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## Research Article

### Patterns and Extent of Generative AI Use Among College Students: A Demographic-Based Quantitative Analysis

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#### ABSTRACT

This research investigated the trends and levels of generative artificial intelligence (AI) application among the students of the Bachelor of Science in Information Systems (BSIS) at Carmen Municipal College in the Academic Year 2025 to offer a localized approach to a Philippine-based context of higher education. Data was gathered aligned with descriptive quantitative design, 389 respondents (72.6% response rate) were surveyed using a standardized questionnaire and analysed with descriptive statistics and non-parametric tests. It has been found that the most common types of tasks by which students use generative AI are academically related and efficiency-based, namely, completing homework, brainstorming, seeking advice, and brainstorming, with an average usage of 3.15, meaning that AI is a facilitating learning tool, not an alternative to learning on their own. Inferential statistics showed that the difference in perceived AI influence was statistically significant among genders ( $U = 16,654$ ,  $p = .047$ ), year level ( $H(2) = 11.40$ ,  $p = .003$ ), and age ( $H(4) = 9.95$ ,  $p = .041$ ), which means that perceived AI influence is different among the demographic groups in the institution. In contrast to the previous research that tends to generalize the application of AI by students in a larger context, the given study notes the patterns of its usage as conditioned by academic level and demographics of learners in a particular institutional environment. The findings can be used as context-specific information that can be used to develop evidence-based policies, AI literacy-focused programs, and responsible integration strategies in other similar public institutions of higher education.

**Keywords:** *Academic Use, AI Tools, Generative AI, Higher Education, Student Engagement*

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## **Introduction**

Generative artificial intelligence (GenAI) is a rapidly developing field that has already introduced a paradigm shift in the field of higher education by changing the approach to performing academic tasks and shifting established limits of learning support. Large language models, commonly referred to as generative AI, have become highly accessible to students in particular as a system that enables them to write academic papers, summarize academic readings, translate texts, and provide explanations of complex concepts, among others (Kasneci et al., 2023; Tlili et al., 2023; Zhai, 2022). In contrast to the traditional education tools that rely on planned learning or human intervention, GenAI works as a real-time, adaptive, and personal response. This urgency has enhanced its uptake by college students as they grapple with mounting academic pressure, thus entrenching AI tools into the day-to-day operations of learning and reinventing the academic process in higher education.

The pedagogical nature of this change is immense. It means that GenAI can serve as a cognitive aide, helping the student to arrange thoughts, advance linguistic precision, and decrease task difficulty (Kasneci et al., 2023; Farrokhnia et al., 2024; Lim et al., 2024). AI tools can increase the short-term productivity of students and their perceived competence of students by reducing the barriers to academic work, especially in writing-intensive classes. Nevertheless, researchers warn that this kind of scaffolding is inherently different in comparison with conventional instructional assistance since it facilitates the automatization of cognitive processes that lie at the core of the very learning process (Zhai, 2022; Farrokhnia et al., 2024; Lim et al., 2024). Consequently, the application of GenAI provides a starkly important question regarding whether improvements in efficiency are achieved at the cost of deep learning and self-development of the skills.

Empirical data gathered in various higher education sectors indicate that students greatly believe that generative AI is helpful in facilitating workload and academic requirements. Student acceptance rates are always high, and learners mention saving time, clarity of ideas, and stress reduction as the main benefits of AI

usage (Lund et al., 2023; Cotton et al., 2023; O'Connor and Chatfield, 2024). Such perceived advantages especially seem to be salient among students with academic anxiety or language impaired where GenAI is seen as a counterbalancing academic support. Nonetheless, the same reports indicate that students tend to have a vague perception of the pedagogical threshold of AI support, a situation that causes mixing boundaries between the support and replenishment of learning efforts.

