

THE ROLE OF CHATGPT IN IMPROVING THE EFFICIENCY OF EDUCATION MANAGEMENT PROCESSES

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Abstract. Education is one of the main pillars in a country's development, given its important role in shaping a competent and competitive young generation. In today's digital and information technology era, the role of technology in education is increasingly important to improve the efficiency and effectiveness of the learning process and overall education management. The purpose of this study is to examine more deeply the role of ChatGPT in improving the efficiency of the education management process. This research is a literature review that uses a qualitative method approach, which means it will analyse and interpret data by relying on information and text from various sources. The research found that ChatGPT's role in improving the efficiency of the education management process is significant. This technology has opened the door for a positive transformation in the way education is managed, taught and run. By providing instant information, assistance in learning, and support in communication, ChatGPT can enrich the educational experience of students, teachers, parents, and administrative staff.

Keywords: ChatGPT, Efficiency, Education Management

Abstrak Di era digital dan teknologi informasi seperti saat ini, peran teknologi dalam pendidikan semakin penting untuk meningkatkan efisiensi dan efektivitas proses pembelajaran serta manajemen pendidikan secara keseluruhan. Tujuan studi ini untuk menelaah lebih mendalam peran ChatGPT dalam meningkatkan efisiensi proses manajemen pendidikan. Penelitian ini merupakan kajian literatur yang menggunakan pendekatan metode kualitatif, yang berarti akan menganalisis dan menginterpretasikan data dengan mengandalkan informasi dan teks dari berbagai sumber. Hasil penelitian menemukan hasil bahwa peran ChatGPT dalam meningkatkan efisiensi proses manajemen pendidikan sangatlah signifikan. Teknologi ini telah membuka pintu bagi transformasi positif dalam cara pendidikan dikelola, diajarkan, dan dijalankan. Dengan memberikan informasi instan, bantuan dalam pembelajaran, dan dukungan dalam komunikasi, ChatGPT dapat memperkaya pengalaman pendidikan siswa, guru, orang tua, dan staf administrasi.

Kata Kunci: ChatGPT, Efisiensi, Manajemen Pendidikan

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INTRODUCTION

Education plays a crucial part in the growth of a nation (Harahap, Sutrisno, Raharjo, et al., 2023), serving as a fundamental foundation (Harahap, Ausat, Sutrisno, et al., 2023). Its significance lies in its ability to cultivate a skilled and competitive younger generation

(Prastyaningtyas, Sutrisno, et al., 2023). Education has a key role in equipping young children with the necessary knowledge, skills, and values to develop into competent adults. Education provides individuals with the chance to fully cultivate their potential, encompassing both academic and non-academic aspects (Septianti et al., 2023). Individuals in their youth who possess sufficient information and abilities will be more effectively equipped to confront forthcoming obstacles, encompassing both professional endeavours and personal spheres (Harini et al., 2023; Sutrisno, Sitinjak, et al., 2023). Quality education is vital in cultivating a highly skilled and extensively knowledgeable workforce across diverse domains (Ismaya et al., 2023; Tuhuteru et al., 2023). A highly educated younger generation possesses the capacity to make valuable contributions to innovation, technology, and industry, thereby enhancing the country's worldwide competitiveness.

In the contemporary period characterised by digital advancements and information technology, the significance of technology in the realm of education has become increasingly prominent (Azzaakiyyah et al., 2023). Its function is crucial in enhancing the efficiency and efficacy of the learning process, as well as in the general management of educational institutions (Hermansyah, 2023; Salamah, 2023; Sukenti, 2023). Artificial intelligence (AI) has emerged as a very promising technical advancement that has introduced novel prospects across several domains within the realm of education (Atrup et al., 2023). An intriguing use of artificial intelligence (AI) within the realm of education is the utilisation of generative language models, such as ChatGPT, which has been developed by OpenAI (Sudirjo, Diawati, et al., 2023). ChatGPT is an artificial intelligence model that has undergone training to generate text that is coherent and sensitive to context (Ausat, Azzaakiyyah, et al., 2023). It possesses the capability to respond to inquiries and engage in natural language interactions with human users (Basir et al., 2023).

