

Willingness and concerns of business education students in using GenAI

Jarrent Tayag

College of Education, Angeles University Foundation, Angeles City, Philippines
Graduate School, Angeles University Foundation, Angeles City, Philippines

Mary Rose Tayag

College of Business and Accountancy, Angeles University Foundation, Angeles City, Philippines

Abstract: Generative Artificial Intelligence (GenAI) has caused significant disruptions in the higher education. Among the most affected are business education programs, which require students to develop creative and innovative thinking. This study aimed to investigate the willingness and concerns of 130 business education students in using GenAI in their academic assignments. Results revealed that while students are willing to use GenAI in their academic work, they are concerned on the possible effects of over-relying on these technologies to the development of necessary competencies and other transferable skills. The students also voiced their concerns about the possible unfair evaluation of outputs, in which those who have used GenAI solely for their tasks will be given better marks than those who opted not to use any of these technologies. The implications of these findings to the policies of higher education institutions and teachers in higher education are discussed.

Keywords: generative AI; business education; concerns about AI; willingness to use AI

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INTRODUCTION

Generative Artificial Intelligence (GenAI) has caused profound disruptions in the educational system in the past years. While the influence of AI has been storming the field of education for decades, the introduction of more accessible GenAI for students has raised paradoxes that challenged the perspectives of school administrators and teachers towards the use of these tools in their academic activities (Lim, et al., 2023). A number of recently published studies (Fisher, 2023; Okaiyeto, Bai, & Xiao, 2023; Oravec, 2023; Tindle, et al., 2023) have pointed out how these technologies have been used (or misused) by students to complete school assignments and pass examinations. These reports, among others, have concretized the long-standing fear of academic leaders and teachers towards allowing the use of AI-powered technologies in the educational system. Oravec (2023) has proposed various measures to assist teachers in developing learning activities that could possibly expose improper use of GenAI. While these measures may hamper the learned behavior of dependence to these tools, it is but a matter of time before an update in the system can cause the overturn of these mechanisms, thereby, ricocheting to a more complex concern for teachers.

Even the olden theories of learning such as those of Piaget, Vygotsky, and Bruner can be used to support the use of GenAI in the learning process. The integration of innovative ideas put together by AI-powered tools can indeed heighten the interest of students. The studies conducted by Baidoo-Anu and Ansah (2023), Chan and Hu (2023), and Su and Yang (2023) comprehensively discuss the potential benefits of GenAI to the educational system. Most of these are no longer promises, but are observable in actual teaching practices especially in the higher education. GenAI has enabled rapid generation of new and broad ideas through informed conversations with the system. For instance, teachers may be able to explore new teaching strategies by formulating a series of generative prompts for ChatGPT. In the past, teachers need to scan through a number of pages and observe classes or watch tutorial videos to navigate the steps in implementing a certain teaching strategy. With the development of the more sophisticated search engines for various web browsers, teachers were able to explore even wider references across the globe in a span of a few seconds. GenAI, such as ChatGPT, has even elevated the modernization of education as it performs intelligent navigation and synthesis of information.

While innovation and creative thinking is placed as the cornerstone for all higher education programs, business education students are expected to develop these skills in upscaling groundbreaking

marketing and management ideas. It is a common expectation among these students to propose startups businesses that can explore the concepts and theories that they have learned from their classes. The linkage between classroom learning and actual business experiences are so critical that it can cause real and significant impact on the student should they fail. As such, formulation of effective learning experiences within the classroom proves to be essential to reduce potential challenges as they venture into the profession. However, given the presence of GenAI, it is imperative to understand the willingness and concerns of business education students. Both literature and practice converge in the idea that these tools can intensify the creativity and innovative ideas of students. However, the challenges on overreliance to these may come at a great cost as they venture unarmed into the field. In this vein, this study aims to investigate the willingness and concerns of business education students towards the use of GenAI in their classes.

METHODOLOGY

Study Design and Sample

The study employed a survey design to gather the perspectives of the business education students of a private higher education institution in the Philippines. The survey design allows for a rapid assessment of the responses of the students across a wide array of items. The sample consisted of 130 business education students from different year levels (male = 65, female = 65).