In addition to these changes in benefits that are perceived, there have been compounding issues to do with academic integrity and cognitive dependency. Current studies also emphasize how the ability of GenAI to produce plagiarism-free, citation-formatted academic content has made defining what constitutes plagiarism and authorship more difficult (Perkins, 2023; Rudolph et al., 2023; Newton and Doherty, 2024). GenAI is able to create unique-looking outputs that are not detected as plagiarism by common plagiarism detection tools, which makes it difficult for instructors to determine the authorship of their students. Moreover, research can indicate that overreliance on AI creations can impair students in their critical thinking, creativeness, and disciplinary knowledge longevity (Rudolph et al., 2023; Newton and Doherty, 2024; Perkins, 2023). These data highlight the importance of researching not only the existence of the use of AI but also the level and the character of the dependence of students on such technologies.

Globally, the spread of GenAI in tertiary education has exceeded the creation of institutional policies and ethical systems. Comparative studies indicate that numerous academic institutions have used a reactive instead of a proactive strategy and frequently have been using temporary rules or discretion on the part of the instructor (Holmes et al., 2022; Tlili et al., 2023; UNESCO, 2023). Such a policy lag has also led to the poor academic practice, ambiguity among schoolchildren, as well as halting interventions at academic integrity standards. According to international policy reports, absolute prohibition is impossible and even not pedagogical; rather, evidence-based regulation, open communication, and AI literacy should be among institutional solutions

(UNESCO, 2023; Holmes et al., 2022; Tlili et al., 2023).

The situation is aggravated by structural and resource disparities, when considering the issue of Asian higher education systems. The studies conducted in East Asia and South East Asia have revealed that the level of experimentation with GenAI tools among students is extremely high, yet there is a lack of formal information about what and how to responsibly or efficiently use it (Chan and Hu, 2023; Lim et al., 2024; Zhu et al., 2024). In such situations, students often claim to be confused about what practices are tolerated in academics, especially when there is no institutional policy or understanding of the same. Also, the issues of misinformation, references which are hallucinated, or inaccuracies in facts are common, which brings up questions of how trustworthy AI-generated scholarly work can be (Zhu et al., 2024; Chan and Hu, 2023; Lim et al., 2024). These findings in the regions indicate the significance of location-specific studies that can explain the differences in institutional capacity, digital literacy, and access.

The integration of generative AI in the Philippine higher education sector has not been empirically done, but has similar challenges to explore. Despite an anecdotal report of the growing numbers of students who rely on AI tools to write and/or complete coursework, there is often little systematic information about the patterns of use. The debates at present taking place in the Philippines are far more concerned with issues related to faculty members, such as cheating and questioning the validity of assessment over student behaviour (Reyes and Mendoza, 2023; Dela Cruz et al., 2024; Abad and Garcia, 2022). This gap restricts the ability of institutions to develop informed interventions, since policy formulations are regularly made without an empirical understanding about the manner, reason, and frequency with which students are utilizing GenAI.

To make the problem even more complicated, there are demographic aspects of AI utilization. According to international studies, age, gender, academic level, as well as field of study might be among the variables that contribute to

the frequency of AI use and the level of dependence (Zawacki-Richter et al., 2024; Cotton et al., 2023; O'Connor and Chatfield, 2024). Young learners and those involved in writing-intensive subjects seem to be more likely to trial generative tools and senior learners may utilize AI in a more focused way to refine their work instead of creating it. Nevertheless, it cannot be presumed that these trends are same across institutions or even across cultures, and therefore, localized demographic analysis is necessary.

Carmen Municipal College (CMC) is one such place that is of vital interest in such research. Being one of the new state-funded higher education institutions in the area, CMC receives students with a wide range of socioeconomic status, with many having little access to extracurricular academic resources. Based on studies of technology-mediated learning, AI tools can serve as informal learning aids that partially fill in institutional offerings in resource-limited settings (Zhai, 2022; Holmes et al., 2022; Kasneci et al., 2023). Simultaneously, the lack of guidelines and AI literacy programs can lead to the risk of inappropriate or overuse of it, as students, who are uninitiated to academic standards of authorship and originality, might be especially prone to them.

Regardless of the increase in GenAI becoming visible in classroom practices at CMC, no empirical research has captured the use of these technologies among the students in a systematic manner. No institutional records regarding the demographic profile, frequency of GenAI use, academic purposes, and degree of dependency of the students exist out there. There is also no evidence available on whether there are significant differences in usage patterns according to gender, age, and year level. This is a knowledge gap and is therefore considered a critical research gap especially to an institution that is trying to achieve balanced access, integrity and pedagogical value in a fast changing technologically oriented world.

