Awareness and Usage of Artificial Intelligence Among Faculty Members at Core Gateway College, Inc.

Marvin J. Agustin[1], Lian Jayne P. Bucago[2], Howell E. Claro[3], Khris Ednard G. Flores[4], Jareb Ralph V. Salameda[5], Almira J. Cabrillas[6], Marjorie S. Velasco[7]

Core Gateway College, Inc., San Jose City, Nueva Ecija, Philippines

Corresponding authors' email: vinaagustin2715@gmail.com[1], lianbucago@gmail.com[2], howellclaro97@gmail.com[3] , floreskhrisednard@gmail.com[4], salameda101998@gmail.com[5] , almiravcabrillas@gmail.com [6], and msvelasco@cgci.edu.ph[7]

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ABSTRACT

This study investigated the level of awareness and adoption of Artificial Intelligence (AI) among faculty members in higher education. Specifically, it explored the use of AI tools in teaching and administrative tasks, as well as identifying barriers hindering AI adoption. The study was conducted during the first semester of the 2024-2025 academic year at Core Gateway College Inc. in San Jose City, Nueva Ecija. The research examined faculty socio-demographic characteristics (age, sex, specialization, marital status, teaching experience, and educational attainment) and their awareness, usage, and perceptions of barriers to AI technology. A descriptive research design was employed, utilizing frequency distributions, standard deviations, and percentages to analyze the data. Results revealed that respondents agreed they are aware of AI, though their understanding of AI technology was lower. Faculty also agreed that they are using AI tools in their professional work. An apparent lack of training opportunities was the major challenges to AI adoption of the respondents. The study emphasized the necessity of increasing AI literacy in academic environments and supporting adoption. The

development of an AI literacy program, increased research in educational AI tools, and the adoption of an AI usage policy was recommended to improve faculty competence with AI, enhance teaching quality, and prepare students for a more AI-driven future.

Keywords. *Artificial Intelligence, Faculty Awareness, AI Adoption, Barriers to AI, Higher Education, Usage of AI*

INTRODUCTION

The increasing integration of Artificial Intelligence (AI) in higher education is an interest that has gained momentum in terms of awareness and adoption among faculty. Improved teaching methods, administrative efficiency, and personalized student experiences are some of the factors driving the integration of AI into higher education. The faculty members are ready to integrate AI tools due to their perceptions of these technologies, the institutional support they receive, and the challenges they face with new pedagogical frameworks. Modern technology has influenced every element of human life, including education. The world has now progressed toward utilizing the fifth generation of the Internet, known as the Internet of Things, in education, and there has been a growing interest in incorporating artificial intelligence (AI) applications into the teaching and learning process (Al-Darayseh, 2023).

According to Mondal et al. (2023), artificial intelligence can be an effective tool for assisting faculty members in overcoming the obstacles they encounter in educational institutions. AI can help by creating content for teachers. For instance, it can be used to develop questions and answers, quizzes, and assignments, among other things. This saves faculty time and effort, allowing them to focus on other vital areas of teaching in higher education institutions (Giray et al., 2024). Teachers' awareness of AI is essential to ensure the practical application of AI technologies in education.

On the other hand, Ng et al. (2023) highlight the need for more thorough research on AI literacy in the context of teacher education. Although artificial intelligence is a hot topic, there is limited published information on its application in Philippine higher education. As shown in Estrellado and Miranda's (2023) study on AI in the Philippine educational system, many teachers may not be entirely prepared to incorporate AI into their teaching due to a lack of in-depth discussion.

According to Villarino (2022), only 17.29% of respondents were aware of any norms or guidelines about the usage of AI, which was a significant finding. High usage rates and this lack of knowledge point to an essential gap in policy communication and implementation in higher education institutions in rural Philippines.

The Commission on Higher Education (CHED) has appreciated the role AI plays in the education sector. In its 2019 roadmap, CHED supported the application of AI in developing curricula as well as training individuals who will become teachers. Nonetheless, despite some commendable activities, such as pilot AI implementations at certain universities, the full integration of AI into faculty members' roles is still a work in progress (CHED, 2019).

The comprehension and implementation of AI technologies by faculty members within the higher education context are essential for the optimal use of these technologies in students' lessons, learning processes, performance evaluation, and administration. Knowing the levels of faculty awareness will facilitate the design of practical training and integration policies. It also ensures that the faculty can spearhead the digital transformation of education, leading to better teaching and learning outcomes, as well as equipping students for a world where technology is the norm.

