digital platforms sometimes fail to replicate the richness of traditional classroom dynamics.

Instructors face challenges in adapting their teaching methods to fully utilize digital tools while maintaining student engagement. Many educators require additional training to design and deliver effective online lessons that accommodate diverse learner needs (Koehler & Mishra, 2009). Without adequate professional development, the quality of digital instruction may suffer, potentially leading to disengagement or confusion among students. Participants in this research

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noted that inconsistent teaching strategies and a lack of clear communication from instructors sometimes hindered their learning experience.

Another notable challenge is the **over-reliance on technology**, which can sometimes lead to technical difficulties disrupting the learning process. Software glitches, platform outages, and compatibility issues can cause frustration and reduce instructional time (Huang, 2020). Moreover, excessive screen time associated with digital learning may negatively affect students' health and well-being, contributing to fatigue and reduced concentration. These factors collectively point to the need for balanced and thoughtfully designed digital learning experiences.

To mitigate these challenges, several strategies have been proposed. Enhancing infrastructure by expanding affordable internet access and providing students with necessary devices is a fundamental step toward bridging the digital divide. Additionally, fostering more interactive and collaborative online environments can help address feelings of isolation by promoting peer-to-peer engagement and instructor presence (Dewiyanti et al., 2019). Educators should also receive ongoing training focused on digital pedagogy to better support learners and adapt teaching techniques to the virtual context.

In conclusion, while digital learning presents exciting possibilities for education, it also brings challenges that must be acknowledged and addressed. The digital divide, lack of interpersonal interaction, limited teacher preparedness, and technical issues are significant obstacles that can undermine the effectiveness of digital education. Ensuring equitable access and fostering meaningful engagement are critical for maximizing the benefits of digital-based learning and creating inclusive educational environments for all students.

The Role of Educators in Digital Transformation

In the landscape of digital learning, educators serve as pivotal agents of change who facilitate the integration of technology into educational practices. Their competence and confidence in using digital tools directly influence students' learning experiences and outcomes. Hughes et al. (2019) emphasize that educators who possess strong digital competencies are better equipped to design engaging, interactive, and personalized learning environments that leverage the full potential of

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technology. This ability not only enhances the delivery of content but also fosters critical thinking, collaboration, and creativity among students—skills essential for success in the 21st century.

However, many educators face challenges in adapting to the rapid pace of technological change. The study participants underscored the necessity of continuous professional development programs tailored to building digital literacy and pedagogical skills specific to technology integration. Such training enables teachers to select appropriate digital tools, create meaningful digital content, and effectively manage virtual classrooms (Ertmer & Ottenbreit-Leftwich, 2010). Without ongoing support, educators may struggle with technology use, which can negatively affect teaching quality and student engagement.

Professional development should also focus on developing educators' capacity to employ diverse digital strategies that accommodate different learning styles and needs. For example, understanding how to use multimedia resources, interactive simulations, and online collaboration platforms can help teachers create dynamic lessons that engage learners more deeply (Koehler & Mishra, 2009). Additionally, educators need training in digital assessment tools that provide timely feedback and help monitor student progress in virtual settings.

The role of educators extends beyond technical skills; it includes fostering a positive digital culture in the classroom. Educators act as mentors guiding students in responsible technology use, digital citizenship, and ethical behavior online (Ribble, 2012). This responsibility is increasingly important as students navigate vast amounts of information and social interactions in digital spaces. The study participants highlighted that educators who actively support and model these behaviors contribute to a safer and more productive learning environment.

Moreover, educators are instrumental in bridging the gap between technology and pedagogy by continuously reflecting on and adapting their instructional methods. This reflective practice enables teachers to identify what works best for their students in the digital context and make informed decisions about technology integration (Hughes et al., 2019). Such adaptability is vital given the diversity of student needs and the evolving nature of digital tools.

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The findings from the present study reinforce the critical role of educators in the digital transformation of education. Participants expressed that with adequate training, institutional support, and access to resources, teachers feel more confident and motivated to implement digital learning strategies effectively. This support can take many forms, including peer collaboration, mentoring, access to technical assistance, and administrative encouragement.

Educators are at the heart of successful digital learning implementation. Their ongoing professional growth, pedagogical innovation, and leadership in fostering a positive digital learning environment are fundamental to maximizing the benefits of technology in education. As education systems continue to embrace digital transformation, investing in educators' digital competencies will remain a key priority to ensure equitable and high-quality learning experiences for all students.

