

Advancing Academic Innovation: Examining the Impact of Generative AI in Hospitality, Tourism and Service Management Education

A Cross-Cultural Study on Fostering Collaborative Learning and Best Practices

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How was the study approached?

- **Exploratory** in nature, **Qualitative** approach
- Exploring the **experiences, perceptions and attitudes** of **university students** towards using **Generative AI tools** and **chatbots**.
- Includes **undergraduate** and **postgraduate** students of **hospitality, culinary arts, tourism, events and service management**
- **Sunway University** (Malaysia), **Dusit Thani College** (Thailand), **University of Santo Tomas** (Philippines)



How was data collected?

- Interviews lasting **30-50 minutes**.
- Adhering to **strict ethical standards**, ensuring only **voluntary participation**.
- **No interviews with students that are being taught by the interviewer-faculty**, and not forced to continue if uncomfortable with proceeding.
- **Semi-structured interviews**, guide questions and expounding towards complementary topics if brought up

What is AI and Generative AI?



AI

- AI is ***like a smart computer program that can learn and think.*** It can do things like *recognize faces, understand language, and even drive cars.*
- Generative AI is a type of AI that can *create new things, like text, images, or music.* ***It learns from a huge amount of data and then uses that knowledge to generate something new.***

For example:

Gemini

- “Explain to me the concept of hospitality as if I was a multi-award winning author and nobel laureate in 200 words.”
 - Hospitality, in its essence, is the art of extending kindness and care to strangers. It is the warmth that welcomes, the comfort that soothes, and the generosity that enriches. It is the delicate balance between duty and pleasure, the fine line between service and friendship.
 - In its broadest sense, hospitality is the human condition itself. It is the impulse to share, to connect, and to create meaning through shared experiences. Whether it is the grand gesture of a royal banquet or the simple act of offering a cup of tea, hospitality is a testament to the enduring power of human connection.

For example:

Gemini

- “Explain to me the concept of hospitality as if I was a Qatari national who is passionate of Islam in 200 words.
 - Hospitality, my brother, is a sacred duty ordained by our beloved Prophet Muhammad (peace be upon him). It is a reflection of our faith, a testament to our generosity and kindness. To welcome a guest into your home is to welcome a blessing from Allah.
 - It is not merely providing food and shelter, but offering comfort, warmth, and sincere companionship. It is to share your blessings, to extend your kindness, and to honor the bonds of brotherhood and sisterhood. Remember, the Prophet himself said, "Whoever believes in Allah and the Last Day should be hospitable to his guest."

How does the students see AI?

- An emic understanding
- Many students perceive **AI as a self-learning program that mimics human intelligence, utilizing data and algorithms to make decisions and offer assistance.**
- Students, however, remain cautious in its use **and emphasize the need to still rely on oneself** to finish through personal input.



AI

“ It gives us easier access to things, like when you don’t understand something. AI Generators usually simplify those things for you. ” (I-P-11)



“This salad and this baby food plate is just the same thing, right?”

Use of Generative AI in Higher Education



Language
Enhancement
and Multilingual
Environments



Finding and
Summarizing
Information



Research and
Project Support

Language Enhancement and Multilingual Environments

- A regular feature for students in multilingual educational contexts.
 - “I found out that it gives rather accurate translations as well and it can be very beneficial for people who do not know English (because Google search was dominated by the English language).” (I-M-10)
- A companion that is trained with the nuances of language as far as the world wide web can muster



Language Enhancement



- ☐ Basic Grammar Checks
- ☐ Sentence Refinement and Paraphrasing
- ☐ Formalization; Bringing from Casual Conversation/Thought to Academic Writing
- ☐ AI: "AI assists in grammar and professional writing by identifying and correcting errors, suggesting improvements, and generating text."

Multilingual Environments



- ☐ Translating pre-dominantly English content to Mother Language
- ☐ Expertise in translation and nuances of language
- ☐ Realistic conversation and practice
- ☐ AI: L'IA aide à la grammaire et à l'écriture professionnelle en identifiant et en corrigeant les erreurs, en suggérant des améliorations et en générant du texte.

Finding and Summarizing Information

AI



- A means to access, distill and summarize information on demand.
- Allows the student to entrust the **mining of information**, the **search of through thousands** of academic papers, news articles, websites, books and the like to AI, and **expect it to be delivered in digestible means**.

- *“If I want to know, for example, how many theories we have related to women empowerment. I write that. I write that for example, “Theories related to women empowerment” then it provides me with different answers.” (I-M-6).*
- *“When ChatGPT gives a lengthy explanation, I could just say simplify and it will simplify.” (I-P-11)*



AI is like Alfred to Batman, but only if Batman explains with **very specific prompts**. Otherwise, Alfred just gives very broad, generic answers.