In our capacity as researchers, we have observed that certain instructors at Core Gateway College Inc. have begun incorporating AI as a source in the lessons they teach to students. Similarly, some aspiring teachers have also begun incorporating AI into their academic coursework. This suggests that the trend of using AI tools for curriculum based activities is increasing among current and prospective teachers.

Artificial intelligence in higher educational institutions helps teaching personnel personalize the learning experience, automate routine tasks, and allocate more time for teaching and research. It helps the teaching staff evaluate students, refine the course content, and forecast their achievements. With the application of AI, these leaders can assertively guide their departments in using technology for more effective learning and improved output. The reasons for conducting this study are the limited research available in this field.

METHODS

The researchers employed a descriptive study design, utilizing quantitative methods. All 64 faculty members of Core Gateway College, Inc. in San Jose City, Nueva Ecija, participated in the study. The research focuses on the Level of Awareness of respondents regarding AI, the usage of AI tools in teaching, and the usage of AI tools in teaching from the academic year 2024–2025. The research questionnaire was pre-tested among 20 faculty members who were not included in the study. Reliability was demonstrated with a Cronbach Alpha value of 0.76. Before disseminating the questionnaire, the researchers obtained the necessary permissions and consents from the relevant authorities. Once approval was sought, the researchers personally administered the questionnaire to the respondents.

Data collected were tabulated and analyzed using statistical tools such as frequency count, percentage, mean, and standard deviation. A 4-point Likert Scale was used such as: 4 – Strongly Agree, 3 – Agree, 2 – Disagree, 1 – Strongly Disagree

RESULTS AND DISCUSSION

Profile of the Respondents

Majority of the respondents' age ranged from 23-30 years old, single, bachelor's degree, and had 1-3 years' experience in teaching.

Level of Awareness of the Respondents on AI

The respondents' level of awareness has a pooled score of 3.17 and a standard deviation (SD) of 0.49, which was described as "agree," implying that most respondents are familiar with artificial intelligence. The statement "I have a working knowledge of the fundamental elements of Artificial Intelligence (AI)." "I am very familiar with Artificial Intelligence." Moreover, "I know the potential uses of AI in various sectors such as health, financial, and educational services" got the highest mean of 3.30. The standard deviations of the three statements are 0.58, 0.63, and 0.66, described as "strongly agree". Meanwhile, the statement "I understand the workings behind the AI systems" has the lowest mean of 2.93 with SD of 0.80, described as agree. It implies that the respondents understand the concept of AI, however not all notion of AI were known. These results are similar from the researcher

conducted by Al-Darayseh (2023), which found that the participants in the study had high acceptance of AI and knew a lot about how to utilize AI in the classroom. Saleh et al. (2025) state that frequent AI users were far more aware of AI's pros and cons than infrequent users.

Table 1. Level of Awareness of the Respondents on AI

STATEMENTS	MEAN	SD	DESCRIPTION
I have a working knowledge of the fundamental elements of Artificial Intelligence (AI).	3.30	0.58	Strongly Agree
I am capable of distinguishing AI tools from their ordinary configuration.	3.22	0.58	Agree
I know the potential uses of AI in various sectors, such as health, finance, and educational services.	3.30	0.63	Strongly Agree
I assert that the use of AI can enhance productivity and quality of the decision-making process.	3.07	0.72	Agree
I am aware of the moral issues associated with the application of AI, including privacy concerns and potential discrimination.	3.04	0.85	Agree
AI will shortly be a significant factor in determining the way People work.	3.14	0.78	Agree
I understand the workings behind the AI systems.	2.93	0.80	Agree
I am very familiar with AI.	3.30	0.66	Strongly Agree
Pooled Mean	**3.17**	**0.49**	**Agree**

Usage of AI Tools in Teaching

In terms of usage of AI tools in teaching of the respondents, it obtained a pooled mean of 3.01, with SD of 0.65, described as agree indicating a generally positive yet varied perception of AI tools in

teaching, suggesting openness to technological integration and the need for targeted professional development, support structures, and resources to improve adoption and address individual challenges. The statement "AI acts as a virtual teaching assistant" got the highest mean of 3.19, with SD of 0.75, described as "agree". Meanwhile, the statement "AI tools are great in assessing my teaching skills " had the lowest mean of 2.68, with SD of 0.91, described as "agree". This connotes that the respondents utilized AI as a tool for their profession. AI assists them as they execute their tasks. Teachers and other educators may also find it easier to handle repetitious administrative duties like creating lesson plans, grading tests, reviewing student work, and more with the help of AI (Fitria, 2021). Some teachers are also looking into ways to intentionally include organized interactions with AI tools in their lessons and tasks. Exploring these together may help teachers and students better understand what AI tools can and cannot do, how to use them and cite their use correctly, and the moral and educational issues that come up with this new technology (Standford, 2023).