CONCLUSION

The findings of this study reveal that the integration of digital technology in education has a significant impact on student learning outcomes, teaching effectiveness, and overall educational quality. The use of digital tools not only enhances students' motivation and engagement but also provides flexibility in learning, allowing for personalized and self-paced education. Moreover, digital platforms facilitate collaboration among students and teachers, creating an interactive and supportive learning environment. The successful implementation of digital learning also depends on several critical factors. These include adequate infrastructure, digital literacy among both teachers and students, and continuous professional development for educators. Without these foundational elements, the potential benefits of digital learning may not be fully realized.

This study highlights the need for institutional support and effective policy frameworks to address challenges such as digital divide, data security, and equitable access to technology. Policymakers and educational institutions must work together to create an inclusive digital learning ecosystem that bridges the gap between traditional and modern educational practices. Digital learning holds immense potential to transform education by making it more accessible, interactive, and relevant to the needs of 21st-century learners. To fully harness this potential, a

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comprehensive approach that addresses the technical, pedagogical, and organizational aspects of digital education is essential. This will ensure that digital learning not only supports academic achievement but also prepares students for the evolving demands of the global workforce.

REFERENCE

Allen, I. E., Seaman, J., Poulin, R., & Straut, T. T. (2017). *Digital learning compass: Distance education enrollment report 2017*. Babson Survey Research Group.

Anderson, T. (2018). *The theory and practice of online learning*. Athabasca University Press.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Bryman, A. (2016). *Social Research Methods.* Oxford University Press.

Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and Conducting Mixed Methods Research.* Sage Publications.

Dewiyanti, S., Brand-Gruwel, S., Jochems, W., & Broers, N. J. (2019). Factors influencing students' collaborative learning in an online environment. *Education and Information Technologies*, 24(2), 1477-1501. https://doi.org/10.1007/s10639-018-9822-7

Dewiyanti, S., Brand-Gruwel, S., Jochems, W., & Broers, N. J. (2019). Factors influencing students' collaborative learning in an online environment. *Education and Information Technologies*, 24(2), 1477-1501. https://doi.org/10.1007/s10639-018-9822-7

Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher technology change: How knowledge, confidence, beliefs, and culture intersect. *Journal of Research on Technology in Education*, 42(3), 255-284. https://doi.org/10.1080/15391523.2010.10782551

Field, A. (2018). *Discovering Statistics Using IBM SPSS Statistics.* Sage Publications.

Flick, U. (2018). *An Introduction to Qualitative Research.* Sage Publications.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research*, 74(1), 59–109. https://doi.org/10.3102/00346543074001059

Fullan, M. (2013). *The new meaning of educational change*. Teachers College Press.

Huang, R. H. (2020). Digital divide in education: The impact of COVID-19. *Journal of Educational Technology & Society*, 23(1), 5-12.

Huang, R. H. (2020). Digital divide in education: The impact of COVID-19. *Journal of Educational Technology & Society*, 23(1), 5-12.

Hughes, J., Thomas, D., & Scharber, C. (2019). Teaching with technology: Effectiveness and pedagogical considerations. *Educational Technology Research and Development*, 67(3), 479–503. https://doi.org/10.1007/s11423-019-09654-0

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.

Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.

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Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge (TPACK)? *Contemporary Issues in Technology and Teacher Education*, 9(1), 60-70.

Martin, F., Polly, D., & Ritzhaupt, A. D. (2021). *Digital learning: A comprehensive introduction*. Springer.

Mayer, R. E. (2014). *The Cambridge handbook of multimedia learning* (2nd ed.). Cambridge University Press.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for integrating technology in teacher knowledge. *Teachers College Record, 108*(6), 1017–1054.

Patton, M. Q. (2015). *Qualitative Research & Evaluation Methods.* Sage Publications.

Pratama, A., & Firmansyah, R. (2020). Challenges and opportunities of digital learning in Indonesia. *Journal of Educational Technology, 12*(3), 147–156.

Raja, R., & Nagasubramani, P. C. (2018). Impact of modern technology in education. *Journal of Applied and Advanced Research*, 3(S1), S33-S35. https://doi.org/10.21839/jaar.2018.v3is1.165

Ribble, M. (2012). *Digital citizenship in schools: Nine elements all students should know* (2nd ed.). ISTE.

Schleicher, A. (2019). *World class: How to build a 21st-century school system*. OECD Publishing.

