

GSJ: Volume 13, Issue 5, May 2025, Online: ISSN 2320-9186 www.globalscientificjournal.com

THE USE OF ARTIFICIAL INTELLIGENCE CHATBOTS IN SCHOOL INQUIRY AND SUPPORT SYSTEMS

¹Eduard G. Belisano ²Josefina R. Sarmiento, PhD

Aemilianum College Inc.

Abstract

This study, titled The Use of Artificial Intelligence Chatbots in School Inquiry and Support Systems, explores the perceptions and experiences of users regarding the integration of AI chatbots in educational institutions. The research involved twelve participants in a Focus Group Discussion (FGD), composed of six

Based on the results of the study, several key findings were identified. First, students and staff generally perceive AI chatbots as effective tools for handling inquiries and support services, appreciating their quick response time and accessibility. However, concerns were noted regarding accuracy and information contextual Second. users reliability. reported challenges such as the inability of AI chatbots to understand complex or contextspecific queries, along with occasional

From these findings, several conclusions were drawn. Students and staff recognize the effectiveness of AI chatbots, especially for quick and accessible support. Nonetheless, the limitations in contextual understanding and reliability signal the need for technological enhancements. While AI chatbots substantially boost Piot, Sorsogon City, Sorsogon, Philippines

educators and six support service personnel from St. Louise de Marillac College of Sorsogon Inc. The goal was to examine how AI chatbots are utilized for managing school inquiries and delivering support services, and to identify areas for improvement to enhance their overall effectiveness and usability.

inaccuracies and technical issues. Third, the use of AI chatbots significantly improves the efficiency and accessibility of school inquiry systems by offering 24/7 access and retrieval. information fast Lastly. improvements were suggested, including refining contextual understanding, integrating with real-time school systems, enhancing language processing, and implementing regular fact-checking to ensure reliable and personalized responses.

efficiency in information services, challenges in accuracy and comprehension persist. Therefore, it is crucial to refine these systems by improving their contextual intelligence, expanding their integration with institutional databases, and increasing the frequency and quality of updates to their knowledge base. To optimize the effectiveness of AI chatbots in school inquiry and support systems, several recommendations are proposed. These include enhancing contextual understanding, maintaining a regularly updated knowledge base, and enabling the escalation of complex queries to human support staff. Additionally, refining the chatbot's language processing

Keywords: Aemlianum College Inc., Artificial Intelligence, Chatbots, Educational Technology, Inquiry

Introduction

The integration of artificial intelligence (AI) has revolutionized various sectors worldwide, including education. AI chatbots, in particular, have gained significant traction in enhancing school inquiry and support systems by providing real-time assistance and streamlining communication. According to Luckin et al. (2021), AI-driven technologies have the potential to personalize learning experiences, optimize administrative tasks, and improve accessibility to educational resources. The

AI-powered chatbots are beginning to reshape the educational landscape by addressing common inquiries from students and improving administrative efficiency in the country. The Department of Education (DepEd) and the Commission on Higher Education (CHED) have recognized the potential of AI in streamlining information dissemination and enhancing student engagement (Villanueva, 2023). Philippine universities and colleges have started

Here in the province of Sorsogon, schools and higher education institutions are gradually incorporating AI-driven tools to improve their inquiry and support systems. Institutions such as Sorsogon State capabilities and technical reliability will address user concerns. Integration with realtime school systems and advanced algorithms can ensure more accurate and relevant responses. Finally, strengthening user feedback mechanisms and support pathways will improve satisfaction and foster greater trust in AI-driven support tools within educational settings.

> Systems, School Support, Services, User Engagement, Virtual Assistance

release of OpenAI's ChatGPT in November 2022 marked a pivotal moment in AI development, with its rapid adoption demonstrating the growing reliance on AI for information retrieval and automated communication (Janson, 2023). The subsequent launch of ChatGPT-4 in May 2023 further expanded AI's capabilities by processing both text and images, positioning chatbots as essential tools for educational institutions worldwide (OpenAI, 2023).

integrating AI chatbots into their platforms to assist with admissions, course inquiries, and academic support, demonstrating the increasing adoption of AI in education (Cruz & Santos, 2023). However, challenges such as digital literacy, infrastructure limitations, data privacy concerns and persist. necessitating further exploration of AI chatbot implementation in the country's educational institutions.