This gap is critical towards informed institutional decision making. Evidence-based knowledge about AI use among students allows formulating adequate policies, frameworks of AI literacy, and assessment strategies that fo-

cus on the learning processes, as opposed to automated results (Holmes et al., 2022; Newton and Doherty, 2024; UNESCO, 2023). In this direction, the researcher proposes that the study will investigate the demographic picture of the students utilizing generative AI in Carmen Municipal College, find the frequency and educational purposes of using the tools, evaluate the level of student dependency on them, and identify any significant dissimilarities in the use of tools by the selected demographic variables. The study aims to give CMC an empirical basis on the responsible, ethical, and pedagogical grounds to integrate generative artificial intelligence in higher education by yielding localized empirical evidence.

### **Materials and Methods**

The research design adopted in this study was a descriptive quantitative research design in that it systematically analysed the trends, frequency, and perceived impact of the generative use of artificial intelligence (GenAI) amongst college students. Quantitative approach has been considered as an adequate method since the research has attempted to gauge measurable behaviours, compare differences between the groups based on demographic variables, and produce statistically interpretable results that may inform institutional policy and decision making on instruction. The study would be done in the Bachelor of Science in Information Systems (BSIS) students of Carmen Municipal College in the Academic Year 2025.

The population sample was officially enrolled BSIS students of first-, second-, and third-year level. A full listing methodology was used, in which all the eligible students were invited to take part in the research, and this enables the coverage of the population to be inclusive. The eligible participants to participate in the study were 536, of which 389 had responses that can be used, and the response rate is 72.6%, which is quite high compared to the average of about 44.1 percent displayed by online surveys in education-related research (Wu et al., 2022) and is equally high compared to the acceptable response threshold in applied research based on surveys (Elliott et al., 2024). The rest 147 cases did not respond and the final

sample was deemed to be sufficient to conduct an analysis since it is a substantial number constituting a target population and justifies the statistical process involved in the study.

A structured self-administered questionnaire was used to gather the data with a specific aim of capturing the generative pattern of using AI among the students. It was based on four major choices demographic (gender, age, year level) and usage frequency of using AI on academic and non-academic tasks. The rating of frequencies and influence responses was done using a five-point Likert scale with Never as an option and Very Often as the closest measure to assess the extent of AI engagement.

The instrument by Süsse and Kobert (2023) has been completely borrowed as the basis of the questionnaire. To obtain the content validity of the study setting, the given instrument had to be evaluated by the expert faculty that stated the items to be not only comprehensible but also relevant to the purpose of the research but applicable to the population of BSIS college students as the researchers of the use of generative AI. To check the reliability of the items a pilot test of 30 participants was done. Cronbach alpha (0.961) was composed of the assessment of reliability of the 31-item questionnaire, and the value is acceptable and suggests the excellent reliability of the questionnaire as a study instrument (Hair et al., 2024; Al-Mansour et al., 2025).

The college authority was then approached to accept the process of data collection in a formal way. When conducting the research, the ethical considerations were taken with utmost care. The respondents were informed regarding the objectives of the research, voluntary nature of the participation, right to exit at any point in spite of this, and assurances of confidentiality and anonymity. Informed consent was followed by participation.

The questionnaire had been given during a given-data-collection time period in an online and hard copied format so as to cover all the areas of different student access to digital access. Strict follow-up in reminders was sent to enhance response rates. Questionnaires filled in were verified as complete, coded and kept in a safe deposit location to ensure confidentiality of respondents.

The analysis of data was performed with help of the right statistical packages. The frequency counts, percentages, weighted means, rankings were descriptive statistics through which the demographic characteristics were summarized and the patterns of using generative AI were defined. Means were weighted by describing predefined scale descriptors to ascertain how and how often AI is used across various purposes.

