

Research Article

Artificial Intelligence Use in Nursing Education and Its Impact on Faculty Time Management, Task Efficiency, And Productivity

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Abstract:

This study examined the use of Artificial Intelligence (AI) in Nursing Education and its impact on time management, task efficiency, and productivity among faculty members at the University of Saint Anthony (USANT) College of Health Care Education (CHCE). A descriptive survey was utilized, with the entire population being 46 USANT CHCE faculty members. The instrument to collect data was distributed through Google Forms, measuring the following: profiles of the respondents, initial conditions of the respondents' familiarity regarding AI, preferred tools, frequency of use, impact of AI use on faculty demands, workload management, and educational outcomes, as well as perceived challenges of using AI.

The demographic profile shows that the employed participants in this study are predominantly younger to middle-aged (43.5% were aged 30-39), heavily female (73.9%), and mostly entry-level junior instructors (69.6%) who work for a long period of time per week (28.3% of whom worked over 50 hours/week). There is a moderate level of familiarity with AI (45.7%), and regular use of AI solutions is not common enough (6.5%), with the most typical AI tools being text-based chatbots (65.2%) and writing assistants (54.3%). With respect to operational impact, it was found that there is a strong agreement that AI highly optimizes the ability to complete tasks and faculty demands productivity (WM = 3.83) and workload (WM = 3.78). Its constituent ratings showed the strongest agreement in educational outcomes (WM = 3.91), and the greater the increase in the efficiency of the instructors, the more effective the mentorship for the students (WM = 4.02). Full technological integration, however, is heavily challenged by systemic barriers (WM = 3.88) fueled by fluctuating institutional internet, moral and ethical issues of academic honesty, absence of formal technological training, and critical mismatch of contexts when it comes to AI-generated outputs not having a sense of locality or clinical and regulatory authenticity in the Philippines.

The study indicates that while AI can effectively streamline repetitive teaching tasks and manage instruction schedules, the indiscriminate use of AI poses a potential risk to educational integrity and the quality of teaching and learning. It shifts faculty workloads, but does not necessarily decrease them. The institution is encouraged to evolve from the current piecemeal approach to a more systematic one through creating tiered professional development training programs, improving its digitization infrastructure, establishing clear ethical guidelines for the use of AI, adjusting evaluation methods to remain aligned with Critical Thinking, and localizing AI content to strictly adhere to the Philippine healthcare standards.

Keywords: Artificial Intelligence, Nursing Education, Faculty, Time Management, Task Efficiency, Productivity

Introduction

The educational field of nursing is changing dramatically in the face of today's technologically advanced times and the unique, digital-literate students who inhabit them. Nurse educators are constantly required to change instructional approaches and methods of managing workload to stay in tune with the interactive format and "need to know" habits of today's learners.

In the higher education (HE) sector, Artificial Intelligence (AI) has proven to be a powerful and transformative tool. The use of AI in teaching and learning is now prominent for its ability to improve the teaching and learning process, administrative processes, and academic productivity (Estrellado & Miranda, 2023; Kadi & Akrachi, 2026). These sophisticated systems are not meant to replace the presence of Human Teachers but to complement the repetitive and time-consuming work, so that faculty could be relieved of these tasks to devote their time to more complex activities like clinical reasoning, mentorship, critical thinking development, etc. (Herrema, 2026).

The importance of AI globally is a blend of efficiency and friction. Though AI tools speed up the creation of exams, the planning of lessons, and the generation of feedback, the application of such tools has been limited due to low levels of teacher trust, inadequate training, and the ethical dilemma surrounding their usage (Aljemely, 2024; Challenge Innovate Grow: Teacher & Learner Centre, 2025; Gorbunova et al., 2026). Lack of institutional backup and output reliability issues can often create what is known as "digital friction," which means that the time saved in automation is traded for manual verification and monitoring (Hill, 2025).

This is especially notable in the Philippines, where nurse educators frequently juggle demanding workloads, including teaching, supervising clinical practice, conducting research, and engaging in community extension, amid strict accreditation standards (Noblezada et al., 2025). The findings of the Second Congressional Commission on Education (EDCOM II) show that higher

education institutions in the Philippines have historically had disjointed and rather defensive approaches to Generative AI, with many seeing it as a problem of plagiarism rather than a utility to aid in teaching and learning that would benefit faculty workflows (Vergara et al., 2024). Such a reactive approach leaves local nurse educators on their own when using complex digital platforms, leading to uneven uptake of these technologies and increased work burden (Eddy et al., 2025). If no efforts are made through structured interventions at the institutional level to mitigate this literacy gap, AI might create a poor fit with the technology or experience due to the technological load (Capuno-Marsan & Marsan, 2026).

Moreover, utilizing AI in nursing education comes with specific ethical and legal implications. International frameworks call for a technology-centric approach that ensures that technology supports rather than replaces professional judgment and the integrity of education (UNESCO, 2023; Sengul et al., 2025). Locally, the guidelines require adherence to the strict Data Privacy Act of 2012, which calls for a proper and systematic faculty development program to enable digital readiness that is sustainable and in line with legal requirements.

At the institutional level, there has been an appreciation of AI as a feasible solution for generating case scenarios, curriculum structuring, and speeding up grading (Qin, 2026). However, a significant gap exists regarding empirical evidence. Research largely leans toward the student-centric viewpoint, or more broadly, general ethical critiques (Aydogan et al., 2026; Kulintang et al., 2026). There is not much available data on how AI functions and is experienced in nursing faculty's daily work (Alrazeeni et al., 2026).

This descriptive quantitative study aims to investigate how artificial intelligence is used in nursing education, specifically among the faculty of the College of Health Care Education of the University of Saint Anthony, and its direct correlation to faculty time management, task efficiency, and productivity. This inquiry aims to provide evidence-based information to guide faculty development approaches, workload policies, and ethical frameworks around the use of AI in higher education practice, fostering a balanced integration that upholds the humanistic nature of nursing education.

Methodology

This study utilized a descriptive-quantitative research design to assess the integration of artificial intelligence (AI) among nursing faculty and its perceived impact on time management, task efficiency, productivity, workload, and educational outcomes. The study was conducted at the College of Health Care Education (CHCE) of the University of Saint Anthony (USANT) in Iriga City, Philippines. A total enumeration (census) sampling approach was employed due to the defined population size, yielding a final sample of all eligible full-time ($n = 14$) and part-time ($n = 32$) nursing faculty members ($N = 46$) who taught theoretical courses, clinical rotations, or skills laboratory instructions during the second semester of the 2024–2025 academic year.

Data were gathered from April to June 2025 using a researcher-made, structured questionnaire administered via Google Forms. The survey items were formulated following an extensive review of related literature and standardized institutional metrics, ensuring that every question strictly aligned with the study's core variables. The instrument was divided into three sections: Part I, which collected demographic and professional profiles alongside AI utilization patterns; Part II, which evaluated the perceived impacts of AI on time management, task efficiency, and productivity; and Part III, which documented the challenges encountered during AI integration. To establish structural integrity, the instrument underwent face and content validation by a panel of experts. It was pilot-tested among a small group of non-participating faculty members to ensure clarity before full deployment.

Prior to data collection, respondents were briefed on the study's objectives, and informed consent was secured digitally. The survey link was disseminated through official institutional email and messaging channels, with periodic reminders sent to optimize response rates. Responses were automatically logged in real-time and exported to a spreadsheet for data scrubbing and tabulation.