University and other local colleges have begun exploring AI chatbot applications to enhance student support services, particularly in providing timely responses to frequently asked questions regarding enrollment, tuition fees, and academic policies (Del Rosario, 2023). However, the extent of AI chatbot utilization in Sorsogon remains limited, with most institutions still relying on traditional means of communication such as face-to-face consultations and manual email responses.

This study aims to examine the role of AI chatbots in school inquiry and support systems, focusing on their impact on accessibility, efficiency, and user experience. By investigating the perceptions of students, teachers, and administrators, this research seeks to identify the benefits and challenges of AI chatbot adoption in educational settings. The findings will provide valuable insights into the practical applications of AI

Statement of the Problem

Specifically, this study sought to answer the following questions:

- 1. How do student and staff perceive the effectiveness of artificial intelligence chatbot in handling school inquiries and support services.
- 2. What challenges do student and staff encounter when interacting with

Scope and Delimitations

This qualitative research investigated the perceptions of students and staff regarding the effectiveness of artificial intelligence (AI) chatbots in managing school inquiries and support services. The study aimed to explore how these individuals perceived the effectiveness of AI chatbots in handling school-related inquiries and support services, identified the challenges they encountered during interactions with these chatbots, assessed the impact of AI chatbots on the efficiency and accessibility of school This situation underscores the need for localized studies that evaluate the effectiveness and feasibility of AI chatbots in addressing the specific needs of schools in Sorsogon.

in local schools, informing policies and strategies for the effective implementation of AI-powered support systems. Ultimately, this study contributes to the broader discourse on AI in education, offering a nuanced perspective on how AI chatbots can enhance communication and service delivery within the unique context of Philippine schools, particularly in Sorsogon.

Artificial Intelligence chatbots for school-related support?

- 3. What impact do AI chatbots have on the efficiency and accessibility of school inquiry systems?
- 4. What improvements can be made to enhance the usability and accuracy if AI chatbots in providing school support and information?

inquiry systems, and gathered suggestions for improvements to enhance the usability and accuracy of AI chatbots in providing school support and information. gather То comprehensive insights, focus group discussions were conducted with 12 participants - six educators and six support service personnel of St. Louise de Marillac College of Sorsogon (SLMCS) - providing diverse perspectives within this educational context.

This study was confined to the experiences and perceptions of college students and staff at SLMCS, which may not have been representative of other educational institutions or student populations. The focus was solely on AI chatbots used for school inquiries and support services, excluding other AI applications in education such as

Gap Bridged by the Study

Previous studies explored AI in education but focused on different areas. Chiu et al. examined how AI tools affected student motivation with teacher support. Akpan et al. analyzed the rise of AI chatbots, discussing their benefits and challenges like plagiarism and misinformation. Musundire investigated chatbots in Australian schools for decision-making but noted issues with

Unlike these studies, the present study focused specifically on the use of artificial intelligence chatbots in school inquiry and support systems. While past research explored AI's role in education, policy, and industry, none directly examined AI chatbots as a tool for handling school inquiries and student support. This study

Research Focus

This study investigated the role of AI Chatbots in transforming school inquiry and by examining their support systems ethical implications, effectiveness, and impact on educational practices. Through a mixed-methods approach, the research provided valuable insights into the integration of AI Chatbots in educational

To address these concerns and achieve the research objectives, a mixedmethods design combining quantitative surveys and qualitative focus group discussions was employed. The research personalized learning tools or administrative automation. Additionally, the study did not assess the technical performance of AI chatbots or compare different chatbot platforms. The findings were intended to provide insights specific to the SLMCS context and may not have been generalizable to other settings.