To measure the differences in the perceived impact of generative AI during various demographic characteristics, non-parametric inferential tests, were adopted because the data does not follow a normal distribution. The differences based on gender were compared with the help of Mann Whitney U, and the differences based on the year level and age were compared with values based on Kruskal-Wallis H. Results were explained concerning the median scores where statistically significant differences have been found to establish the direction and magnitude of group differences. Such analytical processes provided objective, reliable and interpretable results that fulfilled the research questions of the study.

## Result and Discussion

The section provides and discusses the research conclusions on the implementation of the generative AI technologies by students of the Carmen Municipal College in the Academic Year 2025. The findings are tabulated in relation to the research questions that will address the levels, uses, and occurrence of AI use, possible variation depending on demographic variables of year level, age, and gender. Every set of findings is examined and described concerning the current literature and theoretical paradigms, outlining trends, patterns, and implications to teaching, learning, and institutional practices. A descriptive and an inferential analysis will be combined in this section providing a decent image of how plus AI tools are already used, why people can use them, and what

positive and negative effects may be expected due to their utilization in the academic field.

As shown in table 1, the demographic profile of the respondents (N = 389). Samples were composed of a somewhat higher number of female students (n = 206, 53.0%) compared to male students (n = 183, 47.0%) which meant that there were close gender balances, which provided relevant gender-based comparisons. In terms of age, the majority of respondents were between 17 and 20 years old (n = 247, 63.5%), followed by those aged 21–24 (n = 105, 27.0%), while older age groups were represented in smaller proportions, with respondents aged 25–28 (6.2%), 29–32 (2.1%), and 33–36 (1.3%). Such distribution implies that the results are mostly the attitude and the activity of the young early-adult students with the possibility of the limited comparison between the age groups. In terms of year, the respondents were fairly equally spread out among the stages of study with 35.2 percent of first year students (n = 137), 30.8 percent of a second year students (n = 120) and 33.9 percent of a third year students (n = 132) respectively. Having a well-balanced representation of the year levels also makes the data more robust since it reduces the level of cohort bias and enables a proper analysis of the generative AI use difference according to academic advancement stages. The demographic makeup of the sample respondents (as presented in Table 1) depicts an almost equal gender distribution, majority of younger learners and a relatively even distribution of the respondents by year group. The profile is consistent with the trends in the enrolment into the public institutions of higher education and gives a good ground to study the differences in the demographics of GenAI usage. The equal gender and annual cohort distributions minimize cohort bias and enhance the quality of comparative studies, especially in the case of technology adoption and usage behaviour (Zawacki-Richter et al., 2024; Lim et al., 2024).

Table 1. Demographic profile of the respondents (n=389)

Demographic profile	Frequency	Percentage
Gender		
Female	206	53%
Male	183	47%

Demographic profile	Frequency	Percentage
Age		
17-20	247	63.5%
21-24	105	27.0%
25-28	24	6.2%
29-32	8	2.1%
33-36	5	1.3%
Year Level		
1st year	137	35.2%
2nd year	120	30.8%
3rd year	132	33.9%

Preeminence of the 17-20 cohort of respondents indicates that the answers are largely representative of the experiences of undergraduate students in the early stages of their career a group that is commonly cited in the literature as being more willing to experiment with the emerging digital tools (Kasneji et al., 2023; Sun and Zhou, 2024). Smaller learners also use the AI-based resources as the

transitional school academic resources when adapting to the cognitive and writing requirements of higher education. Yet, positive interactions with older students, albeit in lower percentages, facilitate significant comparisons between groups of students of different ages and allows focusing on the potential impact of academic maturity on the perception of the role of AI in education.