Quantitative data were analyzed using descriptive statistics, where frequency and percentage distributions summarized the demographic profiles and AI usage patterns, while weighted means evaluated faculty perceptions on a 5-point Likert scale. Calculated means were interpreted using standard statistical intervals: 4.20–5.00 (Strongly Agree / Very High Impact), 3.40–4.19 (Agree / High Impact), 2.60–3.39 (Neutral / Moderate Impact), 1.80–2.59 (Disagree / Low Impact), and 1.00–1.79 (Strongly Disagree / Very Low Impact).

Results and Discussion

This section provides, interprets, and discusses the collected data based on the main objectives of this study related to the utilization of artificial intelligence (AI) among the University of Saint Anthony College of Health Care Education (USANT CHCE) Faculty. To address the study's main problem, particularly around the patterns observed, specifically, it looks at how faculty members have been affected by the use of AI tools in terms of how much time it takes, how effective this is, and the overall impact on their time management, task efficiency, and productivity

1. Profile of the Respondents

The demographic data of the 46 faculty members of USANT CHCE, who responded to the study, provide a valuable background for understanding the context in which AI is being used in relation to the consideration of time management and task efficiency. In particular, it provides insights into their characteristics, their awareness and knowledge of artificial intelligence (AI), and the different types of AI tools and their use, which were demonstrated in Table 3. The results are significant in grasping the current state and formulating effective AI integration approaches in healthcare education and practice.

a. Age Group. Regarding age, the majority of the respondents were 30–39 yrs old (20, 43.5%), followed by 12 faculty, 40–49 yrs old (26.1%). The age group 50–59 years represented the greatest number of respondents (7, 15.2%), with 3 (6.5%) in the 20–29

years age group and 4 (8.7%) in the 60-year-old and older age group. Based on these results, it is clear that most of them are in their early to mid-adult life, and thus could be more receptive to using technology in the course of their work. Furthermore, this distribution reveals a notable level of mid-career faculty, who may be students of adult learning behaviors and thus are more willing to explore new teaching and learning tools.

These individuals often represent the “early majority”, a key group for institutional change and the embedding of technologies, as described in Rogers' (2003) Diffusion of Innovations theory (Kurt & Kurt, 2023). The simultaneity of the younger and the more senior faculty members, however, highlights the need for diversified approaches in the integration of

Table 1. Profile of the Respondents

DEMOGRAPHICS	FREQUENCY	PERCENTAGE
Age		
20–29 years	3	6.5%
30–39 years	20	43.5%
40–49 years	12	26.1%
50–59 years	7	15.2%
60 years and above	4	8.7%
TOTAL	46	100 %
Sex		
Male	12	26.1%
Female	34	73.9%
TOTAL	46	100 %
Academic Rank		
Instructor	32	69.6%
Assistant Professor	4	8.7%
Associate Professor	8	17.4%
Professor	2	4.4%
TOTAL	46	100 %
Teaching Experience in the Academe		
Less than 1 year	10	21.7%
1-5 years	25	54.4%
6-10 years	6	13%
11-15 years	3	6.5%
More than 15 years	2	4.4%
TOTAL	46	100 %
Total Academic Working Hours per School Week		
0-20 hours	7	15.2
21-30 hours	9	19.6
31-40 hours	8	17.4
41-50 hours	9	19.6
More than 50 hours	13	28.3
TOTAL	46	100 %
Level of Familiarity with AI Tools		
Not familiar	3	6.5
Slightly familiar	15	32.6
Moderately familiar	21	45.7
Very familiar	7	15.2
TOTAL	46	100 %
Types of AI Tools Used		
Writing assistance tools (e.g., Grammarly, Quillbot)	25	54.3%
Language Model-Based Chatbots and Virtual Tutors (e.g., ChatGPT, Gemini, Perplexity)	30	65.2%
AI for Gamification (e.g., Quizizz, Kahoot, Duolingo)	8	17.4%
Learning Material Content Generation and Personalization (e.g., Canva, Slidesgo)	18	39.1%
No AI tools were used.	3	6.5%

Frequency of Using AI Tools		
Daily	3	6.5
Weekly	10	21.7
Monthly	15	32.6
Rarely	15	32.6
As needed	2	4.4
TOTAL	46	100 %

Artificial Intelligence (AI) in the science classroom. The small number of studies based on empirical research, employing the Technology Acceptance Model (TAM), suggests that there is a significant relationship between how teachers' demographic characteristics influence the adoption of AI for instructional purposes, and assumes that younger teachers are more open to using AI for teaching. (Bakhadirov et al., 2024). Moreover, current literature specifically on AI behaviors and thus are more willing to explore new teaching and learning tools.

These individuals often represent the “early majority”, a key group for institutional change and the embedding of technologies, as described in Rogers' (2003) Diffusion of Innovations theory (Kurt & Kurt, 2023). The simultaneity of the younger and the more senior faculty members, however, highlights the need for diversified approaches in the integration of Artificial Intelligence (AI) in the science classroom. The small number of studies based on empirical research, employing the Technology Acceptance Model (TAM), suggests that there is a significant relationship between how teachers' demographic characteristics influence the adoption of AI for instructional purposes, and assumes that younger teachers are more open to using AI for teaching. (Bakhadirov et al., 2024). Moreover, current literature specifically on AI in the higher education context shows that, although the members of the academic leadership are senior faculty, trainee teachers and lecturers are much more confident about using AI and adopt the fastest (Spathopoulou et al., 2025)

So institutional AI training programs need to be purposefully created to overcome the possible generational gap, if one exists. It is important to make workshops age-targeted; that is, don't use a “one size fits all” approach to professional needs. This can be done through significant attention to fundamentals, ethical limits, and shifting workloads to professors who are nearing retirement, and learning opportunities in the latest and most sophisticated versions of prompt engineering and collaborative use of AI.

b. Sex. The sex distribution of the collected data indicates a significant imbalance consisting of a large number of female respondents (34/46 (73.9%)) and a small number of males (12/46 (26.1%)). This trend was probably reflected in the overall distribution of the population of the health care education occupations because women educators outnumber men in that group.

Though history suggests that gender has always been a critical moderating variable in the adoption of technology as part of the frameworks behind the model, recent literature on familiarity and perception of AI reveals a more complex picture. Empirical studies investigating the intentions of higher education teachers to use generative AI tools indicate that while vertical differences across gender groups in intention to use are becoming less and less explicit, there are still underlying differences between male and female teachers in their assessment and interaction patterns with the tools (Tang et al., 2025).

In particular, today's studies show that female teachers are cautious about the potential of generative AI tools and raise many more ethical considerations, transparency, data privacy, and maintaining critical thinking in the students' products (Y. Tang & Zhong, 2026; Reis, 2025). On the other hand, male peers frequently believe they have more confidence at the beginning, that the technology is easier to adopt right away, and that it is mostly used for technical optimization and task efficiency (Phan et al., 2026).

Hence, since this faculty is overwhelmingly female, institutional AI training and integration strategies must be purposefully planned to be inclusive and directly target these gender-differentiated preferences. Equitable access to professional development will involve more than mastering technical skills.

Rather, institutions should strive to maximize AI literacy by employing a range of pedagogical training strategies with significant components focused on AI ethics, algorithmic bias mitigation, and data security, as well as ensuring hands-on application (Al-Abdullatif, 2025). By adopting this balanced approach, departments can create a more inclusive, high-trust environment that addresses faculty concerns and maximizes the use of AI throughout the department.

c. Academic Rank. The distribution shows that the majority of respondents are Instructors (69.6%). This is followed by Associate Professors (17.4%), Assistant Professors (8.7%), and Professors (4.4%). The distribution, which is heavily skewed towards instructors, indicates that there is a large percentage of the faculty in more entry-level academic positions.