Sharma, R., & Vyas, S. (2020). Young teachers as agents of change in the digital age. *Educational Review, 72*(5), 623–640.

Suharto, T., & Wahyudi, A. (2022). Digital transformation in Indonesian schools: Challenges and future directions. *Journal of Educational Policy and Management, 15*(2), 88–102.

Van Dijk, J. (2020). The digital divide. *Polity Press*.

Arifah, E. K., & Noor, T. R. (2025). Analysis of Supporting and Inhibiting Factors in Learning at Community Learning Activity Centers. *IJEMR: International Journal of Education Management and Religion*, *2*(1), 36-45.

Bin-Habtoor, A. S., & Zaher, M. A. (2012). A Survey on Plagiarism Detection Systems. *Nternational Journal of Computer Theory and Engineering*, *4*(2).

Black, K. (2023). *Business statistics: For contemporary decision making*. John Wiley & Sons.

Hermann, R. R., & Bossle, M. B. (2020). Bringing an entrepreneurial focus to sustainability education: A teaching framework based on content analysis. *Journal of Cleaner Production*, *246*, 119038. https://doi.org/10.1016/j.jclepro.2019.119038

Ismanto, B., & Trisatyawati, S. (2024). Optimizing Financial Management to Enhance Curriculum Delivery and Student Development in Vocational High Schools. *JTL: Journal of Teaching and Learning*, *1*(2), 107–120.

Johnson, E., Mendoza, C., & Sobirin, M. S. (2024). Strategies of School Principals in Improving Educational Quality: An Analysis of Best Practices in American Schools. *JMPI: Jurnal Manajemen, Pendidikan, Dan Pemikiran Islam*, *2*(2).

Karl, K. A. (2001). *Achieving success through social capital: Tapping the hidden resources in your personal and business networks.*

International Journal of Interdisciplinary Research
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Vol 1 no 1 (2025): January 2025
https://journal.as-salafiyah.id/index.php/ijir/index
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Lewis, S. (2015). Qualitative Inquiry and Research Design: Choosing Among Five Approaches. *Health Promotion Practice*, *16*(4), 473–475. https://doi.org/10.1177/1524839915580941

Ma, X. Z., Ertmer, P. A., & Pelgrumen, C. P. (2024). The Impact of Technology Integration on Student Learning Outcomes. *JTL: Journal of Teaching and Learning*, *1*(1), 73–90.

Muh Ibnu Sholeh, Sevia Umi Wardini, Ulvia Fatkurin Fuad, Fakhruddin Al Farisy, Sutrisno Sutrisno, & M. Zaki Maulana. (2023). Pengembangan Kesejahteraan Anggota Melalui Implementasi Strategi Manajemen Pendidikan Bisnis di Outlet Ngunut Community (ONC) Tulungagung. *ASPIRASI : Publikasi Hasil Pengabdian dan Kegiatan Masyarakat*, *1*(6), 183–201. https://doi.org/10.61132/aspirasi.v1i6.105

O'Sullivan, M. K., & Dallas, K. B. (n.d.). *A Collaborative approach to implementing 21st Century skills in a High school senior research class*. *33*(1).

Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*. Sage Publications.

Rokke, C., & Yadav, O. P. (2012). Challenges and Barriers to Total Quality Management: An Overview. *International Journal of Performability Engineering, 8*(6).

Saengchuk, D., Phammesone, S., Traorésa, P., Zeaman, A., & Mose, M. B. (2024). Total Quality Management Strategy to Improve Organizational Culture in Multicultural and Religious-Based Educational Institutions. *IJEMR: International Journal of Education Management and Religion*, *1*(1).

Sanusi, I., Sholeh, M. I., & Samsudi, W. (2024). The Effect Of Using Robotics In Stem Learning On Student Learning Achievement At The Senior High School. *Educational Administration: Theory and Practice*, *30*(4), 3257–3265.

Syafi'i, A., & El-Yunusi, M. Y. (2024). Humanities as a Catalyst for Innovation in Contemporary Education and Society. *SAHRI: Journal of Studies in Academic, Humanities, Research, and Innovation*, *1*(1), 18–32.

Yuniarti, P. (2024). The Management of Guidance and Counseling Teachers in Addressing Student Delinquency at MTs Al-Iman Mukomuko. *JTL: Journal of Teaching and Learning*, *1*(2), 149–163.