Several prior research have examined the utilisation of ChatGPT in educational settings. In the study conducted by Fauzi et al. (2023), an analysis was performed to examine the impact of ChatGPT on enhancing student productivity levels. The present study adopts a qualitative approach. According to this study, ChatGPT has the potential to make a substantial impact on enhancing student productivity. ChatGPT has the potential to assist students in multiple capacities, encompassing the provision of valuable information and resources, the enhancement of language proficiency, the facilitation of collaborative efforts, the optimisation of time management and efficacy, as well as the provision of support and motivation. Ausat, Suherlan, et al. (2023) study offered valuable insights into the impact of artificial intelligence technology on the teaching profession and explored strategies for educators to adapt to the

rapid advancements in this field. The study's findings indicate that ChatGPT can potentially influence the field of lecturing. ChatGPT has the potential to assist educators in various capacities, including the generation of preliminary texts and expediting the writing process (Rijal, 2023). However, it is important to acknowledge that employing this technology also presents certain obstacles and potential hazards (Mahardhani, 2023; Said Ahmad et al., 2023; Sari, 2023). It is imperative for lecturers to uphold the fundamental principles of their vocation and actively address instances of academic dishonesty facilitated by technological advancements like ChatGPT. While other studies have investigated the use of ChatGPT in educational settings, there is a dearth of research specifically focused on the application of ChatGPT in the domain of educational management. Hence, this research holds significance in its endeavour to enhance the existing body of knowledge on ChatGPT and improve the efficacy of educational management procedures.

In the realm of educational administration, various facets necessitate effective management. These encompass curriculum development, timetable establishment, oversight of student and faculty performance, as well as engagement with parents or guardians. The execution of these activities necessitates a substantial investment of time and effort when performed manually (Rajapathirana & Hui, 2018). This is the context in which the relevance of ChatGPT can be observed. There are several potential functions of ChatGPT that could enhance the efficacy of education management processes: 1) Virtual assistant for teachers and education staff 2) Automated information service 3) Curriculum development 4) Data analysis and prediction 5) Interaction with parents/guardians.

Nevertheless, while the potential advantages it offers, the use of ChatGPT in the realm of educational management necessitates careful consideration of various obstacles. These include concerns over the safeguarding of data privacy, the reliability of responses, and the limitations in comprehending intricately intricate settings. Hence, it is imperative to undertake comprehensive study in order to gain a deeper understanding of the successful integration of ChatGPT within the educational management process, as well as to explore strategies for maximising its potential benefits and mitigating any potential challenges that may develop. So, this study will examine in more depth the role of ChatGPT in improving the efficiency of the education management process which is also a literature review using a qualitative method approach, which means it will analyse and interpret data by relying on information and text from various sources.

METHOD

This study constitutes a literature review that employs a qualitative methodology, hence entailing the analysis and interpretation of data through the utilisation of information and texts derived from diverse sources. The primary objective of a qualitative literature review is to compile, assess, and incorporate pre-existing knowledge pertaining to the subject of investigation, namely the impact of ChatGPT on enhancing the effectiveness of educational management procedures. This study will gather data from several sources that are pertinent to the subject matter, including scientific journals, books, research papers, and other scholarly materials. The temporal scope of the data encompasses the years 2014 to 2023, affording the researcher the opportunity to observe and analyse the various advancements, trends, and alterations that have transpired during this timeframe.

The utilisation of the qualitative technique in conducting a literature review enables researchers to provide a more comprehensive and detailed description and characterization of intricate and multifaceted matters (Elo et al., 2014). Furthermore, the utilisation of this approach facilitates the incorporation of numerous information sources and encompasses a diverse array of perspectives, hence enhancing the depth of research and bolstering the credibility of the results. The data gathering procedure will entail a rigorous examination of textual material, a thorough search for pertinent information, and the systematic categorization of important data pertaining to the research subject. Following this, the author intends to organise the gathered material in a systematic manner, conduct a comparative analysis of the findings from various sources, and discern recurring patterns, themes, and trends that arise from the amassed data. Firstly, collecting research related to ChatGPT, efficiency and education management. Secondly, summarising related studies and explaining the conceptions of ChatGPT, efficiency, education management and how they can be used in education. Utilising the vast databases of Google Scholar and Google search engine, a thorough search was conducted to find related papers and data published from 2014 to 2023. To ensure the search for relevant research, the following keywords were used: ChatGPT, efficiency, education management, and an appropriate combination of the above.