Junior instructors may have very different occupational roles and teaching loads and may have very different institutional responsibilities compared to senior professorial positions. Research on the role of faculty in the digital transformation era has called attention to the direct teaching responsibilities and grading responsibilities that tend to yield the greatest burden on early-career faculty and non-tenured instructors, who are therefore the most vulnerable to increased workloads (Truong & Tran, 2026; Sun and Yoon, 2025).

A mapping exercise across the academic hierarchy based on empirical indicators shows that there is a clear trend in which junior faculty and instructors are more likely to be less skeptical and exhibit greater baseline confidence in adopting AI in their academic work, whereas senior faculty are more likely to use AI within the framework of academic policymaking, leadership, and/or

governance (Spathopoulou et al., 2025b; Oguntona & Emere, 2025). In addition, research using the Technology Acceptance Model (TAM) reveals significant variations in key determinants of intention to use AI by different levels; teachers are particularly motivated by the technology's ability to save them from mundane administrative duties and reduce burdensome workloads (Runge et al., 2025).

Thus, the contents of institutional AI training programs cannot be standardized and must be carefully selected to fit the differing contextual conditions of each academic level.

d. Teaching experience in the academe. The Years of Experience of the faculty show diverse experience. 54.4% have 1-5 years' experience, with the largest group being 1-3 years, and the group with Less than 1 year is 21.7%. The percentage of faculty with 6-10 years of working experience is 13%, and faculty working more than 15 years is 4.4%, and 11-15 years of working experience is 6.5%.

During this distribution, a spotlight is shed on a teaching staff largely made up of more recent teachers. Early career teachers are also statistically more likely to be more comfortable with technology and more willing to adapt to new systems, yet they are intrinsically fraught with new teacher responsibilities—classroom management and aligning curriculum to instruction—that are especially challenging for those starting. Recent empirical research exploring teachers' attitudes towards AI readiness reveals that, although less-experienced teachers express themselves highly enthusiastically about generative AI, they often struggle to align the technology with existing pedagogical frameworks, at times superficializing the invented use of the technology (Güneyli et al., 2024). On the other hand, there is a lack of institutional memory in the department, as a small number of faculty are highly experienced with over 10 years of tenure. Longitudinal studies investigate a negative correlation between the number of years teaching and speedily incorporating highly disruptive technologies in the classroom, but highly-trained teachers also show deeply embedded pedagogical content knowledge (PCK). Experienced educators, as evidenced in the study on AI governance in universities, are essential in assessing the profound effects of AI on students' critical thinking, uncovering nuanced ethical issues, and spotting subtle hallucinations within algorithms that might evade detection from less experienced instructors (Deep et al., 2025; Mosha et al., 2026). Hence, the departmental plan for the implementation of AI must be designed to harness such a mix of strengths instead of assuming the faculty as a unity. For the majority of novice (21.4%) and early-career (54.7%) educators, professional AI learning should be foundational and explicit to help them grasp the benefits of AI in complementing and strengthening existing teaching methods, such as rubric design, lesson planning, and objective mapping (Güneyli et al., 2024). For veteran minority groups, training should focus on gains in efficiency that doesn't nullify the other priorities of limited time, and the veteran minority should be actively placed in a leadership role to enable them to lead the entire department in policy decisions, ethical considerations, and to act as a mentor to other younger colleagues who need to balance the use of AI with sound pedagogical traditions (Michopoulou & Gan, 2025).

e. Total Academic Working Hours per School Week. On reviewing the hours under Total Academic Working Hours per Week, which is a combination of hours under Lecture and Related Learning Experience (RLE) comprising skills laboratory and clinical duties per semester, the workload distribution can be seen as varied. 28.3% of the faculty work over 50 hours. This is followed by 19.6% working 31-40 hours and another 19.6% working 41-50 hours. There are also equal proportions of 15.2% for 0-20 hours and 21-30 hours.

The notable high proportion of faculty working very long hours, especially nearly 48% working over 40 hours a week, indicates that time constraints and faculty professional burnout constitute a significant structural impediment to new technology utilization. The time and expertise needed to master how to prompt-engineer generative AI for content creation and the learning curve, also mentioned in both publications, can be time-consuming, though there is significant potential for using such tools to automate repetitive administrative tasks, create clinical rubrics, and maximize the design of class preparation workflows (Pangestu et al., 2026; Norgaila et al., 2026)). This results in what can be called a "time-investment paradox" because the professors who place the most value on time -saving tools have the least amount of discretionary time to learn them.

But empirical longitudinal evidence shows that, when training is scaffolded appropriately, long-term increases in efficiency can be significant for the most heavily burdened populations in education. In fact, teachers who have incorporated AI tools into their lesson planning, grading, and administrative tasks have noted a significant decrease in weekly prep time, alleging that up to several hours were saved, which directly addresses the issue of cognitive fatigue (Khlaif et al., 2025; Sensarma, 2025).

Institutions need to know that a program to facilitate AI adoption among this already overworked faculty cannot involve a long set of mandatory seminars. On the contrary, professional development should prominently feature why it is valuable and immediately show ways to implement it, which will be extremely useful and save the time spent on day-to-day tasks. Moreover, the provision of this training should be very flexible and elastic. Micro-learning modules, asynchronous video tutorials, and the 'productivity clinics' with manageable, bite-sized chunks that integrate smoothly into busy RLE and clinical programs will be key when it comes to driving greater uptake and sustained use in the programs at an institutional level (Nichols, 2026; Kaplan Nursing NCLEX® Prep, 2025).

f. Level of Familiarity with AI Tools. The results revealed that the level of familiarity with Artificial Intelligence (AI) amongst the faculty is moderate. These showed 45.7% as Moderately Familiar, 32.6% as Slightly Familiar, 15.2% as Very Familiar, and 6.5% as Not Familiar.

This mixed distribution of technical fluency closely aligns with recent empirical studies on the state of digital transformation in

clinical education. Current research on AI readiness among health science faculty members suggests that the overall understanding of generative AI is growing rapidly across the world, yet a significant portion of active educators show limited technical expertise and official educational programs for this technology (Güneyli et al., 2024; Chatzichristos et al., 2025). There is a gap in variance, with around 40 percent needing foundational upskilling, while a small cohort is ready to implement this innovation. For individuals who are "not familiar" and "slightly familiar," basic introductory courses that touch on fundamental concepts and applications would be most appropriate. On the other hand, higher-level instruction of specific AI tools, the ethical aspects, and AI's innovative pedagogical applications would better suit faculty who are 'moderately' or 'very familiar'.

This is why these metrics highlight the need to move away from a uniform training model and take a more tiered approach to broadening AI literacy. This approach enables the department to provide a structured growth path for basic AI users while continuing to challenge advanced users of the tool, ultimately boosting the entire department's proficiency and proficiency levels.

g. Types of AI Tools Used. The "Types of AI Tools Used" highlighted the preference for a variety of AI tools, with respondents able to choose more than one. Language Model-Based Chatbots and Virtual Tutors are the most popular ones with the faculty, shared by 65.2%. This suggests a high preference for using AI for dialogue, content creation, and possibly student interaction, embodying an increase in reliance upon conversational AI for academic matters. Writing assistance tools (e.g., Grammarly, Quillbot) are used closely, with 54.3% using them. The high uptake rate demonstrates the perceived importance of AI to improve the writing quality, grammar, and academic outputs of important documents, namely teaching material and research works.

Such outcomes support a generalized global development of higher education where Conversational Agent (CA) architectures like Large Language Models (LLM) have grown from being a novelty to a regular operational tool in the ideation of curricula, in drafting technical explanations, and for immediate learners' troubleshooting (López-López et al., 2026; Elshaer et al., 2026). Writing assistance tools come next (e.g., Grammarly, Quillbot, 54.3%), followed by language instruction tools (52.4%). This high adoption rate speaks to the pressing, real-world need that educators identified when it comes to honing syntax, checking grammar, and general student output, all crucial for teaching and scholarly peer reviews.