Table 2. Usage of AI Tools in Teaching

STATEMENTS	MEAN	SD	DESCRIPTION
AI continues to enhance teaching activities, including grading, assessment, and delivering lectures.	3.01	0.79	Agree
AI acts as a virtual teaching assistant.	3.19	0.75	Agree
AI can assist teachers in creating lesson plans and generating course content.	3.11	0.77	Agree
AI Tools provide real-time language translation and personalized lessons.	3.16	0.71	Agree
AI tools are excellent for assessing my teaching skills.	2.68	0.91	Agree
AI helps in academic research by automatic literature review, data analysis, and citation.	2.84	0.99	Agree
Pooled Mean	**3.01**	**0.65**	**Agree**

Barriers to Faculty Adoption of AI

The rank shows that "Inadequate training on AI tools" is at the top with 68.75 percent. It shows a widespread problem that educators face while adjusting to AI technologies. This is primarily followed by "Ethical issues on AI" (67.18%) in terms of its importance in addressing moral

implications in educational settings. "Lack of AI support to teaching and curriculum" (53.12%) ranked 3rd among the barriers. This means that there is a lack of provision, leaving the instructor unable to provide AI support for the curriculum. Ranked 4th is the "High cost of AI tools" (40.62%) increases complexity and challenge because schools and institutions lack the resources required to upgrade such facilities. Ranked 5th, "Threat to the job" (35.93%) poses a threat to AI adoption, particularly due to the fear that it will replace human roles in education. And lastly, a lack of time (17.18%) reflects the practical and logistical challenges educators face in allocating sufficient time to engage with AI technologies adequately, thereby integrating them into classrooms.

Table 3. Barriers to Faculty Adoption of AI

STATEMENTS	FREQUENCY	%	RANK
Inadequate training of AI tools	44	68.75	1
Ethical issues on AI	43	67.18	2
Lack of AI support for teaching and curriculum	34	53.12	3
High cost of AI tools	26	40.62	4
Threat to the job	23	35.93	5
Lack of time	11	17.18	6

CONCLUSION

Based on the study's results, the findings suggest that faculty members, particularly those who are younger and less experienced, require ongoing support and training to apply AI in education effectively. It should, therefore, involve targeted training programs for all faculties, such as those tailored to age, specialization, and gender, to address the specific needs of various faculty groups. Workshops on technical understanding, as well as practical applications of AI in curriculum delivery and assessments, would address the present gaps in knowledge. Facilitating cross-disciplinary AI projects and initiatives by faculty can foster the dissemination of knowledge and effectively demonstrate the practical applications of AI. An AI literacy program supported by Computer Science faculty can help address barriers such as a lack of proper training and access to facilities through a regular feedback

mechanism. Lastly, the establishment of an AI adoption policy, along with investments in innovation, resources, and faculty development, will help pave the way for the successful integration of AI in education and guide continuous improvement.

RECOMMENDATIONS

These recommendations are based on the conclusion drawn from the research study. The study examines the necessity of continued support and training for faculty, particularly younger or less experienced individuals, to enhance their knowledge and application of AI in education. Training programs may use demographic differences in age, specialty, and gender to tailor them to more distinct groups of faculty. Practical workshops devoted to implementing AI in teaching, such as curriculum delivery and assessment, can help bridge the gap in technical understanding and usability. Cross-disciplinary projects and collaboration among faculty should be encouraged to facilitate the sharing of knowledge and demonstrate the practical applicability of research. Regular polls and mechanisms for feedback are recommended to identify barriers, such as inadequate training and limited access to resources, which can be addressed through targeted interventions and peer support programs. Additionally, an AI literacy program, assisted by Computer Science faculty, can foster access to and effectiveness of AI within education through continuous research and innovation.

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