Instrument

The tool is based on the study conducted by Chan and Hu (2023), which explored the voices of students towards the use of GenAI. The tool used for this study consisted of five sections. The first required the demographic variables of the respondents. The second to the fourth parts consisted of items regarding the knowledge of GenAI (6 items), willingness to use GenAI (8 items), and concerns about GenAI (4 items), respectively. These parts were answerable through a 5-point Likert scale. For the last part, the students were given two open-ended questions to allow them to express their willingness and concerns, which may not have been covered in the previous items. The tool underwent reliability testing with Cronbach's alpha ranging from 0.78 to 0.94, indicating that there is internal consistency from among the items.

Table 1. Reliability Values for the Instrument

Variables	Reliability Values
Knowledge of GenAI	0.89
Willingness to Use GenAI	0.94
Concerns about GenAI	0.78
Overall Instrument	0.89

Research Procedures

The instrument was prepared through an online form, which was shared to the students. The study was conducted during the second semester of the academic year, ensuring that the students have at least one semester (approximately 4 months) exposure to the program of the university. As the university encourages the use of innovative teaching and learning strategies, including the proper use of AI, students are expected to have adequate schema on these tools. The data gathered were analyzed using SPSS 18.

FINDINGS

Frequency of Use

The students were asked how often they use GenAI technologies like ChatGPT. Table 2 shows that they are using GenAI, but not in more frequent intervals as anticipated. Despite the reported benefits of utilizing these technologies, less than half of the respondents are using them often.

Table 2. Frequency of Use of GenAI

	f (%)
Always	0
Often	50 (38.46%)
Sometimes	40 (30.77%)
Rarely	40 (30.77%)
Never	0

Knowledge of GenAI

Table 3 summarizes the responses of the students in terms of their knowledge of GenAI. Results reveal that students acknowledge that there are limitations in the use of GenAI, especially in handling complex tasks. The students are likewise aware of the quality of output, which may be derived from utilizing these technologies. Least favored among the items are focused on the ability of GenAI to provide contextual and fair outputs. These findings hint the inability of the students to formulate relevant prompts that could generate the desired outputs.

Table 3. Knowledge of GenAI

	SA	A	N	D	SD	Ave	
I understand generative AI technologies like ChatGPT have limitations in their ability to handle complex tasks.	64 (49%)	30 (23%)	26 (20%)	5 (4%)	5 (4%)	1.88	A
I understand generative AI technologies like ChatGPT can generate output that is factually inaccurate.	36 (28%)	61 (47%)	28 (22%)	0	5 (4%)	2.08	A
I understand generative AI technologies can generate output that is out of context or inappropriate.	25 (19%)	30 (23%)	60 (46%)	9 (7%)	6 (5%)	2.50	A
I understand generative AI technologies can exhibit biases and unfairness in their output.	25 (19%)	36 (28%)	58 (45%)	5 (4%)	5 (4%)	2.46	A
May rely too heavily on statistics, which can limit their usefulness in certain contexts.	28 (22%)	55 (42%)	37 (28%)	4 (3%)	6 (5%)	2.23	A
Have limited emotional intelligence and empathy, which can lead to output that is insensitive or inappropriate.	35 (27%)	40 (31%)	45 (35%)	10 (8%)	0	2.23	A

Willingness to Use GenAI

The students are generally willing to use GenAI for their various academic tasks. However, it may be noted that there is an apparent scattered responses between being strong affirmation and having a neutral perspective towards the use of GenAI. Least favored item is on the provision of personalized and immediate feedback and suggestions for the students' assignments. Considering that this is supposed to be one of the most salient features of GenAI, such response may stem from rather peculiarity of the support that GenAI can provide towards their academic tasks. The most favored item is on the capacity of GenAI to hasten the process of completing their tasks, which may be indicative of the common reason for the employment of these technologies in their context.