AI could revolutionize the creation of learning material and personalization, given that 39.1% of the faculty members use Learning Material Content Generation and Personalization tools. This underscores a pivotal shift in the department's approach toward adaptive learning design, where almost 40% of the department utilizes the calculation power of AI in the development of a variety of pedagogical modules, the customization of clinical case studies, or the adjustment of teaching and learning speeds based on students' heterogeneity (Seril, 2026).

17.4% are using AI for Gamification (e.g., Quizizz, Kahoot, Mentimeter), a smaller percentage but still a significant number of cases, for engaging learners by introducing game-like features into the learning process, which would probably need particular technical adjustments and knowledge of game-based teaching and learning, for which faculty members are less often oriented.

Among them, 6.5% stated they are not using any AI, which corresponds to the "Not familiar" in the familiarity data, which also shows a basic need for initial training. In conclusion, if the few percentages of widespread use of writing assistants and chatbots suggest that AI is well-established in everyday administrative and linguistic practices, the considerably smaller percentages of the use of gamification and complex adaptive personalization platforms point to an institutional gap. Professional development for faculty needs to go beyond merely creating text and should explicitly point to the educational advantages, interactive pedagogical approaches, and the capabilities for student engagement of specialized advanced interactive tools, specifically designed for health sciences education (Rasheed et al., 2025; Cabero-Almenara et al., 2023).

h. Frequency of Using AI Tools. Lastly, the answers to the Frequency of Using AI Tools indicate "Monthly" and "Rarely" as the top responses at 32.6% each. This is followed by "Weekly" (21.7%), "Daily" (6.5%), and "As needed" (4.4%). The trend in this distribution indicates that a substantial part of the faculty population employs AI tools at least once a month, while a large proportion (approximately 34%) infrequently or not at all.

It is difficult to argue that all of the members within this department presently exist at the same baseline cognitive awareness (knowledge) through evaluative to consistent integration stages; most of the members are currently in the persuasion and trial stages, and very few are in the routine utilization stage (Gonzales & Nabua, 2025; Davis, 2026).

Large-scale institutional surveys reflect this exact pattern, with exposure/situational use of generative AI accepted across the faculty, while more impactful, frequent, or weekly use in classes is less common in higher education. Across the world, typical faculty use cases include local transformations in lesson preparation, syndicating syllabus resources, and improving access to content (Digital Education Council AI in Higher Education Global Survey 2026). The challenge for an institution is to move the saved world bookshelf from "rare" or "monthly" use, to more regular or routine use. Professional learning and development needs should focus on shared learning instead of providing abstract technological capacities; connect to clinical and classroom work; and be hands-on (Antinluoma et al., 2021).

Overall, it is a fairly young to middle-aged, female-dominated faculty, with many instructors emphasizing a dynamic and basic-laying faculty. Notably, there is a notable degree of familiarity with AI and limited usage of various AI tools, but there is an apparent need for structured and targeted approaches to AI integration. The strategies must be tailored to demographic needs, must educate about how AI can benefit the workload, and should continually look at addressing ethical considerations and privacy concerns to create an environment where using AI in healthcare education is going to be welcoming.

2. AI's Impact on faculty time management, task effectiveness, and productivity.

The study explored how faculty perceived the influence of artificial intelligence (AI) on their time management, task efficiency, and enhanced productivity, focusing on three broad areas: faculty demands, workload, and educational outcomes.

a. Faculty Demands. Table 4 shows a consistently positive perception of the use of AI tools by faculty members in their role. Overall, the faculty members feel that AI is improving their productivity and efficiency, with an average weighted mean of 3.83 ('Agree'). This is consistent with current international literature that shows a relationship between the systematic use of generative AI in HE and time-saving for instructors in doing repetitive administrative and preparation tasks (Gupta et al., 2024; Liang et al., 2025).

The very best rated indicator, *"AI support has improved the instructors' ability to meet deadlines"* (Weighted Mean = 4.04, Rank 1), indicates that faculty are particularly compelled by the use of AI to meet deadlines, such as grading and reporting. This aligns with and extends the empirical work on workforce Generative AI, which shows that there is a significant task completion speed with the use of AI assistants, with the most outstanding efficiency gains coinciding with individuals with less prior experience in the tasks (Brynjolfsson et al., 2023).

Second, *"AI tools help instructors manage multiple responsibilities with greater ease"* (Weighted Mean = 3.91, Rank 2) shows that AI tools are helping to balance multiple tasks across teaching, research, and administration. Recent mixed-method institutional work has shown that generative AI tools are highly useful in eliminating "cognitive fatigue" in academic work, relieving the time burden on teachers in their repetitive tasks of drafting texts, formatting documents, and planning content, which ultimately allows them to focus more on strategic mentorship of students and active involvement in research activities (Kumari et al., 2026; Adamakis & Rachiotis, 2025).

The third item, *"The use of AI tools is associated with faster preparation of instructional materials..."* (Weighted Mean = 3.89) reveals that, according to faculty, AI can be useful to

Table 2. AI Use and Its Impact on Faculty Time Management, Task Efficiency, and Productivity, along with Faculty Demands

Indicators	Weighted Mean (WM)	Interpretation	Rank
The use of AI tools is associated with faster preparation of instructional materials. (e.g., PowerPoint presentation, quizzes, exam, lecture content)	3.89	Agree	3
AI support has improved the instructors' ability to meet deadlines.	4.04	Agree	1
Streamline administrative tasks and enhance efficiency with AI assistance. (e.g., grading and assessment, classroom management, research, and scholarly activities).	3.65	Agree	5
AI tools help instructors manage multiple responsibilities with greater ease.	3.91	Agree	2
The overall teaching productivity is enhanced when AI applications are integrated into daily tasks.	3.67	Agree	4
Average Weighted Mean	3.83	Agree	

create presentations, assessments, and lecture materials. This is supported by the most recent structural equation modeling (SEM) findings on the ability and effectiveness of teachers in lesson planning and real-time assessment design, where the usage of AI tools created a strong positive causal effect (Alwakid et al., 2025; Gabunilas and Naval, 2026).

"The overall teaching productivity is enhanced when AI applications are integrated into daily tasks" (Weighted Mean = 3.67, Rank 4), which is an indicator that touches on an overall benefit, but there is a slight perception decrease when compared to a focused task. This mirrors the wider trends of generative AI uptake in the academe, where there is great praise for having support on specific, structured, and predictable tasks; however, being integrated into full curricula is still a continuous and complex endeavor, with great need for human-AI collaboration (Liang et al., 2026; Generative A.I. in Education, 2024).

The least rated, but still positive indicator was *"Streamline administrative tasks and enhance efficiency with AI..."* (WM: 3.65, Rank #5). Faculty feel the same about the statement, but the slightly poorer score could be due to the current state of AI tools in these areas, such as fine-tuned grading, policy-guided workflow, or research record keeping. This aligns with cross-border inter-university research, which indicates that the uptake of AI technology does not result in baseline productivity improvements for administration if the institution does not have a structured technical training, explicit operational protocols, or governance structure to address data-privacy and algorithmic trust issues (Ashfaq, 2025; Yajie, 2026).

All these findings reflect the most noticeable improvement AI brings in terms of punctuality and handling complex workloads. Respectively, there is evidence of positive faculty attitudes reflected in indicators of instructional preparation and overall productivity, although further development is needed in the areas of administrative efficiency.

b. Workload. Table 5 shows the collective judgements of the faculty that the effects of artificial intelligence (AI) tools have a favorable impact on the management of faculty workload.