user acceptance and security. Quimba studied AI adoption in Philippine industries, finding low awareness and poor infrastructure. Villarino focused on AI use in rural colleges, highlighting ethical concerns and the lack of policies. Ocampo and Gozum discussed AI in Catholic education, examining ethical and institutional perspectives.

aimed to bridge that gap by developing an AI chatbot designed to assist students, teachers, and school staff in accessing information efficiently. It addressed key challenges such as chatbot integration, user acceptance, and data security, ensuring an AI-driven system that improved communication and support services within educational institutions.

settings and developed guidelines for responsible implementation. By exploring the perspectives of educators and support personnel, the study contributed to the ongoing discourse on the use of AI technology in education and informed best practices for the ethical integration of AI Chatbots in schools.

involved participant recruitment from diverse educational settings, data collection through surveys and focus groups, and thorough data analysis procedures to derive meaningful insights into the role of AI Chatbots in school inquiry and support systems. Ethical confidentiality, dat considerations were paramount throughout adherence to ethical the research process to ensure participant involving human subj **Insights on Perceptions and Recommendations for Improvement**

Understanding the perceptions of students and staff regarding artificial intelligence (AI) chatbots in academic environments is essential for evaluating their effectiveness as tools for school inquiries and support services. As educational institutions increasingly adopt AI-driven technologies, it becomes crucial to assess not only their technical performance but also how users

Rationale

As schools increasingly integrate Artificial Intelligence (AI) chatbots into their inquiry and support systems, it becomes crucial to understand how these tools are perceived by their primary users - students and staff. While AI chatbots promise greater efficiency, accessibility, and immediate assistance, user experiences reveal both strengths and limitations in their usability, accuracy, and

Objectives

- 1. To assess how students and staff perceive the effectiveness of AI chatbots in handling school-related inquiries.
- 2. To identify the specific challenges encountered by users when interacting with AI chatbots for support services.

Goals

1. To optimize AI chatbot design based on user feedback for greater reliability and contextual accuracy. confidentiality, data protection, and adherence to ethical guidelines for research involving human subjects.

experience and respond to these systems. This section presents key insights gathered from users' experiences, highlighting both strengths and areas needing improvement. Based on these findings, practical recommendations are proposed to enhance the usability, accuracy, and overall effectiveness of AI chatbots in meeting the dynamic needs of school communities.

contextual relevance. Gathering insights into these perceptions allows institutions to enhance chatbot performance, align them better with educational needs, and ensure that technological innovations support rather than hinder academic communication. This output seeks to translate empirical observations into meaningful improvements for educational practice.

- 3. To evaluate the impact of AI chatbots on the efficiency and accessibility of school inquiry systems.
- 4. To recommend actionable improvements to enhance chatbot usability, accuracy, and user satisfaction.

2. To increase accessibility and inclusiveness of AI chatbot services for all types of users.

Strategies

- Conduct User Feedback Assessments Regularly collect and analyze feedback from students and staff to continuously refine chatbot features and response quality.
- 2. Enhance Natural Language Processing (NLP) Capabilities Upgrade chatbot technology to better understand nuanced questions and provide contextually accurate responses.
- Integrate AI with School Information Systems Ensure seamless access to realtime data such as grades,

Outcomes

- 1. Refined User Experience Improved accuracy and relevance of chatbot responses leading to higher satisfaction and trust among students and staff.
- 2. Enhanced Inquiry Efficiency Faster resolution of routine inquiries, freeing up staff time and ensuring smoother communication within the institution.

- 3. To foster a user-centered approach to AI chatbot implementation in school settings.
- 4. To guide institutional development of AI tools that are aligned with educational values and support needs.

enrolment, deadlines, and school events by linking AI chatbots to internal databases.

- Offer Multilingual and Offline Support Options Improve accessibility by enabling AI chatbots to respond in the local language and function with limited or no internet connectivity.
- Implement Training for Users and Administrators
 Educate users on effectively utilizing AI chatbots and train school staff on monitoring and updating chatbot content.
- Increased Accessibility and Availability
 24/7 access to information empowers users to obtain support outside traditional office hours and from remote locations.
- 4. Informed Institutional Decisions Data-driven recommendations support evidence-based policymaking and technological investment in AI tools tailored for education.