One notable benefit of employing a qualitative literature evaluation lies in its inherent adaptability to comprehend and elucidate intricate phenomena, as it is not constrained by numerical or statistical limitations (Rahman, 2016). The anticipated outcome of this research endeavour is to offer a detailed analysis of the evolution of the subject matter within the specified timeframe of 2014 to 2023. Additionally, it is expected that this study may yield

suggestions for future research endeavours that can enhance the comprehension of matters pertaining to the subject.

RESULTS

In the continuously advancing digital epoch, technology is progressively assuming a fundamental role in diverse spheres of existence, including the realm of education. The utilisation of ChatGPT has emerged as a notable technological advancement in enhancing the efficacy of educational administration procedures. The emergence of ChatGPT, an artificial intelligence solution created by OpenAI, has had a profound impact on the administration and operation of education (Sudirjo, Ausat, et al., 2023).

The significance of ChatGPT in enhancing the efficacy of education management procedures should not be ignored. One of the primary advantages of this system is its capacity to promptly deliver precise and pertinent information to various education stakeholders, including students, instructors, parents, and school administrative personnel (Dhawan, 2020). Educational institutions can streamline certain administrative chores, such as responding to general inquiries and disseminating information regarding timetables, curriculum, extracurricular activities, and related matters (Rukman et al., 2023), through the utilisation of ChatGPT. This system aids in alleviating the burden on administrative personnel and facilitates prompt responses to individuals seeking information.

In addition, ChatGPT has the capability to be seamlessly linked with other online learning platforms. This enables a virtual assistant to provide support to students by addressing inquiries pertaining to educational resources or assignments (Essel et al., 2022). For instance, in the case where a learner has challenges in comprehending a mathematical idea, they can pose a direct inquiry to ChatGPT and obtain a lucid and well-organized elucidation. This not only facilitates students' self-directed learning but also diminishes their dependence on teacher support beyond regular class hours (Harini, 2018; Sutrisno, Hayati, et al., 2023). Regarding classroom administration, ChatGPT can serve as an assistant for many tasks such as schedule management, assignment reminders, and providing concise reviews of previously covered material. Educators have the ability to employ this tool in order to create instructional strategies, establish and uphold discipline, and optimise time management within the educational setting (Haleem et al., 2022).

ChatGPT also contributes to the improvement of communication with parents in the realm of education management. This virtual assistant has the capability to regularly inform parents on children' academic achievement and behaviours (Briones et al., 2021). Parents can utilise

ChatGPT as a means to inquire about school-related activities, educational strategies, or any other matters that may be of importance to them. This facilitates a more robust communication channel between the educational institution and the household.

Nevertheless, despite the numerous advantages of ChatGPT, it is imperative to address the accompanying obstacles. Although ChatGPT demonstrates proficiency in generating coherent and pertinent language, there are instances where it may present information that is not totally precise or contextually appropriate. Hence, it is imperative to exercise diligent oversight and employ content filtering mechanisms in order to ascertain the accuracy and utility of the information being presented. When incorporating ChatGPT into school administration, it is crucial to maintain an equilibrium between technological implementation and human contact. Although ChatGPT possesses the capability to automate numerous jobs, it is incapable of assuming the function of human educators and personnel in delivering the personalised approach, emotional comprehension, and human interaction that are necessary in the field of education. The role of ChatGPT in enhancing the efficiency of the education management process is of considerable importance. ChatGPT facilitates the creation of an educational setting that is characterised by enhanced efficiency, adaptability, and responsiveness to the requirements of students, educators, parents, and other individuals involved in the educational process. This is achieved through the provision of immediate information, learning assistance, and communication support. Nevertheless, the prudent execution of its implementation must be accompanied by a judicious equilibrium with human connection, thereby upholding crucial educational principles.