Overall, “*The integration of AI enhances workload management and overall job satisfaction for faculty*” achieved a higher weighted mean score than the other indicators, with a score of 3.87, which corresponds to “Agree” and ranks as the top indicator. This indicates that teachers see the potential of AI as something that could not only help to alleviate heavy workloads but also increase their morale within their jobs. This correlation is supported by international evidence of the widespread uptake of generative AI systems among 87% of educators in one study, which found that using these systems for routine clerical tasks led to higher job satisfaction and reduced cognitive overload in the workplace (Redmond, 2026; Mediodia & Ablin, 2025).

The indicator “*Use of AI leads to a perception of better work-life balance among nursing instructors*”, is ranked second with a weighted mean of 3.83, followed by personal responsibilities in reducing the time needed for routine academic work. Breadth of duties and workloads are the historical reasons for clinical burnout among nursing and health sciences faculty. In fact, recent health professions education literature has shown that using this technology to help with tasks such as writing clinical simulations, optimizing schedules, or generating rubrics provides a welcome reprieve and extra hours from occupational burnout while helping the clinical instructor to lead a higher quality of life (Pavuluri et al., 2024; Yilanli & Kaur, 2026). The perception of autonomy, along with maintaining a healthy balance between work and life, is substantially higher when introducing AI as a digital co-pilot and not as a prescriptive surveillance system (Rosa & Rosa, 2026).

Table 3. AI Use and Its Impact on Faculty Time Management, Task Efficiency, and Productivity, along with Workload

Indicators	Weighted Mean	Interpretation	Rank
AI tools reduce the time spent on repetitive academic tasks, allowing faculty to focus more on teaching.	3.72	Agree	4.5
AI tools improve task efficiency, allowing faculty to dedicate more time to professional development and research.	3.72	Agree	4.5
By automating routine tasks, AI frees up time for instructors to engage in more meaningful interactions with students.	3.74	Agree	3
The integration of AI enhances workload management and overall job satisfaction for faculty.	3.87	Agree	1
Use of AI leads to a perception of better work-life balance among nursing instructors.	3.83	Agree	2
Average Weighted Mean	3.78	Agree	

Third most popular was the statement “*By automating routine tasks, AI frees up time for instructors to engage in more meaningful interactions with students*” (WM = 3.74, “Agree”). Apparently, the faculty members realize that AI can be a boon in pedagogy and thus spare their time for high-level activities like mentoring, counseling, and assisting students. Among the mapping efforts of pedagogical mediation of AI platforms in higher education, it is noted that while AI can find value in automating grading and administrative tasks in Learning Management Systems (LMS), the main benefit of that automization lies in the possibility of freeing up an educator's time, which can be dedicated to personalized feedback, student engagement loops and human-centered mentoring (Temper et al., 2025).

Indicators weighted fourth and fifth, both with a weighted mean score of 3.72 (Agree) are: “*AI tools reduce the time spent on repetitive academic tasks, allowing faculty to focus more on teaching*” and “*AI tools improve task efficiency, allowing faculty to dedicate more time to professional development and research.*” This highlights the potential impact of AI in streamlining time-consuming, repetitive tasks like encoding, report generation, and basic grading, thereby freeing up educators' time to focus on teaching and research. Empirical research on the workforce based on the Technology Acceptance Model (TAM) shows that the deployment of AI has a marked positive impact on the speed of work execution and the quality of output, especially among professional educators with multifaceted administrative tasks and research activities (Brynjolfsson et al., 2023). Dedicate more cognitive space to lifelong learning and research productivity since content development has been reduced from weeks to hours (Team, 2026).

The overall interpretation is “Agree.” The average weighted mean for general is 3.78, and frequently, faculty members feel that AI has a positive impact on workload reduction and work performance overall. This aligns with the international world's recognition of the potential productivity of AI if used wisely in higher education.

These results have a few important implications. In the first place, educational institutions need to persist in investing in AI devices to help reduce repetitive tasks and enhance teacher wellness as well as satisfaction. Secondly, AI can also help boost student-faculty

interaction by freeing up time from administrative tasks for teaching. Third, it seems that AI can help in work-life balance and facilitate faculty training on digital tools, which can optimize their use. Finally, AI can be employed for data analysis, literature review, and project planning to assist with professional development and research. To maintain these, though, the need for institutional support, equitable access to technology, and a clear AI-use policy is paramount, especially in resource-constrained education settings.

c. Educational Outcomes. Table 6 shows the impact of AI integration on educational outcomes, especially from the perspectives of faculty members. All indicators are scored as “Agree” and an average weighted mean of 3,91, which indicates a consistently positive perception. It indicates that generally, educators are aware that the supportive role of AI is useful to improve student outcomes both directly and indirectly.

The highest-rated indicator is *“Enhanced instructor efficiency through AI use supports better academic support for students,”* which received a weighted mean of 4.02, interpreted as “Agree,” and ranked first. This suggests that faculty believe their increased efficiency, as a result of using AI tools, enables them to provide timelier and more effective academic assistance to students. This result holds internationally as well, with empirical workspace data showing that AI-supported workers can finish more complicated administrative tasks more quickly, resulting in a trade-off of valuable time spent on administrative bottlenecks to improved time devoted to higher-value engagements (Brynjolfsson et al., 2023). Several

Table 4. AI Use and Its Impact on Faculty Time Management, Task Efficiency, and Productivity, along with Educational Outcomes

Indicators	Weighted Mean	Interpretation	Rank
AI-assisted teaching methods contribute to more timely student feedback.	3.83	Agree	4.5
AI-generated learning materials improve student engagement by aligning with modern learning styles, moving beyond traditional methods.	3.87	Agree	3
Enhanced instructor efficiency through AI use supports better academic support for students.	4.02	Agree	1
Faster task completion by faculty allows more focus on personalized student mentoring.	3.98	Agree	2
AI integration indirectly improves student performance by enabling instructors to allocate time to innovative learning activities	3.83	Agree	4.5
Average Weighted Mean	3.91	Agree	

global systematic reviews on higher education (HE) technology suggest that automating and streamlining the use of AI can improve faculty availability for students due to the increased efficiency and value-free time created (Kamalov et al., 2023).

“Faster task completion by faculty allows more focus on personalized student mentoring,” with a weighted mean of 3.98, is interpreted as “Agree” and comes in second place. This is because AI can sometimes be used to take some of the burden off faculty to allow them to devote more time to attending to their students. This suggests that by incorporating generative AI into education, teachers have the potential to effectively evolve from information facilitators to active facilitators who mentor students and boost their independence, capability, and individual interaction in the classroom, as reported in the health science literature of the last few years (Mikroyannidis et al., 2025).

The weighted mean score for the indicator *“AI-generated learning materials improve student engagement by aligning with modern learning styles, moving beyond traditional methods”* came third with an “Agree” score of 3.87. This indicates that content that's created with AI, like adaptive tutorials, virtual clinical simulations, and customized case scenarios, resonates more seamlessly with today's students' learning preferences. According to scoping reviews done in 2025, students' engagement, communication, and minimum clinical preparation were significantly supported by learning through safe, immersive environments that simulated real-world clinical environments and were powered by AI tools (Lesińska-Sawicka & Michalak, 2026; Jacobs et al., 2025).

