Use of Artificial Intelligence in Educational Settings

A Thesis

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ABSTRACT

This study determined the use of artificial intelligence in educational settings and its relationship to the level of satisfaction among students in the College of Teacher Education at Southern de Oro Philippines College. The participants were the 1st year to 4th year students enrolled for the School Year 2024-2025. This study used a correlational research design to investigate the relationship between students' use of AI tools and their level of satisfaction. A researcher-made questionnaire based on a review of related literature, were used to gather data. A total of 117 participated, selected using Slovin's formula. The data were examined using Pearson's Product Moment Correlation Coefficient, Mean, and Standard Deviation. The findings showed that majority of the students expressed a high level of satisfaction with AI tools. According to the study, students are mostly drawn to AI because it makes their work easier, more user-friendly and, it enhances this learning experience. Additionally, those students who frequently utilize AI tools feel a higher level of satisfaction. It is recommended for students to use AI tools as a supplement to their academic, but not solely depends on it.

KEYWORDS: artificial intelligence, students' satisfaction, usefulness

I. INTRODUCTION

The rapid growth of technology changes the education setting in the 21st century. With the integration of digital platforms, students can enhance their academic experience by using virtual learning tools. The key component of this change is the integration of Artificial Intelligence (AI). Artificial intelligence in education is addressed to the technological advancements that enables learning experiences through intelligent tutoring, adaptive learning platforms, and automated feedback mechanism. AI is more than just a set of technologies; it includes chatbots and machine learning that can help with the students learning experiences.

Artificial Intelligence (AI) is transforming education by providing chances for individualized learning, allowing students to progress at their own pace and focus on subjects that captivate their interest. This individualized approach enhances motivation and boosts overall academic performance. According to Ouyang et al. (2021), AI presents considerable potential of transforming educational methodologies and instructional strategies, as it adapts learning experiences to meet the varied needs of students. Moreover, AI improves the learning experience by real-time feedback and assessment. AI systems continuously monitor student progress and provide immediate feedback, enabling learners to correct mistakes promptly and reinforce their understanding of concepts. This timely intervention is essential for helping students stay on track and achieve their academic goals.

Higher education uses generative AI tools; according to a German survey, two-thirds of college students use these tools for activities including text analysis, production, problem-solving, and decision-making in their courses (von Garrel et al. 2023). Similar

survey shows that majority of college students in the Philippines have strong awareness of AI technology (Team, 2024). This widespread knowledge indicates a fundamental understanding of AI technologies and their diverse applications. The high level of awareness and increasing adaption of AI tools among Filipino college students underscores the potential benefits of generative AI in enhancing education, and innovation across various field.

Furthermore, a recent study revealed that tertiary students in Benguet actively use generative AI tools such as ChatGPT, CiCi, and Grammarly in their academic activities (Ignas,2025). These tools primarily used to obtain information, checking grammar accuracy, and enhance writing efficiency. This suggests that AI tools has become part of academic among Filipino students, facilitating learning and improving the quality of academic outputs.

While integrating AI into education presents a lot of advantages, it also raises concerns about students becoming dependent on technology. Ahmad et al. (2023) noted that reliance on AI tools may lessen student motivation and lead to a reduction in cognitive skills. However, it is important to recognize that when AI tools are used appropriately, they can enhance students' satisfaction. Research indicates that AI-powered educational tools provide personalized feedback and adaptive learning experiences, which contribute to a sense of competence and independence among learners (Byers, 2024). This personalized approach not only encourages engagement but also improves the students performance academically, which makes them to be highly satisfied with their learning experiences.

Thus, this study sought to examined the use of artificial intelligence in educational settings. It focused on what AI tools and applications used by students, frequency of use, perceived usefulness of AI tools, ease of use and, students' satisfaction with AI tools. Even though some research has been done on AI in education, there remains a knowledge gap in understanding how these technologies affect students' satisfaction and, learning experiences.

II. METHODOLOGY

This study used a correlational research design. Correlational research is a non-experimental research approach that measures the relationship between two or more variables without manipulating them, utilizing statistical analysis to identify patterns and associations (Devi et al., 2023). This methodology is particularly valuable in educational research, as it helps for the exploration of how AI tools might affects students' experiences and level of satisfaction. The following statistical tools were employed to gain a deeper comprehension of the data: Mean and Standard Deviation were utilized in Problems 1 and 2. Problem 3 utilized the Pearson Product-Moment Coefficient of Correlation to find a significant relationship between the use of artificial intelligence and students' satisfaction.

III. RESULTS AND DISCUSSION

Problem 1. What is the level of AI used by the respondents in term of:

1.1 tools and applications used;
1.2 frequency of use;
1.3 perceived usefulness; and
1.4 ease of use?