DISCUSSION

Technological advancements have significantly influenced the methods of learning and teaching in contemporary education. A noteworthy advancement pertains to the capacity of ChatGPT to personalise its learning process. Through the analysis of student data and behavioural patterns, ChatGPT possesses the capacity to provide personalised learning recommendations tailored to the distinct requirements of each individual. This tremendously aids educators in developing more effective pedagogical tactics, while also assisting students in obtaining knowledge based on their own learning pace and preferred learning style. In addition to its educational applications, ChatGPT also plays a significant role in offering vocational counselling. The capacity of this resource to offer insights into diverse potential occupations, educational trajectories, and requisite competencies for the future significantly aids students in making more informed choices pertaining to their professional goals.

The incorporation of ChatGPT within the educational platform also yields advantages in the administration of assignments and projects. ChatGPT possesses the capability to offer extensive support by furnishing sequential instructions or providing solutions to inquiries pertaining to academic assignments. This functionality enables students to enhance their efficacy and efficiency in the completion of academic tasks. In addition to its student-centric applications, ChatGPT also exhibits promise in supporting the professional growth of instructors. ChatGPT can serve as a beneficial tool for educators to enhance their professional competence. Through the utilisation of teaching simulations facilitated by ChatGPT, educators are afforded the valuable opportunity to effectively convey educational material, obtain constructive feedback, and therefore enhance their pedagogical approaches.

The data analysis capabilities of ChatGPT are quite valuable. ChatGPT possesses the capacity to proficiently analyse data, hence enabling the identification of trends and patterns within the realm of education. This information has the potential to assist decision-makers in developing more efficacious programmes aimed at enhancing the quality of education. Furthermore, ChatGPT plays a significant role in fostering the advancement of an inclusive educational framework. ChatGPT has the potential to enhance accessibility and promote fairness in education through the provision of supplementary materials and support for students with special needs. The role of ChatGPT holds significant potential in transforming and enhancing the existing educational environment.

Nevertheless, it is crucial to bear in mind that although ChatGPT exhibits significant promise in enhancing the efficacy of school management, there exist ethical and privacy concerns that necessitate careful study. Maintaining absolute confidentiality of student and other user data is vital, and the utilisation of ChatGPT should align with established rules (Kraugusteeliana et al., 2023). Furthermore, it is imperative to adopt a comprehensive approach while utilising ChatGPT in educational settings, with a focus on enhancing the overall quality of the learning process. Although modern technology has the capability to streamline numerous administrative processes, it is important to recognise that the interaction between teachers and students is crucial in fostering a constructive and beneficial educational setting (Wahyoedi et al., 2023).

Educational institutions can enhance their management efficiency by leveraging ChatGPT's capacity to deliver prompt information, personalised support, and aid in the learning journey (Rasul et al., 2023). Nevertheless, the achievement of successful implementation is contingent upon the manner in which the technology is included in alignment with educational

philosophies and objectives, as well as the preservation and reverence of human contact (Sutrisno, Ausat, et al., 2023; Sutrisno, Kuraesin, et al., 2023; Touriano et al., 2023).

The impact of technological advancements on learning and teaching methods in modern education has been substantial. An impressive development lies in the capacity of ChatGPT to individualise its learning procedure. By conducting an examination of student data and behavioural patterns, ChatGPT possesses the capability to offer tailored learning recommendations based on the distinct requirements of each individual. This significantly aids educators in formulating more efficient educational strategies, while also supporting students in obtaining knowledge according to their individual learning pace and preferred learning style. In addition to its educational uses, ChatGPT plays a substantial role in offering vocational counselling services. The resource's capacity to offer valuable insights into a range of potential occupations, educational trajectories, and future-relevant abilities significantly aids students in making well-informed decisions about their career aspirations.