Findings

Based on the results of the study, the following key findings were identified and formulated:

- 1. Students and staff perceive AI chatbots as generally effective in handling school inquiries and support services, noting their quick responses and accessibility, though concerns remain regarding contextual accuracy and reliability.
- 2. Students and staff encounter challenges such as the AI chatbots' inability to fully understand complex or contextspecific queries, occasional inaccuracies in responses, and technical issues that hinder their overall effectiveness in providing school-related support.

Conclusions

Based on the findings of this study the following conclusions were formulated:

1. Students and staff acknowledge the effectiveness of AI chatbots in handling school inquiries and support services, particularly appreciating their quick responses accessibility. and concerns regarding the contextual accuracy and reliability of the information provided highlight the need for further improvements to ensure their full potential is realized in educational settings

- 3. AI chatbots significantly enhance the efficiency and accessibility of school inquiry systems by providing quick, 24/7 responses, improving information retrieval times, and offering easy access to common queries, although some limitations in accuracy and context understanding remain.
- 4. Improvements that can enhance the usability and accuracy of AI chatbots in providing school support and information include refining contextual understanding, integrating with other school systems for real-time updates, enhancing language processing capabilities, and incorporating regular updates and fact-checking mechanisms to ensure more accurate and personalized responses.
- 2. Despite the usefulness of AI chatbots in providing schoolrelated support, students and staff face challenges related to the limited chatbots' ability to understand complex or contextspecific queries. occasional inaccuracies, and technical issues. all of which hinder the overall effectiveness of the system and suggest a need for refinement in the technology.

3. AI chatbots greatly improve the efficiency and accessibility of school inquiry systems by offering quick, round-the-clock responses and facilitating faster information retrieval, but challenges in accuracy and context understanding still exist, indicating the need for further enhancements to optimize their performance in educational settings.

Recommendations

Based on the conclusions drawn from this study, the following recommendations were formulated:

- 1. To improve the effectiveness of AI chatbots in handling school inquiries, it is recommended to enhance the chatbots' contextual understanding, update the knowledge base regularly, and implement a system for escalating complex queries to human support.
- 2. Refine the technology of AI chatbots by improving their ability to understand complex or context-specific queries, addressing inaccuracies, and resolving technical issues to enhance their overall effectiveness in providing school-related support.
- 3. Enhance the AI chatbots' accuracy and contextual understanding by

4. It is essential to refine their contextual understanding, integrate them with other school systems for real-time updates, enhance their language processing capabilities, and incorporate regular updates and fact-checking mechanisms, which will ensure more accurate, relevant, and personalized responses for users.

implementing advanced algorithms and regular updates, ensuring they provide more precise and reliable information for optimal performance in school inquiry systems.

- 4. Refine AI chatbots' contextual understanding, integrate them with school systems for real-time updates, enhance language and processing capabilities, incorporate regular updates and fact-checking mechanisms to provide users with more accurate, relevant, personalized and responses.
- 5. Improve user interaction feedback systems, and ensure seamless escalation to human support for complex queries, thereby enhancing accuracy and user satisfaction.

References

 Adams, J. S. (1963). *Toward an understanding of inequity*. Journal of Abnormal and Social Psychology, 67(5), 422–436.