Table 1

Summary Table of Use of Artificial Intelligence

Use of Artificial Intelligence	Mean	SD	Description	Interpretation
Tools and Application Used	3.16	1.32	Undecided	Moderate
Frequency of Use	3.46	1.06	Agree	High
Perceived Usefulness	3.69	1.01	Agree	High
Ease of Use	3.75	0.98	Agree	High
Overall	**3.51**	**1.09**	Agree	High

Note: 4.21-5.00 Very High; 3.41-4.20 High; 2.61-3.40 Average; 1.81-2.60 Low; 1.00-1.80 Very Low

Table 1 shows the data on the use of artificial intelligence among students. The results indicate the overall Mean score of 3.51, SD = 1.09, described as Agree and interpreted as High level of AI utilization among education students. The findings suggest that these students actively incorporate AI tools and technologies into their academic work. This aligns with recent research by Freeman (2025), which reveals that the vast majority of students use AI in some capacity, such as positive attitudes toward AI reflect increasing acceptance and integration of innovative digital resources, which can enrich learning experiences and better prepare students for future challenges.

The ease of use has a high Mean score = 3.75, SD = 0.98, described as Agree and interpreted as High. This suggests that most students are attracted to AI because it simplifies tasks and features an intuitive, user-friendly design. According to Ayanwale & Ndlovu (2024), perceived ease of use plays a crucial role in shaping students' positive attitudes and readiness to adopt AI technologies in educational environments. When students find AI tools easy to understand and operate, they are more likely to incorporate them into their academic activities, boosting engagement and enhancing learning outcomes.

The tools and application used has the lowest Mean, 3.16, SD = 1.32, described as Undecided and interpreted as Moderate. This suggests that students have only moderate familiarity with specific AI tools but still recognize their usefulness and ease of use in educational contexts. Higher scores for frequency, perceived usefulness, and ease of use show that students find AI beneficial for academic activities. These findings support evidence that AI tools can enhance learning by personalizing instruction and streamlining educational processes (Sergeeva et al., 2025). However, research also indicates that while many students use AI tools like ChatGPT to improve productivity and learning quality, a significant number remain less familiar with the variety of AI applications available, highlighting the need for increased education and support (Thomson et al., 2024).

The higher the level of variables related to the use of artificial Intelligence, the greater the level of students' satisfaction. This highlights that increased interaction with AI tools directly contributes to how content and fulfilled students feel in their learning journey. As students become more familiar and comfortable with AI technologies, they experience greater support, confidence, and motivation (Lin & Chen, 2024). Enhancing access to AI resources and providing proper guidance can further boost student satisfaction and academic achievement. These findings emphasize the critical need for thoughtful integration of AI in education to foster a more engaging, effective, and rewarding learning environment (Adewale et al., 2024).

Problem 2. What is the level of students' satisfaction with AI tools?

Table 2

Students' Satisfaction with AI Tools

Indicators	Mean	SD	Description	Interpretation
1. I value the real-time support that AI tools offer.	3.68	0.98	Agree	High
2. I believe that AI tools have made learning more efficient for me.	3.54	0.92	Agree	High
3. I would recommend using AI tools to my peers for academic support.	3.74	0.91	Agree	High
4. I appreciate the personalized learning experiences offered by AI tools.	3.66	0.92	Agree	High
5. I feel more engaged and motivated in my learning when using AI tools.	3.66	0.97	Agree	High
6. I am highly satisfied with AI tools in enhancing my learning experience.	3.55	0.93	Agree	High
7. I find using AI tools has positively influenced my academic performance.	3.71	0.87	Agree	High
8. I appreciate the ability of AI tools to enhance my learning pace and style.	3.72	0.82	Agree	High
9. I use AI tools to provide clear explanations that improve my understanding.	3.84	0.88	Agree	High
10. I significantly improve my understanding of complex subjects with AI tools.	3.89	0.88	Agree	High
11. I receive feedback from AI tools that is consistently helpful and constructive.	3.74	0.85	Agree	High
12. I find that AI tools provide me with valuable resources that enhance my studies.	3.68	0.91	Agree	High
13. I enjoy how AI tools have made studying more enjoyable and interactive for me.	3.79	0.92	Agree	High
14. I feel like AI tools have made it easier for me to access information and resources.	3.69	0.93	Agree	High
15. I appreciate availability of AI tools has reduced my anxiety related to academic tasks.	3.71	0.95	Agree	High
Overall	**3.71**	**0.91**	Agree	High

Note: 4.21-5.00 Very High; 3.41-4.20 High; 2.61-3.40 Average; 1.81-2.60 Low; 1.00-1.80 Very Low