The indicators *“AI-assisted teaching methods contribute to more timely student feedback”* and *“AI integration indirectly improves student performance by enabling instructors to allocate time to innovative learning activities”* are both at the rank of 4.5, which is our weighted mean and is interpreted as “Agree.” The answers indicate that, although AI isn't actually teaching the students, AI is still an impactful facilitating tool that allows teachers to provide feedback more quickly and allows teachers more space to explore meaningful and engaging teaching strategies. Recent scoping reviews to document trends in teaching and assessment show that using automated feedback loops and creating cases with the help of Artificial Intelligence is becoming more popular for providing feedback and developing critical thinking in the process (Zhang et al., 2026; Lipnevich et al., 2026).

This indicator has recently been based on experimental research work carried out in the area, which has been validated empirically. In a randomized controlled trial in 2025, students from nursing schools in Manila, Philippines, showed a statistically significant improvement in posttest knowledge acquisition when AI-generated supplementary learning materials were implemented in clinical courses, demonstrating that curated AI content serves as a valuable additional tool to help students retain clinical concepts and learn

patient safety standards (Calacday et al., 2025).

The results show that, while faculty see AI as a productivity tool, they also see it as another opportunity for them to improve students' learning in a student-centered approach. Together, increased efficiency, time savings, and content delivery on demand help enable more personalized, responsive teaching. Apart from institutions, these findings suggest the need to increase AI-powered integration in ways that complement human-led mentoring, feedback, and engagement. Instructor PD can help build their competency in the appropriate use of AI tools. Similarly, policy and infrastructure support are needed to foster the ethical, inclusive, and effective use of AI that supports learning outcomes for diverse learners.

Summarizing the perceived effects of Artificial Intelligence (AI) on faculty's time management, task efficiency, and productivity in three dimensions: faculty demands, faculty workload, and learning outcomes, as seen from Table 7. The results were an overall average weighted mean of 3.84, which corresponds to "Agree", representing a general opinion of faculty

Table 5. Summary of AI Use and Its Impact on Faculty Time Management, Task Efficiency, and Productivity

Indicators	Weighted Mean	Interpretation	Rank
Faculty Demands	3.83	Agree	2
Workload Management	3.78	Agree	3
Educational Outcomes	3.91	Agree	1
Average Weighted Mean	3.84	Agree	

members that AI is having a positive impact on their performance and efficiency in the academic workplace.

This is a macro-level consensus, and it reinforces the idea that higher education professionals don't just think about generative AI technologically. Rather, they see the benefit as a holistic and systemic one, with administrative streamlining directly resulting in manageable workloads, factors that contribute to better applicability to cognitive bandwidth, and overall lower rates of occupational burnout (Conceição & Palma-Moreira, 2025; Hung et al., 2025). The highest-rated indicator that was most highly rated was *Educational Outcomes*, with a weighted mean rating of 3.91 ('Agree' = 1). This indicates that faculty consider AI tools as potential facilitators to enhance the quality of teaching and learning for students. AI tools are perceived to aid in content creation, personalized feedback, and adaptive learning. Strong empirical evidence on generative AI in higher education shows that these enable more effective and efficient delivery and personalization of educational content, integrating safe and scalable simulation and remedial spaces to actively meet the needs of diverse learners (Brynjolfsson et al., 2023). Generative AI, when used responsibly, can augment the core design of instructional materials, but also facilitate and speed up the feedback loops that support formative assessment and produce the desired learning competencies in a localized setting, especially in a technology-enhanced or blended learning context (Rahim et al., 2025).

Faculty Demands is ranked 2nd with a weighted mean grade of "Agree" (3.83). The finding suggests that the use of AI can lead to more efficient task performance, enabling faculty to fulfill their academic duties better, which includes the development of teaching materials, evaluation of student products, student data management, and research. The results of large-scale systematic reviews highlight the benefit of AI in boosting output and performance in higher education, particularly through freeing up human intellectual capacity for more complex academic tasks (Liang et al., 2025).

Moreover, studies on the optimization of workplaces have illustrated that the use of generative AI for education-based tasks such as drafting, formatting rubrics, and scheduling of content by educators increases their professional efficacy, noting that they feel a significant decrease in the fatigue of repetitive tasks (Sachdeva, 2026; Gold et al., 2026).

The third and least favorable indicator was *Workload*, with a weighted mean score of 3.78 (Agree), which was ranked 3rd. While this score remains pretty good, it does show the heightened need for certain structures: AI, while incredibly convenient, is not a substitute for or a full measure of a reduced academic workload. Yet, AI requires educators to meet the other set of professional obligations, including investing hours in digital upskilling, adapting existing pedagogical and assessment methods to fit digital tools, managing prompt engineering, and conducting careful ethical checks of AI-generated work.

This aligns with other studies conducted across multiple universities globally, which demonstrate that the introduction of AI technology doesn't automatically result in a seamless experience; in many cases, it may establish a "time-investment paradox" or simply the load and shift to more continuous technical oversight and compliance checks (Majumdar, 2026; Lim, 2026). Such a phenomenon is prominently visible in educational contexts such as the Philippines, which have a variety of reasons to dismiss the smooth facilitation of this process, such as inconsistent professional development opportunities and varying institutional support for such integration with disruptive digital systems by early-career teachers who are not technically savvy (Güneyli et al., 2024).

These findings indicate the utility of employing them in AI to improve educational delivery, enhancing faculty productivity in the process of managing workloads, but to varying extents. Its most impressive effect on educational outcomes highlights how AI can revolutionize the educational landscape in terms of teaching and learning processes. The attitude of productivity is high, suggesting that more encouragement is needed by institutions for the use of AI for academic efficiency.

The relatively low score on workload, however, is telling and alludes to the critical need for greater faculty training, clearer guidelines on the use of AI, and institutional support mechanisms to ensure that the use of AI actually relieves existing workloads

rather than shifting and adding to those. In the context of higher education institutions, these involve strong infrastructure, tiered capacity-building steps, and clear AI integration policies, all with a strong focus on ethics. A responsible use of AI and professional development opportunities will empower faculty to leverage the potential of AI while safeguarding academic integrity, privacy, and sovereignty in instruction.

3. Perceived challenges in AI utilization

The findings from Table 8 show what faculty perceive as the challenges they come across when using artificial intelligence (AI) in education. The average weighted mean score was 3.88, representing 'Agree', clearly indicating that the faculty members recognized the existence of some noteworthy barriers influencing the effective incorporation of AI in the academic context. These challenges come in line with recent literature addressing the current global and local landscape on barriers to the adoption of AI in Universities (AIBlooshi, 2026; UNESCO, 2026).

“Technical difficulties, such as poor internet connectivity or software malfunctions, hinder the effective use of AI tools,” received the highest rating with a weighted mean of 4.18 (Agree, Rank 1). This discovery resonates with recent empirical research that highlights the critical role of stable access to information and communication technology (ICT), consistent power supply, and stable bandwidth in maximizing the potential of cloud-based generative AI tools, particularly in developing parts of the world (Adobe Stock, 2025; Patel et al., 2025). In the Philippine educational system, recent research shows that chronic Internet outages and campus-wide disparities in digital infrastructure are frequent occurrences that significantly hamper the optimal implementation of AI tools in real-time by the faculty, thereby affecting the smooth running of classroom processes, including real-time AI-powered teaching and learning, online grading, and prompt communication among the teacher and students (Kunjiapu et al., 2025).