- Akpan, I. J., Kobara, Y. M., Owolabi, J., Akpan, A. A., & Offodile, O. F. (2025). Conversational and generative artificial intelligence and human-chatbot interaction in education and research. International Transactions in Operational Research, 32(3), 1251–1281.
- 3) Almusaed, A., Almssad, A., & Albaj, A. K. (2024). Ethical and Pedagogical Challenges in the Integration of Artificial Intelligence into Lifelong Learning. *The proceedings is licensed under a Creative Commons Attribution-Non Commercial Share Alike 4.0 International License, permitting all non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.*, 16-33.
- Asio, J. M. R., & Soriano, I. D. (2025). The State of Artificial Intelligence (AI) Use in Higher Education Institutions (HEIs) in the Philippines. In *Impacts of AI on Students and Educators in Education 5.0* (pp. 523-552). IGI Global Scientific Publishing.
- Bell, L. A. (2007). Theoretical foundations for social justice education. In M. Adams et al. (Eds.), Teaching for Diversity and Social Justice (2nd ed.). Routledge.
- Bhattacherjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 25(3), 351-370.
- 7) Bruner, J. S. (1966). Toward a theory of instruction. Harvard University Press.
- Cavoukian, A. (2011). Privacy by design: The 7 foundational principles. Information and Privacy Commissioner of Ontario. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. Nature Machine Intelligence, 1(9), 389-399. https://doi.org/10.1038/s42256-019-0088-2
- 9) Cavoukian, A. (2011). Privacy by design: The 7 foundational principles. Information and Privacy Commissioner of Ontario. Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. Nature Machine Intelligence, 1(9), 389-399. https://doi.org/10.1038/s42256-019-0088-2
- Chiu, T. K., Moorhouse, B. L., Chai, C. S., & Ismailov, M. (2024). Teacher support and student motivation to learn with Artificial Intelligence (AI) based chatbot. Interactive Learning Environments, 32(7), 3240– 3256.
- 11) Cruz, M., & Santos, R. (2023). Artificial Intelligence in Education: A High-Level Academic and Policy Overview. Springer.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness and structural design. *Management Science*, 32(5), 554-571.
- Dastin, J., Sriram, M., & Singh, S. (2021). Responsible AI and the impact of ethical guidelines in education. Journal of AI and Education Ethics, 12(4), 98-112.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. https://doi.org/10.2307/249008
- Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

- Del Rosario, A. (2023). Artificial Intelligence in Studies Use of ChatGPT and AI-Based Tools Among Students in Germany. Springer.
- DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. Information Systems Research, 3(1), 60–95. https://doi.org/10.1287/isre.3.1.60
- 18) DepEd (2024). DepEd launches AI center for education. https://www.deped.gov.ph/2025/02/20/deped-launches-ai-center-for-education
- Esguerra, S. D. A., Libiran, L. G. A., Quiambao, A. C., & Gabriel, B. D. Artificial Intelligence Usage and Perceived Critical Thinking Skills of Psychology Students at National University–Baliwag.
- 20) European Union. (2016). General Data Protection Regulation (GDPR). https://gdpr.eu/ Solove, D. J., & Schwartz, P. M. (2021). Privacy Law Fundamentals (3rd ed.). IAPP.
- 21) Ferrari, A. (2013). Digital Competence in Education: A European Framework. Publications Office of the European Union.
 Rest, J. R. (1986). Moral development: Advances in research and theory. Praeger Publishers.
- 22) Ferrari, A. (2013). Digital Competence in Education: A European Framework. Publications Office of the European Union.
- Floridi, L., & Cowls, J. (2019). A unified framework of five principles for AI in society. *Harvard Data Science Review*, 1(1). https://doi.org/10.1162/99608f92.8cd550d1
- 24) Fodor, J. A. (1975). The language of thought. Harvard University Press.
- 25) Freire, P. (1970). Pedagogy of the Oppressed. Herder and Herder.
- 26) Janson, N. (2023). Generative AI in Higher Education: Fall 2023 Update of Time for Class Study. Tyton Partners.
- Joglekar, P. (2015). Continuous improvement and technology adoption: A study on AI systems in education. International Journal of Technology and Education, 28(4), 567-578.
- 28) Jurafsky, D., & Martin, J. H. (2020). Speech and language processing: An introduction to natural language processing, computational linguistics, and speech recognition.
- Kant, I. (1996). *The Metaphysics of Morals* (M. Gregor, Trans.). Cambridge University Press. (Original work published 1797)
- 30) Kazi, S. (2023) Education and Instruction; https://ceinternational1892.org/article/how-ai-powered-learninganalytics-are-shaping-early-childhood-education-and-instruction/?gad_source=1&gclid=CjwKCAiAt4C-BhBcEiwA8Kp0CYkqKX54mBTnYA8QkHgyWplcQnOvQsmXPD44d4M6HECF2UyaDwyU8BoCB5Q QAvD_BwE
- Labadze, L., Grigolia, M., & Machaidze, L. (2023). Role of AI chatbots in education: Systematic literature review. International Journal of Educational Technology in Higher Education, 20(1), 56.
- Lee, J. D. (2004). Human–computer interaction and safety. In *Handbook of human factors and ergonomics* (pp. 121-133). Wiley
- Luckin, R. (2023). Ethical considerations for artificial intelligence in educational assessments. Journal of Educational Technology & Society, 26(3), 12-28.