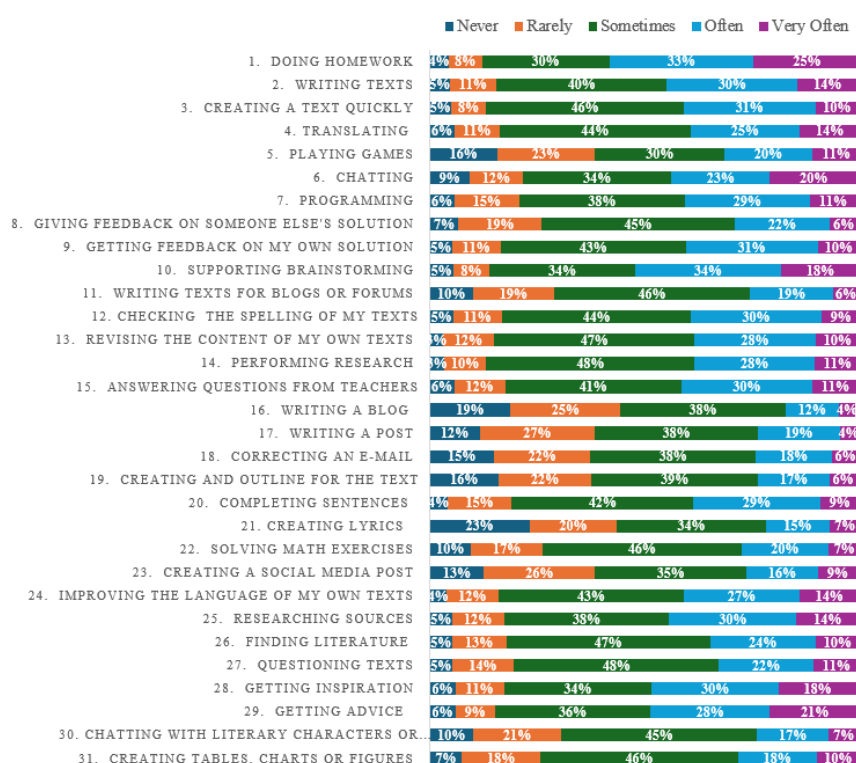


Figure 1. Percentage of Generative AI usage in different ways

The Figure 1 above demonstrates that there is a disparity in usage of generative AI across the five responses in categories of never, rarely, sometimes, often, and very often. The majority of the activities fall under the sometimes

category with the most frequent one being performing research (48%), questioning texts (48%), revising the contents of the own texts (47%), finding literature (47%), and creating a text quickly (46%), which suggests that

students use the generative AI on an infrequent yet regular basis. The most predominant category in academic activities is often such as brainstorming (34%), doing homework (33%), writing text (30%), answering teachers questions (30%) and researching sources (30%), indicating higher frequency of use in activities with an academic orientation. At the same time, the very often answers are a bit more in doing homework (25%), getting advice (21%), chatting (20%), and supporting brainstorming (18%), which indicates a tendency to use AI in cases of certain activities. Conversely, the percentage in never and rarely in more creative and informal activities, including creating lyrics (23% never; 20% hardly) and writing a blog (19% never; 25% rarely), and creating social media post (13% never; 26% hardly) display more refusal in these activities. All in all, the spread of the usage level of the categories provides evidence that generative AI is mostly applied on medium levels, though the patterns of usage may differ in the degree of academic relevance and the character of a task.

Table 2 analysis revealed that the students utilized the generative AI tools in an academic and efficiency acquisition predominantly oriented manner. The most common application was doing homework ( $M = 3.67$ ), which can be understood as to a high degree, meaning that generative AI is becoming an ordinary aid in academic activities to solve tasks and relieve faculty workloads (Cotton et al., 2023; von Garrel and Mayer, 2024). This was succeeded by supporting brainstorming ( $M = 3.51$ ), getting advice ( $M = 3.48$ ), and getting inspiration ( $M = 3.43$ ), all rated as often, and this reflects the tendency of students to use AI as a statistical partner to ideate, receive guidance, and surmount initial obstacles when approaching learning tasks (Farrokhnia et al., 2024; Kasneci et al., 2023). Other high-ranking purposes such

as improving the language of my own text ( $M = 3.35$ ), researching resource ( $M = 3.36$ ), and writing texts ( $M = 3.38$ ) were rated as sometimes, indicating that AI was applied selectively to serve academic writing and information search, unlike when it is used as a direct assistance in the homework. Such tendencies suggest that generative AI serves as an efficient productivity tool and cognitive scaffold especially in the initial stages of tasks and creativity, as well as problem-solving.