The next is the statement *“Dependency on AI tools may hinder the development of critical thinking skills”* (WM of 4.04) at rank 2; Agree. This supports concerns of overdependence on AI systems by faculty and students and potential decreasing cognitive involvement. However, research in both the fields of work and cognition indicates that over-trusting the ability of AI models to automatically or instantaneously output can lead to a decline in human labor interest and motivation to think deeply, to synthesize, and to reflect on one's own work, especially when

Table 6. Perceived Challenges Encountered by Nursing Faculty With AI Tools Utilization

Indicators	Weighted Mean	Interpretation	Rank
There is a struggle to incorporate AI tools into teaching methods due to limited knowledge and experience.	3.48	Agree	5
Technical difficulties, such as poor internet connectivity or software malfunctions, hinder the effective use of AI tools.	4.18	Agree	1
The use of AI tools in education raises concerns regarding academic integrity, as they may facilitate cheating or the generation of misleading content.	3.98	Agree	3
Dependency on AI tools may hinder the development of critical thinking skills.	4.04	Agree	2
AI tools lack authenticity in providing contextually relevant and accurate knowledge to their users.	3.72	Agree	4
Average Weighted Mean	3.88	Agree	

handling more complicated tasks (Brynjolfsson et al., 2023). In this regard, higher education researchers contend that higher-order digital tools should be strategically designed to be cognitive scaffolds to support and enhance student inquiry, as opposed to substituting for human-centered and student-driven inquiry processes (Liang et al., 2025), particularly during learning tasks that involve analysis, synthesis, and reflection. Tang (2023) believes that using technologies in the education sector should be complementary and not a substitution for the learner-centered approach, which promotes deep thinking and meaningful learning experiences. The third-ranked indicator, *“The use of AI tools in education raises concerns regarding academic integrity, as they may facilitate cheating or the generation of misleading content,”* had a weighted mean of 3.98 (Agree). This is a valid concern regarding the potential for misuse of AI, for example, using large language models (LLMs) to write essays, evade thorough Technical/Drafting Tests, or create citations that cannot be verified.

The findings from a scoping review on the use of Generative AI in nursing and clinical education are that the validity of traditional competencies is jeopardized by the unregulated use of AI, calling for an urgent need for new approaches in a redesign of frameworks to assess clinical judgment skills instead of just text recitation (Hardie et al., 2026; Hinsche et al., 2026). This risk has prompted strong measures by the international bodies that serve as the guardians of academic integrity, namely the imperative to quickly adopt institutional AI ethics policies and limits on acceptable uses with stringent monitoring systems (UNESCO, 2026).

The fourth indicator, *“AI tools lack the authenticity in providing contextually relevant and accurate knowledge of their users,”* yield a weighted mean equal to 3.72 (Agree, Rank 4). It indicates a lack of understanding of the culture, language, and context of the global AI models. For example, although prominent LLMs are good at weaving through generic data, they have often been accused of having demographic biases and failing to understand local sociological realities or regional regulatory policies, or even

the particular setting of the classroom. Modern educational technology literature underscores the need for localized prompt engineering and adaptations to context in order to mitigate the transfer of culturally irrelevant and inaccurate educational data in institutions operating outside of Western contexts (Liang et al., 2025).

The lowest-rated item, though still within the “Agree” category, was *“There is a struggle to incorporate AI tools into teaching methods due to limited knowledge and experience,”* with a weighted mean of 3.48 (Agree, Rank 5). This suggests that faculty are very interested in the use of AI, but that the optimized use of AI capabilities is limited by a lack of formal training at the institutional level to prepare them to use AI effectively and a lack of digital literacy in general.

Teacher readiness assessments reveal that many teachers are not confident enough to progress beyond surface interactions with the software, for example, because they do not receive professional development designed for such purposes (Güneyli et al., 2024). When this is considered, it is clear that technology's presence is not enough for effective use, and it is necessary to constantly upskill to turn “tech users” into efficient digital educators (Napitupulu et al., 2024; Adam & Nasri, 2025).

The results indicated that, although faculty members see the potential of integrating AI in educational processes, there are multiple barriers that need to be systematically addressed for a successful integration both structurally and pedagogically. The first-mentioned technical issues show the need for technical infrastructure facilitation efforts and stable internet connectivity, particularly in institutions in geographically disadvantaged locations. Additionally, issues related to academic honesty and critical thinking suggest a pressing need to improve digital ethics guidelines and redesign institutional evaluations toward fostering critical thinking and responsible AI use.

The belief that AI does not have contextual accuracy and cultural relevance implies that educational AI tools should be designed purposefully for Filipino learners and educators with clinical and learning contexts that are unique to them. Lastly, the fact that limited faculty understanding and experience of AI tools exists highlights the absolute need for ongoing and tiered workshops and institutional support to increase overall AI literacy.

The results stress that the “digitalization” of higher education is not just a matter of implementing software for the universities that would welcome it, but for higher education policy makers, university leadership, and curriculum developers. What is required is a well-balanced and well-funded approach with a strong focus on infrastructure deployment, through-and-through professional development, and clear and unambiguous guidance with respect to ethical matters in order to ensure the integrity, equity, and high quality of teaching.

4. Strategic recommendations for Nursing Faculty AI Integration

1. Robust institutional policy and Information and Communications Technology (ICT) infrastructure support are essential. The most prominent barrier is technical limitations and the lack of stability of connections (WM = 4.18), while the institution needs to upgrade its digital infrastructure first. Faculty offices, skills lab, and Related Learning Experience (RLE) coordination premises will be equipped with stable high-speed Wi-Fi to enable the seamless use of AI for academic activities.

At the same time, the university should acquire enterprise-grade AI systems (e.g., premium institutional versions of ChatGPT, Claude, and Turnitin AI tools) for the entire university. It will increase data security and ensure students' data complies with privacy regulations governing student records, while also getting rid of discrepancies that are caused by individual subscription prices.

Furthermore, it is important that the Academic Affairs Office establishes unambiguous discipline-specific academic integrity guidelines for acceptable and unacceptable utilization of AI in the nursing field. These policies need to explicitly state what represents fair use (such as creating learning content or modules for instruction) and what constitutes misuse (such as directly submitting AI-generated analyses in clinical subjects); this approach helps minimize faculty members' uncertainty and the perception of potential plagiarism by others (WM = 3.98).

2. It is suggested to train faculty with a differentiated training model instead of homogeneous training seminars, because there are various types of digital competence among faculty. This should correspond with faculty experience distribution, which should be predominantly junior (1-5 years of experience).

Tier 1 (Foundational Level): For junior faculty and people not exposed to AI too much. Basic digital literacy, prompt engineering basics, and basic usage (automated lesson planning, rubric development, assessment development, and classroom engagement tools like Quizizz, Kahoot, etc.).

Tier 2 (Advanced Level): Designed for educators who have seniority and a lot of experience. The focus of this level should be on AI-supported curriculum mapping, research synthesis, insightful analysis of clinical simulation designs, and critical ethical analysis of generative AI output in nursing education. High-impact and time-saving applications, especially those that help one stay on track for deadlines (WM = 4.04), including automatic syllabus generation, feedback creation, and administrative paperwork.

3. Create Peer-Led Mentorship and Microlearning for Digital Literacy for faculty so that tech-savvy faculty can lead their peers in short, targeted learning in their busy teaching schedules as needed. Due to high workloads – many faculty members working more than 40-50 hours per week – the regular, long-format training sessions can be difficult. The institution should therefore embrace a flexible approach to learning with asynchronous learning (5–10 minutes long) using microlearning modules and short task-based videos for key AI applications.

The department should appoint “AI Champions” from among tech-savvy and mid-career educators to enhance the internal capacity-building efforts. These individuals will be peer mentors, showcasing

how AI tools can enhance workflows, with a focus on nursing education, such as prompt libraries to support lecture preparation, case formulation, and assistance for clinical documentation.

4. Constitute a faculty working group to validate, scrutinize, and modify AI-generated content that resonates with the Philippine healthcare environment, culture, and guidelines set by the national nursing regulatory body (PRC-BON, CHED). Faculty must build capability in more sophisticated contextual prompting (WM = 3.72) to address concerns for limited contextual accuracy and relevance. This involves incorporating country-specific care guidelines for the Philippines into AI queries, making sure the input and output guidelines are culturally appropriate and clinically valid.