The incorporation of ChatGPT into educational platforms offers benefits in the management of assignments and projects as well. ChatGPT possesses the capacity to offer substantial assistance through the provision of step-by-step guidance or the provision of answers to inquiries pertaining to academic assignments. This feature facilitates the enhancement of students' efficacy and efficiency in the completion of academic work. In addition to its utility in student-oriented contexts, ChatGPT also exhibits promise in facilitating the professional development of educators. ChatGPT has the potential to be a valuable resource for educators seeking to augment their professional proficiency. The utilisation of teaching simulations facilitated by ChatGPT offers educators significant prospects to proficiently disseminate educational content, acquire constructive evaluations, and consequently enhance their pedagogical methodology.

The data analysis capabilities offered by ChatGPT are quite valuable. The system possesses the capability to meticulously examine data, facilitating the discernment of trends and patterns within the realm of education. The provided information possesses the capacity to aid decision-makers in the development of more efficacious plans aimed at enhancing the quality of education. Moreover, ChatGPT assumes a significant part in the advancement of an inclusive educational framework. The implementation of this approach has promise in enhancing accessibility and fostering equity in the realm of education by offering supplementary resources and assistance to students with exceptional need. The utilisation of ChatGPT has significant promise in the future transformation and enhancement of the current educational landscape.

It is imperative to acknowledge that the utilisation of ChatGPT or comparable technologies is merely a tool. The ability of instructors, the vision of school leadership, and the interaction among all stakeholders in the education process continue to significantly influence the quality and success of education (Day et al., 2016). Technology serves as a tool to facilitate the objective of enhancing education, with the ultimate aim of cultivating a generation that possesses aptitude, expertise, and the ability to make valuable contributions within a constantly expanding global community (Harahap, Kraugusteeliana, Pramono, et al., 2023; Harahap, Sutrisno, Fauzi, et al., 2023; Prastyaningtyas, Ausat, et al., 2023).

CONCLUSION

The contribution of ChatGPT to enhancing the efficacy of education management processes is noteworthy. The advent of technology has facilitated a constructive shift in the management, delivery, and execution of educational practises. ChatGPT has the potential to enhance the educational experience of students, instructors, parents, and administrative staff by offering immediate access to information, facilitating learning, and aiding in communication.

RECOMMENDATIONS

It is important to note that when implementing ChatGPT, there are several factors that should be taken into consideration. First and foremost, with regards to integration, it is imperative to exercise caution while incorporating this technology into the education system. Optimising the selection of an acceptable location and method of use will result in the maximisation of advantages. Furthermore, it is crucial to maintain a balance between technology and human interaction in the realm of education. Although technology holds immense promise, the role of interpersonal connections in the educational process remains significant. Teachers play a vital role in delivering a tailored approach, offering emotional assistance, and providing direction to students. Additionally, it is imperative to provide training and development opportunities for teachers and education personnel to enhance their proficiency in utilising these technologies. The implementation of comprehensive training programmes will facilitate the optimal utilisation of ChatGPT's capabilities and enable individuals to effectively address any potential obstacles that may occur. Furthermore, it is imperative to adhere to stringent privacy requirements while managing data of students and other users, in order to address concerns related to privacy and ethics. It is imperative to exercise oversight and establish regulatory measures to ensure that the utilisation of this

technology does not infringe upon individuals' privacy rights. Additionally, the process of monitoring and evaluation plays a crucial role in ensuring the ongoing success of ChatGPT. Regular monitoring allows for the assessment of its performance, while soliciting input from stakeholder aids in gaining valuable insights and perspectives. In this manner, the technology can undergo ongoing enhancements and adaptations according to specific requirements.

The deliberate strategizing and adoption of a pedagogical framework centred on excellence in education might provide favourable outcomes through the integration of ChatGPT in educational administration. The focus is not solely on optimising efficiency, but also on enhancing the learning experience by ensuring inclusivity and timeliness. Through the prudent integration of modern technology, the field of education can persistently undergo transformation, thereby fostering a more promising future for forthcoming generations.