The low-order reasons indicate an inactivity in specialized, creative, or non-academic activities. The most uncommon used versions was writing a blog ( $M = 2.57$ ), rarely, with little AI inclusion into personal writing. Equally low was creating lyrics ( $M = 2.62$ ), creating an outline for a text ( $M = 2.75$ ), writing a post ( $M = 2.77$ ), and correcting an email ( $M = 2.78$ ) (sometimes/rarely), indicating students do not prioritize AI for niche creative or casual communication. Other low values was playing games ( $M = 2.89$ ) and creating social media posts ( $M = 2.84$ ), which highlights limited non-academic use. Overall, these poor indicators demonstrate that the role of AI is still largely academic with the personal/creative use being underdeveloped, which is also due to the tendencies of Asian students putting instrumental rather than exploratory applications into practice (Chan and Tsi, 2023).

The fact that the overall weighted mean is 3.15 (sometimes) indicates that there is moderate integration into the academic habit where AI is the complement and not the dominant force behind the learning process (Limna et al., 2024). This ambivalent trend endorses selective, intentional adoption rather than overreliance, which is in line with the results of students relying on AI to supplement, not replace, core thinking (Newton and Doherty, 2024).

Table 2. To describe the purposes for which generative AI tools are used by students

Indicators	Weighted Mean	Interpretation	Rank
1. Doing homework	3.67	Often	1
2. Writing texts	3.38	Sometimes	5
3. Creating a text quickly	3.33	Sometimes	9
4. Translating	3.31	Sometimes	11.5
5. Playing games	2.89	Sometimes	25

Indicators	Weighted Mean	Interpretation	Rank
6. Chatting	3.33	Sometimes	9
7. Programming	3.24	Sometimes	17
8. Giving feedback on someone else's solution	3.02	Sometimes	21
9. Getting feedback on my own solution	3.29	Sometimes	13.5
10. Supporting brainstorming	3.51	Often	2
11. Writing texts for blogs or forums	2.92	Sometimes	23
12. Checking the spelling of my texts	3.26	Sometimes	15
13. Revising the content of my own texts	3.31	Sometimes	11.5
14. Performing research	3.33	Sometimes	9
15. Answering the teacher's questions	3.29	Sometimes	13.5
16. Writing a blog	2.57	Rarely	31
17. Writing a post	2.77	Sometimes	28
18. Correcting an e-mail	2.78	Sometimes	27
19. Creating an outline for a text	2.75	Sometimes	29
20. Completing sentences	3.25	Sometimes	16
21. Creating lyrics	2.62	Sometimes	30
22. Solving math exercises	2.99	Sometimes	22
23. Creating a social media post	2.84	Sometimes	26
24. Improving the language of my own texts	3.35	Sometimes	7
25. Researching sources	3.36	Sometimes	6
26. Finding literature	3.22	Sometimes	18
27. Questioning texts	3.19	Sometimes	19
28. Getting inspiration	3.43	Often	4
29. Getting advice	3.48	Often	3
30. Chatting with literary characters or historical persons	2.9	Sometimes	24
31. Creating tables, charts, or figures	3.05	Sometimes	20
Over-all mean	3.15	Sometimes	

Legend: 1.00-1.79 (Never), 1.80-2.59 (Rarely), 2.60-3.39 (Sometimes), 3.40-4.19 (Often), 4.20-5.00 (Very Often)

As demonstrated in Table 3, the Mann-Whitney U test was used in comparing the level of impact of generative AI in male students (Mdn = 3.07) and female students (Mdn = 3.21), which has non-normal values; Table 3 illustrates the result. The findings indicated a significant difference ( $U = 16,654$ ,  $p = .047$ ), which rejected the null hypothesis and exhibited a moderate difference in the perceived influence among females. It corresponds to more recent data that female students are more regularly using AI as an academic aid, specifically in

writing and organization, which is possibly explained by the fact that they feel more comfortable with collaborative tools (Cotton et al., 2023; O'Connor and Chatfield, 2024; Chan and Tsi, 2023). At the institutional level, it highlights the necessity of using gender-inclusive approaches to consider different AI levels of confidence and choice, which would allow developing and allocating skills equitably (Zawacki-Richter et al., 2024; Bretag et al., 2024).