Table 2, shown on the following page, presents the data on students' satisfaction with AI tools. The overall Mean score of 3.71, with SD = 0.91, described as Agree, and interpreted as High. This suggests that the most students are highly satisfied with their use of AI in academic settings. This high satisfaction level suggests that AI tools are not only well accepted but also considered effective in enhancing learning experiences by enabling personalized instruction, delivering prompt feedback, and increasing student engagement. Additionally, research emphasizes that content quality, students' emotional well-being, and how useful they perceive AI tools can be plays a significant role in shaping

students' satisfaction (Almufarreh, 2024). The highest Mean, 3.89 SD = 0.88, described as Agree and interpreted as High, is reflected in indicator 10, I significantly improve my understanding of complex subjects with AI tools. This suggests that students appreciate how AI breaks down difficult concepts into manageable parts, making challenging subjects more accessible and less overwhelming. Hennekeuser et al. (2024) stated that AI has the ability to personalize learning experiences, tailoring educational content to fit each student's unique needs and pace, which fosters deeper understanding and confidence.

Table 2 also showed the lowest Mean 3.54, with SD = 0.92, described as Agree and interpreted as High, corresponding to indicator 2, I believe that AI tools have made learning more efficient for me. This suggests that, despite being the lowest, students generally perceive AI tools as effective in enhancing their learning efficiency. These findings reflect a positive attitude toward the integration of AI in their academic experiences, even in the least strongly endorsed statement. The strong satisfaction levels suggest that AI technologies are well-accepted and effective in improving students' learning experiences. Similarly, students have expressed moderate to high satisfaction with AI chatbots, particularly valuing their responsiveness, accuracy, and adaptability to users' needs (Subaveerapandiyan et al., 2024).

Problem 3. Is there a significant relationship between the use of artificial Intelligence and students' satisfaction?

Table 3

Correlation Analysis

Use of Artificial Intelligence	r-value	p-value	Description	Decision on Ho	Interpretation
Tools and Application Used	0.436**	0.000	Low Positive	Reject	Significant
Frequency of Use	0.736**	0.000	High Positive	Reject	Significant
Perceived Usefulness	0.809**	0.000	High Positive	Reject	Significant
Ease of Use	0.795**	0.000	High Positive	Reject	Significant

**. Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis reveals that the tools and application used has a statistically significant, although low, positive correlation with student satisfaction, as indicated by an r-value of 0.436 and, p-value of 0.000. This suggests that while the choice of AI tool does influence satisfaction, its association is less pronounced compared to other determinants such as frequency of use, perceived usefulness, and ease of use. Chang (2024), multiple studies confirm that perceived usefulness and ease of use are primary drivers of student satisfaction with AI tools in education, often outweighing the influence of the specific tool selected.

Frequency of use exhibits a strong positive correlation with student satisfaction, r-value = 0.736, p-value = 0.000, indicating that students who engage more frequently with AI tools tend to report higher satisfaction levels. This aligns with findings that regular interaction and familiarity with AI-driven platforms enhance the perceived value and the overall learning experience (Almulla, 2024).

Perceived usefulness demonstrates a stronger positive correlation with student satisfaction, evidenced by a correlation coefficient, r-value = 0.809, p-value = 0.000, indicating that students' perceptions of the practical benefits and effectiveness of AI tools are key determinants of their overall satisfaction (Abdulkadir Jeilani & Abubakar, 2025). In essence, the more students view AI tools as beneficial for their learning and academic activities, the higher their satisfaction with these technologies tends to be. This finding highlights the critical need to emphasize the concrete advantages of AI integration in educational environments to foster enhanced student engagement and acceptance.

Similarly, Ease of use is correlated with students' satisfaction, r-value = 0.795, p-value = 0.000, highlighting the importance of user-friendly interfaces and intuitive design in improving students' experiences with AI tools. Recent research supports that when AI applications are simple to use and navigate, students tend to have greater satisfaction and are more actively engaged with the technology, which leads to improved learning outcomes (Al-Abdullatif, 2024).

IV. CONCLUSIONS

The study concluded the following based on the findings:

1. The students used AI tools as a supplement to their academic endeavors. They use it to support their learning and to make their school work easier and faster to finish.
2. AI effectively enhances and helps students in their academics. It should provide assistant and gives information and ideas to the learners.

3. Students found that using AI tools really help them in their academics. They agree that these tools make studying easier and help them do better in school.

V. RECOMMENDATIONS

Based from the study's findings and conclusions, the following recommendations are suggested:

1. Students may limit their usage of AI; they should not be dependent solely on the AI tools for their coursework. Critical thinking skills should still be developed and utilized as more effective tools in learning.
2. It is recommended that may advise students to minimize their engagement with AI tools, and not to be dependent in terms of their academic. They should remind students that AI is only a support tool, not a replacement for their own hard work.
3. AI tools must not the only source to help students in their coursework. Students should also read books, search in libraries, and ask teachers so they can learn more and not rely only on technology.
4. Future researchers are encouraged to explore more about how AI tools affect students' learning habits, performance, and thinking skills. They may also study how to use AI in a balanced way so it can help students without reducing their ability to think independently.

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