- 34) Maslow, A. H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.
- 35) Musundire, A. (2025). Chatbots as Virtual Leaders: Supporting Decision-Making and Strategic Planning in Australian Secondary Schools. In Chatbots in Educational Leadership and Management (pp. 1–28). IGI Global Scientific Publishing.
- 36) Noble, S. U. (2018). Algorithms of Oppression: How Search Engines Reinforce Racism. NYU Press.
- 37) Norman, D. A. (2013). The design of everyday things: Revised and expanded edition. Basic Books.
- 38) NormativeEthicalTheory:Ross, W. D. (1930). The right and the good. Oxford University Press.Theory:
- Ocampo, L. M. A. R., & Gozum, I. E. A. (2025). Catholic higher education interface with AI: Diversions and intersections. International Studies in Catholic Education, 1–15.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460-469.
- 41) Organisation for Economic Co-operation and Development (OECD). (2013). *The OECD Privacy Framework*. OECD Publishing. https://www.oecd.org/sti/ieconomy/oecd privacy framework.pdf
- 42) Paas, F., Tuovinen, J. E., Tabbers, H., & Van Gerven, P. W. (2003). Cognitive load measurement as a means to advance cognitive load theory. *Educational Psychologist*, 38(1), 63-71.
- 43) Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: models, dimensions, measures, and interrelationships. *European Journal of Information Systems*, 17(3), 236–263.
- 44) Phil Star (2024). DepEd studying policy on use of AI in schools. https://www.philstar.com/headlines/2024/10/26/2395424/deped-studying-policy-use-ai-schools
- 45) PIDS (2021). Philippine research think tank Philippine Institute for Development Studies (PIDS) would rather keep in check the rising optimism toward AI integration in domestic businesses. In a recent study, PIDS found that despite a national push for artificial intelligence (AI) integration, local businesses, especially micro, small and medium enterprises (MSMEs), struggle to adopt AI technologies due to infrastructure, awareness and funding barriers
- 46) Postman, N. (1993). Technopoly: The surrender of culture to technology. Vintage Books. Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.
- 47) Principles of Ethical AI: Jobin, A., Ienca, M., & Vayena, E. (2019). The global landscape of AI ethics guidelines. Nature Machine Intelligence, 1(9), 389-399. https://doi.org/10.1038/s42256-019-0088-2
- 48) Putnam, H. (1961). Brains and behavior. In R. J. Butler (Ed.), Analytical Philosophy (pp. 37-45). Blackwell.
- 49) Quimba, F. M. A., Moreno, N. I. S., & Salazar, A. M. C. (2024). Readiness for AI adoption of Philippine business and industry: The government's role in fostering innovation-and AI-driven industrial development. PIDS Discussion Paper Series, (No. 2024-35).