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REFERENCES

- Atrup, A., Diawati, P., Syamsuri, S., Pramono, S. A., & Ausat, A. M. A. (2023). The Effect of Entrepreneurship Education and Creativity on Students' Entrepreneurial Intention : The Perspective of Effectuation and Cognitive Flexibility Theory. *Jurnal Kependidikan*, 9(2). <https://doi.org/https://doi.org/10.33394/jk.v9i2.7822>
- Ausat, A. M. A., Azzaakiyyah, H. K., Permana, R. M., Riady, Y., & Suherlan, S. (2023). The Role of ChatGPT in Enabling MSMEs to Compete in the Digital Age. *Innovative: Journal Of Social Science Research*, 3(2), 622–631. <https://doi.org/https://doi.org/10.31004/innovative.v3i2.346>
- Ausat, A. M. A., Suherlan, S., & Azzaakiyyah, H. K. (2023). Is ChatGPT Dangerous for Lecturer Profession? An In-depth Analysis. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(2), 3226–3229. <http://journal.universitaspahlawan.ac.id/index.php/jpdk/article/view/13878>
- Azzaakiyyah, H. K., Wanof, M. I., Suherlan, S., & Fitri, W. S. (2023). Business Philosophy Education and Improving Critical Thinking Skills of Business Students. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 1–4. <https://doi.org/10.61100/adman.v1i1.1>

- Basir, A., Puspitasari, E. D., Aristarini, C. C., Sulastri, P. D., & Ausat, A. M. A. (2023). Ethical Use of ChatGPT in the Context of Leadership and Strategic Decisions. *Jurnal Minfo Polgan*, 12(1), 1239–1246. <https://doi.org/https://doi.org/10.33395/jmp.v12i1.12693>
- Bradshaw, C., Atkinson, S., & Doody, O. (2017). Employing a Qualitative Description Approach in Health Care Research. *Global Qualitative Nursing Research*, 4, 1–8. <https://doi.org/10.1177/2333393617742282>
- Briones, S. K. F., Dagamac, R. J. R., David, J. D., & Landerio, C. A. B. (2021). Factors Affecting the Students' Scholastic Performance: A Survey Study. *Indonesian Journal of Educational Research and Technology*, 2(1), 97–102.
- Day, C., Gu, Q., & Sammons, P. (2016). The Impact of Leadership on Student Outcomes. *Educational Administration Quarterly*, 52(2), 221–258. <https://doi.org/10.1177/0013161X15616863>
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis. *SAGE Open*, 4(1), 1–10. <https://doi.org/10.1177/2158244014522633>
- Essel, H. B., Vlachopoulos, D., Tachie-Menson, A., Johnson, E. E., & Baah, P. K. (2022). The impact of a virtual teaching assistant (chatbot) on students' learning in Ghanaian higher education. *International Journal of Educational Technology in Higher Education*, 19(1), 57. <https://doi.org/10.1186/s41239-022-00362-6>
- Fauzi, F., Tuhuteru, L., Sampe, F., Ausat, A. M. A., & Hatta, H. R. (2023). Analysing the Role of ChatGPT in Improving Student Productivity in Higher Education. *Journal on Education*, 5(4), 14886–14891. <https://doi.org/10.31004/joe.v5i4.2563>
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Harahap, M. A. K., Ausat, A. M. A., Sutrisno, S., Suherlan, S., & Azzaakiyyah, H. K. (2023). Analyse the Role of Family in Entrepreneurship Education: Effective Support and Assistance. *Journal on Education*, 5(4), 14563–14570. <https://doi.org/10.31004/joe.v5i4.2510>
- Harahap, M. A. K., Kraugusteeliana, K., Pramono, S. A., Jian, O. Z., & Ausat, A. M. A. (2023). The Role of Information Technology in Improving Urban Governance. *Jurnal Minfo Polgan*, 12(2), 371–379. <https://doi.org/10.33395/jmp.v12i2.12405>
- Harahap, M. A. K., Sutrisno, S., Fauzi, F., Jusman, I. A., & Ausat, A. M. A. (2023). The Impact of Digital Technology on Employee Job Stress: A Business Psychology Review. *Jurnal Pendidikan Tambusai*, 7(1), 3635–3638. <https://jptam.org/index.php/jptam/article/view/5775>
- Harahap, M. A. K., Sutrisno, S., Raharjo, I. B., Novianti, R., & Ausat, A. M. A. (2023). The Role of MSMEs in Improving the Economy in Ramadan. *Community Development Journal: Jurnal Pengabdian Masyarakat*, 4(2), 1907–1911. <https://doi.org/10.31004/cdj.v4i2.13794>
- Harini, H. (2018). Kepemimpinan dan Kepercayaan (Trust) Terhadap Komitmen Organisasi Pada Guru Bimbingan dan Konseling di SMP. *Indonesian Journal of Educational Counseling*, 2(2), 197–204. <https://doi.org/10.30653/001.201822.44>
- Harini, H., Wahyuningtyas, D. P., Sutrisno, S., Wanof, M. I., & Ausat, A. M. A. (2023). Marketing Strategy for Early Childhood Education (ECE) Schools in the Digital Age. *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini*, 7(3), 2742–2758. <https://doi.org/10.31004/obsesi.v7i3.4454>