Table 4. Willingness to Use GenAI

	SA	A	N	D	SD	Ave	
I envision integrating generative AI technologies like ChatGPT into my teaching and learning practices in the future.	38 (29%)	41 (32%)	42 (32%)	9 (7%)	0	2.15	A
Students must learn how to use generative AI technologies well for their careers.	44 (34%)	25 (19%)	55 (42%)	6 (5%)	0	2.15	A
I believe generative AI technologies such as ChatGPT can improve my digital competence.	57 (44%)	13 (10%)	51 (39%)	5 (4%)	4 (3%)	2.15	A
I believe generative AI technologies like ChatGPT can help me save time.	62 (48%)	33 (25%)	30 (23%)	0	5 (4%)	1.85	A
I believe AI technologies such as ChatGPT can provide me with unique insights and perspectives that I may not have thought of myself.	65 (50%)	15 (12%)	45 (35%)	0	5 (4%)	1.96	A
I think AI technologies such as ChatGPT can provide me with personalized and immediate feedback and suggestions for my assignments.	47 (36%)	28 (22%)	44 (34%)	6 (5%)	5 (4%)	2.19	A
I think AI technologies such as ChatGPT is a great tool as it is available 24/7.	65 (50%)	10 (8%)	50 (38%)	0	5 (4%)	1.92	A

I think AI technologies such as ChatGPT is a great tool for student support services due to anonymity.	40 (31%)	30 (23%)	50 (38%)	0	10 (8%)	2.27	A
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Concerns about GenAI

The students voiced relatively strong concerns on the possibility of GenAI impeding their ability to develop transferable skills, which are necessary, especially for their courses and profession. The students also agree that GenAI can hamper their opportunities to interact with others and may be a hindrance for them to develop the skills that are meant to be learned through the academic tasks given in higher education. The findings are consistent with the results of Chan and Hu (2023), which essentially proposes a general impression towards the use of GenAI technologies.

Table 5. Concerns about GenAI

	SA	A	N	D	SD	Ave	
Using generative AI technologies such as ChatGPT to complete assignments undermines the value of university education.	23 (18%)	28 (22%)	69 (53%)	0	10 (8%)	2.54	A
Generative AI technologies such as ChatGPT will limit my opportunities to interact with others and socialize while completing coursework.	20 (15%)	36 (28%)	64 (49%)	5 (4%)	5 (4%)	2.54	A
Generative AI technologies such as ChatGPT will hinder my development of generic or transferable skills such as teamwork, problem-solving, and leadership skills.	16 (12%)	69 (53%)	35 (27%)	5 (4%)	5 (4%)	2.35	A
I can become over-reliant on generative technologies.	25 (19%)	32 (25%)	60 (46%)	5 (4%)	8 (6%)	2.58	A

Other Issues and Concerns in the Use of GenAI

The responses of the students in the open-ended questions revealed other concerns that they have relevant to the use of GenAI. While they acknowledge that GenAI technologies can effectively decrease the time it takes to complete an academic assignment, they are also concerned about the possible inequality between those students who used the tools and those who do not. Given the reservations of some to fully utilize the technologies in accomplishing their academic work, the students are concerned that those who used the technologies will earn better marks than those who opted not to use the technologies and simply rely on their own ideas and effort. This perspective highlights the negative connotation of using these technologies, apparently immediately associating them to dishonesty and unfair evaluation. It reveals that students recognize the capacity of these technologies to provide innovative outputs. On the other hand, such perspective may also stem from the fear that those who may be over-reliant to these technologies may earn better marks, begging an argument on the equivalency of effort and grading.

CONCLUSIONS AND RECOMMENDATIONS

The study contributes to the ongoing discussion on the role of GenAI in the field of education. While the benefits offered by these technologies have been recognized, the concerns about the use of these and their potential implications to the overall development of necessary competencies in higher education have affected the willingness of students to utilize them. Considering the widespread presence of these technologies, there is still limited utilization of these in the educational system. For the instances that these have been used by the students, it has been reported through the results of this study that it is primarily due to the ability of these tools to shorten the time it takes to complete the task. Results reveal the fear from among the respondents that these technologies can hamper the development of, not only their competence to the university programs, but also in terms of transferable skills. The concern on fairness of evaluation shows that while they acknowledge that these tools can improve significantly their outputs, they fear that students who have relied solely in these tools can have better grades.

The business education program in higher education requires students to develop innovative

ideas. While GenAI can guide students in coming up with these ideas, adequate guidance should be provided to ensure that students will not develop overreliance with these technologies. This calls for more progressive perspective from among teachers and school leaders to encourage the ethical and acceptable utilization of GenAI in their academic preparations. As the educational system is continually challenged by the rise of more sophisticated technologies, educational leaders should institute policies that will capitalize the benefits and hamper the abuse and misuse of these technologies.

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