- 50) Ranjan, R., Vishwakarma, A. K., Dhengre, N., Motdhare, S., & Rao, A. P. (2024, June). The Transformative Impacts of Artificial Intelligence on Education through Ethical Perspectives. In 2024 15th International Conference on Computing Communication and Networking Technologies (ICCCNT) (pp. 1-6). IEEE.
- 51) Rest, J. R. (1986). Moral development: Advances in research and theory. Praeger Publishers.
- 52) Ribble, M. (2011). Digital citizenship in schools: Nine elements all students should know (2nd ed.). ISTE.
- 53) Santos, J., & Rivera, M. (2023). Ethical considerations and future prospects of AI integration in education: Insights from the Philippines. Journal of Philippine Education and Technology, 45(2), 98-115.
- 54) Saville, S. K., & Jones, M. A. (2020). Chatbots in education: An exploration of conversational agents. *Journal of Educational Technology Development and Exchange*, 13(2), 1-16.
- 55) Short, J., Williams, E., & Christie, B. (1976). The social psychology of telecommunications. John Wiley & Sons.
- Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. *Cognitive Science*, 12(2), 257-285.
- 57) Technology Acceptance Model (TAM): Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319-340. https://doi.org/10.2307/249008
- 58) The University of Iowa (2024); The role of AI in modern education; https://onlineprograms.education.uiowa.edu/blog/role-of-ai-in-modern-education
- 59) Turing, A. M. (1950). Computing machinery and intelligence. Mind, 59(236), 433-460.
- 60) U.S. Department of Health, Education, and Welfare. (1973). Records, Computers and the Rights of Citizens: Report of the Secretary's Advisory Committee on Automated Personal Data Systems. Washington, DC: U.S. Government Printing Office.
- Unesco (2024). Ethics of Artificial Intelligencehttps://www.unesco.org/en/artificialintelligence/recommendation-ethics
- 62) uropean Commission. (2018). General Data Protection Regulation (GDPR). https://gdpr.eu/ Freeman, R. E. (1984). Strategic Management: A Stakeholder Approach. Pitman. OECD. (2019). OECD Principles on Artificial Intelligence. https://www.oecd.org/going-digital/ai/
- 63) Venkatesh, V., & Bala, H. (2008). Technology Acceptance Model 3 and a Research Agenda on Interventions. *Decision Sciences*, 39(2), 273-315. https://doi.org/10.1111/j.1540-5915.2008.00192.x
- 64) Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. MIS Quarterly, 27(3), 425–478. https://doi.org/10.2307/30036540
- 65) Villanueva, J. (2023). AI-Powered Educational Technologies: Impacts on Curriculum and Pedagogy. South East European Journal of Public Health.
- 66) Villarino, R. T. (2025). Artificial Intelligence (AI) integration in Rural Philippine Higher Education: Perspectives, challenges, and ethical considerations. IJERI: International Journal of Educational Research and Innovation, (23).

- 67) Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- 68) Warschauer, M. (2004). Technology and Social Inclusion: Rethinking the Digital Divide. MIT Press.
- 69) Yambal, S., & Waykar, Y. A. (2025). Future of Education Using Adaptive AI, Intelligent Systems, and Ethical Challenges. In *Effective Instructional Design Informed by AI* (pp. 171-202). IGI Global Scientific Publishing.
- 70) Zhang, P., & Adipat, B. (2005). Challenges, methodologies, and issues in the usability testing of mobile applications. *International Journal of Human-Computer Interaction*, 18(3), 293-308.
- 71) Zuboff, S. (2019). The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power. PublicAffairs.

Acknowledgement

The successful completion of this research study represents a significant milestone in the researcher's academic journey. It is the result of months of diligent effort, thoughtful reflection, and steadfast perseverance. More importantly, it stands as a collective achievement – one made possible through the unwavering support, guidance, and encouragement of numerous individuals and institutions. With deep appreciation, the researcher extends sincere gratitude to all those who have meaningfully contributed to the realization of this project;

First and foremost, the researcher offers deepest gratitude to **Rev. Fr. Rey Genaro M. Malabanan**, **CRS**, Director of **Aemilianum College Inc**., for his steadfast support and encouragement. His exemplary leadership and unwavering commitment to academic excellence have served as both an inspiration and a strong institutional foundation for this study. His visionary guidance and dedication to fostering a research-driven academic environment have been instrumental in bringing this work to fruition;

The researcher extends sincere gratitude to the esteemed adviser and Dean, **Dr. Josefina R. Sarmiento**, whose mentorship has been truly transformational. Her intellectual rigor, patient guidance, and generous sharing of expertise have served as pillars of strength throughout the course of this research. Her critical insights, encouragement during moments of uncertainty, and unwavering belief in the researcher's potential have left a lasting impact on the development and completion of this work. It has been a privilege to benefit from her mentorship;