Furthermore, it is recommended that there be a joint and shared repository of validated prompts and AI-generated instructional materials. This should be done in a centralized manner with uniformity, accuracy, and reality in accordance with the local health care context, including the return to community-based Filipino patient simulations.

5. Given reports of decline in critical thinking abilities (WM = 4.04), it is recommended that faculty reprioritize the time saved by new AI tools to more effectively leverage them to improve assessment quality, rather than to increase the amount of assessment.

Focus the instructional assessment away from AI-generated writing towards authentic, performance-based assessment. These include direct observation in clinical and skills laboratory environments, oral defense of nursing care plans, structured post-clinical de-briefing, and patient care scenarios utilizing standardized patients in a simulation environment. This change maintains the importance of human-centered assessment for clinical judgment, reasoning, and professional competency for nursing students, while leveraging technology for administrative needs.

Conclusions

As a result of this study, the following conclusions are reached:

1. A picture of the USANT CHCE faculty emerges from this demographic profile – a younger to mid-career, heavily female-dominated workforce primarily composed of junior instructors who face demanding weekly schedules and possess uneven digital competencies. The profile forms an environment where the use of AI is strongly anticipated as an administrative support tool, but there are significant time limits on its usage and little or no formal training is carried out.

2. Although AI applications have proven valuable to individual faculty members by accelerating the creation of instructional materials, meeting strict reporting deadlines, and supporting multitasking, at the moment, their use remains limited to highly structured and repetitive tasks, and their potential for supporting administrative and policy-driven multi-faceted institutional operations remains untapped.

3. On AI's Impact on Time Management and Task Efficiency and Productivity for Faculty Demands, Workload, and Educational Outcomes: AI tools can effectively manage tasks and save time on material preparation, particularly enabling them to meet tight deadlines in academic work. This is an improvement that improves faculty job satisfaction and enables instructors to spend more time with students, providing them with mentoring and academic support. It also showed that the greatest benefit of using AI in education is its ability to contribute to educational outcomes; more time used for educational purposes by faculty means that students benefit from more effective guidance and learning supports. But when it comes to automation, the use of AI is still vastly restricted to structured and repetitive tasks. Therefore, AI generally redistributes and reprioritizes faculty duties and doesn't necessarily decrease the amount of work institutions overall.

4. For Perceived Challenges of AI Integration, there were internal and external challenges rooted in the capability of AI to enhance workload and time management among nursing educators. Technical limitations, ethical issues for academic integrity, lack of localized clinical relevance of AI-generated outputs, and lack of formal education about AI use are among these challenges. If not tailored and supported appropriately and institutionally, the use of AI might degrade the quality of instruction and professional standards within nursing education. Thus, it is essential to have conscious and systematic institutional efforts to achieve responsible integration of AI in an educationally sound manner.

5. From an institutional standpoint, the researcher found that the AI transition from an individual level to systematic institutional implementation requires regarding AI as a not only supplements IT tools in education but also as an integral part of the academic development of the college. To ensure AI is implemented sustainably and responsibly, a balanced solution is required that includes faculty capacity building, investment in infrastructure, and the creation of ethical and operational structures. These are key efforts to guarantee that the advantages of AI are optimized while maintaining the quality, integrity, and effectiveness of nursing education.

Recommendations

In direct alignment with the findings of the study, the following actionable recommendations are proposed to optimize workloads, enhance time management, and elevate productivity among the faculty:

1. Given that the demographic profile of the College of Healthcare Education is characterized by early- to mid-career educators facing exceptionally dense weekly schedules, traditional, exhaustive training seminars may inadvertently exacerbate workload stress rather than alleviate it. Therefore, it is recommended that the College design and implement modular, asynchronous "micro-learning" pathways focused on foundational AI prompt engineering and digital literacy. This allows junior instructors to build competence at their own pace without compromising their primary instructional or clinical duties. Furthermore, to bridge internal gaps in technical

capability, the institution should establish a collaborative peer-led tech-mentorship framework. Pairing digitally proficient educators with those experiencing technical barriers fosters a supportive, low-stakes environment for knowledge transfer, thereby democratizing technological literacy across the department in an empathetic, community-driven manner.

2. While individual faculty members successfully leverage AI for immediate, repetitive tasks, institutional leadership should intentionally expand the application of these tools toward broader, macro-level workflows. It is recommended that academic coordinators pilot AI tools for complex but highly structured administrative obligations, such as initial curriculum mapping, the aggregation and trend analysis of student evaluation data, and the preliminary structuring of institutional self-survey documents for accreditation bodies like the Philippine Association of Colleges and Universities Commission on Accreditation (PACUCOA) or the Commission on Higher Education – Regional Quality Assessment Team (CHED RQAT). To optimize efficiency uniformly and reduce administrative anxiety, the College should curate a centralized, vetted repository of standardized AI prompt templates. These templates should be specifically engineered for the repetitive paperwork native to nursing education, such as generating tables of specifications (TOS) or formatting syllabi to institutional standards, ensuring that all faculty members can reclaim valuable time.

3. Because the study demonstrates that AI effectively optimizes preparatory tasks and allows educators to shift their focus toward student support, this systemic redistribution of time must be formally recognized within the college's structural framework. Institutional leadership should adjust faculty workload accounting models to explicitly credit the qualitative hours redirected toward direct student mentoring, Related Learning Experience (RLE) guidance, and research advisement, thereby validating and elevating the human element in instruction. Concurrently, to fully capitalize on AI's positive correlation with educational outcomes, faculty should be encouraged to utilize advanced generative tools to develop highly contextualized, case-based situational inquiries. These resources should be deliberately aligned with the blueprint of the Philippine Nurse Licensure Examination (PNLE), thereby augmenting the students' critical thinking and diagnostic reasoning skills ahead of their professional entry.

4. To mitigate internal anxieties surrounding academic integrity and instructional quality, the College must proactively draft a comprehensive, localized policy governing AI utilization. This framework should explicitly delineate permissible parameters of AI assistance for both educators and students, establishing a transparent standard that safeguards academic rigor while embracing technological evolution. Furthermore, addressing technical limitations regarding the localized clinical relevance of AI outputs requires strict quality control. The institution must mandate a "human-in-the-loop" clinical validation protocol, requiring that any AI-generated clinical scenarios, simulation rubrics, or instructional aids undergo a mandatory review and validation process by a committee of senior clinical instructors. This ensures strict alignment with Department of Health (DOH) protocols, local epidemiological realities, and contemporary Philippine nursing standards before materials reach the classroom or simulation lab.

5. To move away from fragmented, sporadic individual adoption, the university administration, in close coordination with CHCE leaders and IT stakeholders, should formulate a comprehensive 3-to-5-year Strategic AI Integration Roadmap. This document should serve as an institutional blueprint that carefully balances infrastructure development, continuous financial investment in faculty capability, and the preservation of pedagogical quality. Finally, in alignment with ethical obligations and data privacy regulations, the university should invest in institutional licenses for secure, enterprise-level AI platforms. Providing faculty with centralized access ensures equity of resources across the department while comprehensively safeguarding sensitive student data in strict compliance with the Data Privacy Act of 2012 (RA 10173).

6. Future studies should extend beyond descriptive approaches by examining the measurable effects of AI integration on faculty performance and student learning outcomes. It is recommended that subsequent research employ mixed-methods or experimental designs across multiple institutions to generate more generalizable and longitudinal evidence on the effectiveness of AI in nursing education. This will contribute to the long-term advancement of national and international educational technology research.

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