Table 3. Significant differences in the influence level of generative AI technology usage in terms of gender

Gender	Median	Mann-Whitney U	P	Decision on Ho	Conclusion
Female	3.21	16654	0.047	reject	significant
Male	3.07				

Note: The p-value is significant below .05

As shown in Table 4, the Kruskal-Wallis H test between the generative AI influence based on the year level (non-normal data) showed a noticeable difference ( $H(2) = 11.40, p = .003$ ). Medians have increased over time (1st year = 3.03; 2nd year = 3.23; 3rd year = 3.26) as more advanced students experience the impact of AI through improved exposure and strategic

combination in more complicated course work (Perkins, 2023; Rudolph et al., 2023; Lim et al., 2024). This benefits pedagogically scaffolded AI literacy rudimentary monitored direction of beginners and superior ethical/critical mentoring of adults so they can become mature without asymmetrical dependence (Holmes et al., 2022; Newton and Doherty, 2024).

Table 4. Significant differences in the influence level of generative AI technology usage in terms of Year Level

Year Level	Median	Kruskal-Wallis	df	P	Decision on Ho	Conclusion
1st year	3.03					
2nd year	3.23	11.4	2	0.003	Reject Ho	Significant
3rd year	3.26					

Note: The p-value is significant below .05

As outlined in Table 5, the Kruskal-Wallis H test comparing generative AI influence across five age groups (non-normal data), revealing significant differences ( $H(4) = 9.95, p = .041$ ). Peak influence occurred among 29–32-year-olds (Mdn = 3.87), with decline in the 33–36 group, suggesting mature students (29–32)

value AI most purposefully for efficiency and goal-directed learning, while oldest learners show skepticism toward outputs (Sun & Zhou, 2024; Zhai, 2022). This age-responsive pattern necessitates tailored support matching digital confidence and academic habits across cohorts (Kasneci et al., 2023; Lim et al., 2024).

Table 5. Significant differences in the influence level of generative AI technology usage in terms of Age

Age	Median	Kruskal-Wallis	df	P	Decision on Ho	Conclusion
17-20	3.16					
21-24	3.03					
25-28	3.00	9.95	4	0.041	Reject Ho	Significant
29-32	3.87					
33-36	2.78					

Note: The p-value is significant below .05

### Conclusion

This research paper concludes that the application of generative artificial intelligence (GenAI) into academic work of the student population of Bachelor of Science in Information Systems (BSIS) at Carmen Municipal College will be moderately applied to academic activities of the student population at the Academic Year 2025 and will involve a localized analysis of AI application at one local institution of higher learning. The results suggest that academic and efficiency-oriented uses of generative AI are the most prevalent regarding the use of this type of artificial intelligence among students, specifically, to do homework, facilitate

brainstorming, consult, and brainstorm. The implication of this trend is that GenAI is supposed to be an academic support enhancing tool which is designed to improve productivity, deliver primary processes of learning, but will not replace independent intellectual activity.

The general degree of use indicates a balanced approach, with the students not unitarily depending on AI to help them complete their learning activities but stay engaged in academic activities. Gender, age, and year-level differences were found in perceived influence, which means that, depending on their academic experience and exposure to more complex learning conditions, students can have

different levels of engagement with generative AI. These differences, however, are in the framework of the institution and can be perceived in terms of indicative but not generalizable trends.

Comprehensively, the results above note how generative AI has become an increasingly important part of student learning practices, especially as a source of academic help, generator of ideas, and optimizer of tasks. Meanwhile, they emphasize the relevance of emphasizing the direction of its use so that it does not suppress, but, on the contrary, enhances meaningful learning. Since this research is narrowed down to BSIS students in one institution, future research is suggested to expand the scope by cross-disciplinary cross-institutional research. It is also suggested that mixed-method techniques can be applied (i.e., interviews or focus groups) to gain more information about the motivation, experiences, and decision-making processes of the student who applies generative AI and thus become part of a more substantial picture of its role in higher education.

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