The researcher also acknowledges the invaluable support of **Dr. Belen L. Dominguino**, Vice President for Academic Research and CVF of SLMCS, whose leadership and encouragement have played a significant role in the realization of this research. Her dedication to academic advancement and institutional development is deeply appreciated and has contributed meaningfully to the success of this study;

The researcher extends heartfelt thanks to **Sr. Maria Felipa Fe C. Javen, D.C**., President of the school, for her invaluable administrative support and for fostering a culture that upholds education, innovation, and research. Her quiet strength and unwavering support behind the scenes have significantly contributed to the progress and success of this study;

The researcher expresses deep gratitude to the **Management Information Systems (MIS) Team**, whose technical assistance and collaborative spirit made it possible to integrate digital tools and gather reliable data essential to this study. Their expertise was invaluable in ensuring the smooth implementation of the technological components throughout the research process;

A special mention is extended to the MIT II Batch 2025, a group of resilient and passionate individuals who have shared in this academic journey. Their camaraderie, encouragement, and unwavering willingness to support one another embody the essence of a true scholarly community. The shared sleepless nights,

engaging discussions, and collective perseverance have left lasting memories that the researcher will always cherish and remember with pride;

No acknowledgment would be complete without honoring the researcher's greatest source of strength and inspiration – his family. Deepest gratitude is extended to his beloved wife, **Mrs. Catherine D. Belisano**, whose unwavering support, love, and patience served as a steady anchor throughout this academic journey. Her understanding during long hours, missed family moments, and the pressures of research has been a gift beyond measure. She stood by the researcher in moments of difficulty, offering strength and belief that never wavered;

To his children – **Cathleen Nicole D. Belisano**, **James Eidrine D. Belisano**, and **Cedrik D. Belisano** – heartfelt thanks are offered for being a constant source of joy and motivation. Every page of this research carries their presence. Their smiles, hugs, and words of encouragement served as powerful reminders of the purpose and value of this endeavor;

The researcher is sincerely grateful to peers and **Support Service Personnel members** who generously contributed their time and perspectives. Their valuable feedback and critical engagement helped refine the researcher's understanding and expand the perspective on the role of AI chatbots in educational settings. The collaborative spirit within the academic environment has been an invaluable asset to the success of this study;

The researcher also extends sincere thanks to the librarians and administrative staff of **Aemilianum College Inc.** and **St. Louise de Marillac College of Sorsogon Inc.**, whose professionalism and dedication ensured access to essential academic resources. Their assistance greatly facilitated the research process and made the navigation of scholarly materials significantly more efficient;

The researcher is deeply grateful to the educators, staff, and **Support Service Personnel** who participated in this study. Their openness, willingness to share their experiences, and trust made this research possible. They provided the real-world context that allowed the application of theoretical frameworks, such as the Diffusion of Innovations Theory, the Technology Acceptance Model, and Social Cognitive Theory, to be realized in meaningful and practical ways. Their insights are truly the heart of this study;

The researcher is also thankful to the various software developers and online platforms whose tools facilitated the data collection and analysis process. The integration of AI-driven interfaces in educational research could not have been successfully evaluated without the use of these innovative, cutting-edge technologies. Their contributions to advancing digital tools are deeply appreciated;

The researcher extends heartfelt thanks to those who provided emotional support throughout this journey - **friends, colleagues, and well-wishers**. Their words of encouragement, thoughtful check-ins, and moral support often arrived at just the right moments, offering strength during challenging times;

Above all, the researcher offers deepest and most profound thanks to Almighty God. It is through His divine providence that the researcher was able to navigate this journey with faith, courage, and clarity. His grace sustained the researcher during moments of doubt and fatigue, opening doors, providing strength, and granting wisdom when it was needed most. This work stands as a testament to His faithfulness and guidance;

From the bottom of the Researcher's heart, "Thank you!"

E. G. B.

+++