- Hermansyah, A. M. S. (2023). The Effect of Dividend Policy on Corporate Financial Performance. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 5–8. <https://doi.org/10.61100/adman.v1i1.2>
- Ismaya, B., Sutrisno, S., Darmawan, D., Jahroni, J., & Kholis, N. (2023). Strategy for Leadership: How Principals of Successful Schools Improve Education Quality. *AL-TANZIM*, 7(1), 247–259.
- Kraugusteeliana, K., Indriana, I. H., Krisnanik, E., Muliawati, A., & Irmanda, H. N. (2023). Utilisation of ChatGPT's Artificial Intelligence in Improving the Quality and Productivity of Lecturers' Work. *Jurnal Pendidikan Dan Konseling (JPDK)*, 5(2), 3245–3249. <https://doi.org/10.31004/jpdk.v5i2.13650>
- Mahardhani, A. J. (2023). The Role of Public Policy in Fostering Technological Innovation and Sustainability. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 47–53. <https://doi.org/10.61100/adman.v1i2.22>
- Prastyaningtyas, E. W., Ausat, A. M. A., Muhamad, L. F., Wanof, M. I., & Suherlan, S. (2023). The Role of Information Technology in Improving Human Resources Career Development. *Jurnal Teknologi Dan Sistem Informasi Bisnis*, 5(3), 266–275. <https://doi.org/https://doi.org/10.47233/jteksis.v5i3.870>
- Prastyaningtyas, E. W., Sutrisno, S., Soeprajitno, E. D., Ausat, A. M. A., & Suherlan, S. (2023). Analysing the Role of Mentors in Entrepreneurship Education: Effective Support and Assistance. *Journal on Education*, 5(4), 14571–14577. <https://doi.org/10.31004/joe.v5i4.2511>
- Rahman, M. S. (2016). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language “Testing and Assessment” Research: A Literature Review. *Journal of Education and Learning*, 6(1), 102–112. <https://doi.org/10.5539/jel.v6n1p102>
- Rajapathirana, R. P. J., & Hui, Y. (2018). Relationship between innovation capability, innovation type, and firm performance. *Journal of Innovation & Knowledge*, 3(1), 44–55. <https://doi.org/10.1016/j.jik.2017.06.002>
- Rasul, T., R Nair, S., Kalendra, D., & Robin, M. (2023). The role of ChatGPT in higher education: Benefits, challenges, and future research directions. *Journal of Applied Learning & Teaching*, 6(1), 1–16. <https://doi.org/10.37074/jalt.2023.6.1.29>
- Rijal, S. (2023). The Importance of Community Involvement in Public Management Planning and Decision-Making Processes. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 84–92. <https://doi.org/10.61100/adman.v1i2.27>
- Rukman, W. Y., Urath, S., Harini, H., Ausat, A. M. A., & Suherlan, S. (2023). Philosophy Education as a Means of Developing Student Soft Skills. *Edumaspul: Jurnal Pendidikan*, 7(1), 281–286. <https://doi.org/https://doi.org/10.33487/edumaspul.v7i1.5458>
- Said Ahmad, Muh. I., Idrus, M. I., & Rijal, S. (2023). The Role of Education in Fostering Entrepreneurial Spirit in the Young Generation. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 93–100. <https://doi.org/10.61100/adman.v1i2.28>
- Salamah, S. N. (2023). Financial Management Strategies to Improve Business Performance. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 9–12. <https://doi.org/10.61100/adman.v1i1.3>
- Sari, A. R. (2023). The Impact of Good Governance on the Quality of Public Management Decision Making. *Journal of Contemporary Administration and Management (ADMAN)*, 1(2), 39–46. <https://doi.org/10.61100/adman.v1i2.21>
- Septianti, R., Wahab, A., Hastuti, R., Purnama, Y., & Ausat, A. M. A. (2023). Re-examining the Impact of Covid-19 on Education. *Jurnal Pendidikan Tambusai*, 7(1), 3934–3940. <https://jptam.org/index.php/jptam/article/view/5872>

- Sudirjo, F., Ausat, A. M. A., Rijal, S., Riady, Y., & Suherlan, S. (2023). ChatGPT: Improving Communication Efficiency and Business Management of MSMEs in the Digital Age. *Innovative: Journal Of Social Science Research*, 3(2), 643–652. <https://doi.org/https://doi.org/10.31004/innovative.v3i2.347>
- Sudirjo, F., Diawati, P., Riady, Y., Ausat, A. M. A., & Suherlan, S. (2023). The Role of ChatGPT in Enhancing the Information Search and Decision-Making Process of Travellers. *Jurnal Minfo Polgan*, 12(2), 500–507. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12443>
- Sukenti, S. (2023). Financial Management Concepts: A Review. *Journal of Contemporary Administration and Management (ADMAN)*, 1(1), 13–16. <https://doi.org/10.61100/adman.v1i1.4>
- Sutrisno, Ausat, A. M. A., Permana, B., & Harahap, M. A. K. (2023). Do Information Technology and Human Resources Create Business Performance: A Review. *International Journal of Professional Business Review*, 8(8), e02206. <https://doi.org/10.26668/businessreview/2023.v8i8.2206>
- Sutrisno, S., Hayati, H., Saputra, N., Arifin, S., & Kartiko, A. (2023). The Influence of The Head of Madrasah and Infrastructure Facilities on The Quality of Education Through Teacher Competence. *Tafkir: Interdisciplinary Journal of Islamic Education*, 4(2), 274–288. <https://doi.org/10.31538/tijie.v4i2.423>
- Sutrisno, S., Kuraesin, A. D., Siminto, S., Irawansyah, I., & Ausat, A. M. A. (2023). The Role of Information Technology in Driving Innovation and Entrepreneurial Business Growth. *Jurnal Minfo Polgan*, 12(2), 586–597. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12463>
- Sutrisno, Sitingjak, H., Diawati, P., Sitingjak, I. Y., & Ausat, A. M. A. (2023). Telaah Dampak Positif Gaya Kepemimpinan Transformasional bagi Peningkatan Produktivitas Individu dan Organisasi. *Community Development Journal : Jurnal Pengabdian Masyarakat*, 4(1), 726–731. <https://doi.org/10.31004/cdj.v4i1.12483>
- Touriano, D., Sutrisno, S., Kuraesin, A. D., Santosa, S., & Ausat, A. M. A. (2023). The Role of Information Technology in Improving the Efficiency and Effectiveness of Talent Management Processes. *Jurnal Minfo Polgan*, 12(2), 539–548. <https://doi.org/https://doi.org/10.33395/jmp.v12i2.12454>
- Tuhuteru, L., Ausat, A. M. A., Pratiwi, E. Y. R., & Suherlan, S. (2023). The Role of Civic Education in Promoting Diversity and Tolerance in Schools. *Edumaspul: Jurnal Pendidikan*, 17(1), 275–280. <https://doi.org/https://doi.org/10.33487/edumaspul.v7i1.5456>
- Wahyoedi, S., Suherlan, S., Rijal, S., Azzaakiyyah, H. K., & Ausat, A. M. A. (2023). Implementation of Information Technology in Human Resource Management. *Al-Buhuts*, 19(1), 300–318. <https://doi.org/https://doi.org/10.30603/ab.v19i1.3407>