Research and Project Support

- Many students find generative AI helpful in **generating ideas, structuring assignments, and refining their approach to various academic projects.**
- Students highlighted how **they use AI for specific academic tasks**, such as solving **tutorial questions and completing assignments**, as well as engaging with the intricacies of a “research project” (I-M-7).
- *“AI is like my personal assistant...to assist and simplify our everyday tasks in order to help us maximize convenience and efficiency.” (I-T-17).*



Perceived Benefits of Generative AI



Idea
Generation and
Conceptual
Understanding



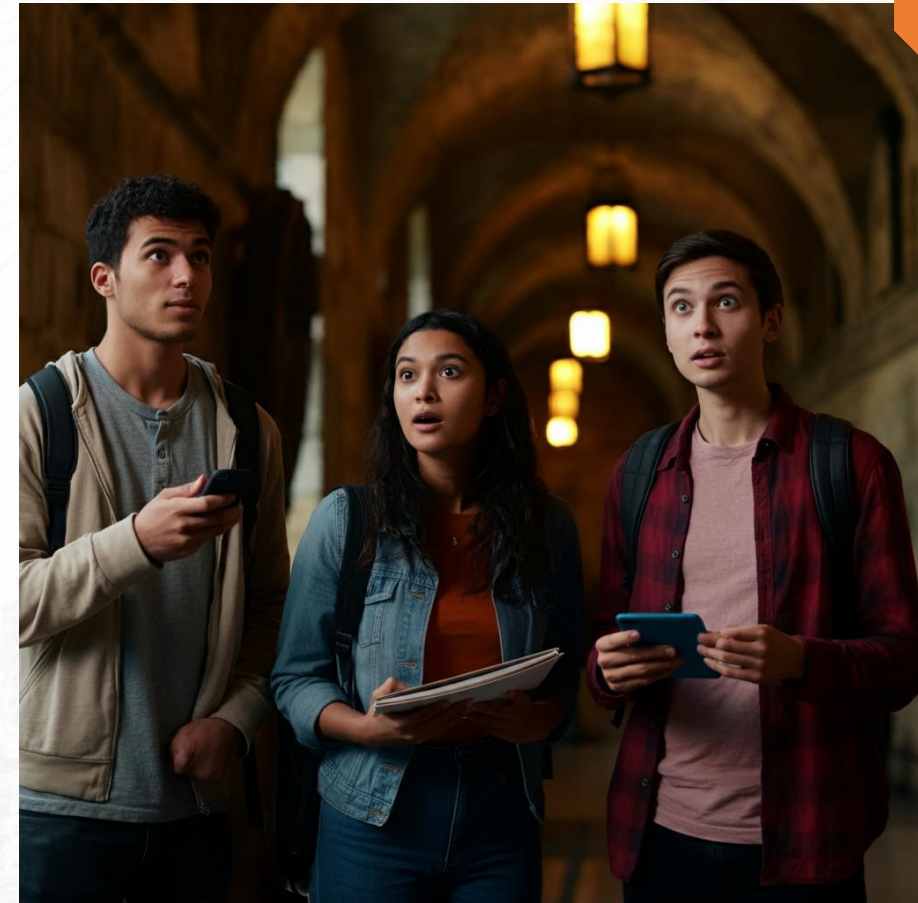
Enhanced
Academic
Expression



Efficiency and
Convenience

Idea Generation and Conceptual Understanding

- The capacity for generating ideas often helps students **overcome cognitive barriers and offers fresh viewpoints** they may not have initially considered.
- Using AI as a starting point for **exploring complex topics** can **enhance students' grasp of intricate subjects**, helping them **build confidence in their academic work**.



AI

- *“Well, I believe I had to have a shallow type of like interpreting ideas or maybe like understanding or analyzing data and through ChatGPT or some generative AI that I've been using, it really like helped me to explore more of those ideas and not just stick to what the surface knowledge that I already have.” (I-P-13)*



Like diving for the first time, you must first find something to dive for. Once you do, then the “world’s your oyster”.

Enhanced Academic Expression

- Students who may be less confident in English, especially in academic contexts, AI tools **have a transformative role in helping them improve their academic language**
- It helps students **clarify their thoughts and prompts further intellectual exploration.**





- *“it can give me some hints, but the actual process is for writing. It is helpful for me because my writing is not good. I write by my own words. So, I just put it to [ChatGPT] and ask it to paraphrase in academic writing, then I edit by myself, but it has really nice sentence structures” (I-M-6).*

Me: “There’s nothing here of note that hasn’t been already explored.” but more academic please.

AI: “No substantial gaps exist in the current body of knowledge regarding this area of inquiry.”

Efficiency and Convenience



- Students appreciate **the speed with which AI provides information**, particularly when managing multiple assignments, allowing **them to focus on higher-order analysis and synthesis**.
- Aligns with students' preference for readily **accessible information**, **streamlining** the research process and **offering an alternative to time-intensive traditional methods**.

- *“I mean it’s easier, you can say that. It’s simple. You can just ask, and it will give you the information you need. Well, with traditional learning, you have to find it yourself, such as going to a library and taking notes” (I-M-3).*



Sometimes, flooding in the Philippines prevent students from going to school.

Sometimes, going to school is preventing students from going to school.



Perceived Limitation and Challenges



Lack of Depth
and Critical
Engagement



Accuracy and
Reliability
Issues



Practical
Constraints in
Use

Lack of Depth and Critical Engagement

- A **lack of critical engagement** AI offers in comparison to (some) humans.
- A sentiment that AI, while efficient, **may not match human critical thinking or the capacity for deep, reflective understanding.**
- AI tools **sometimes misinterpret context**, which can lead to **unintended shifts in meaning**



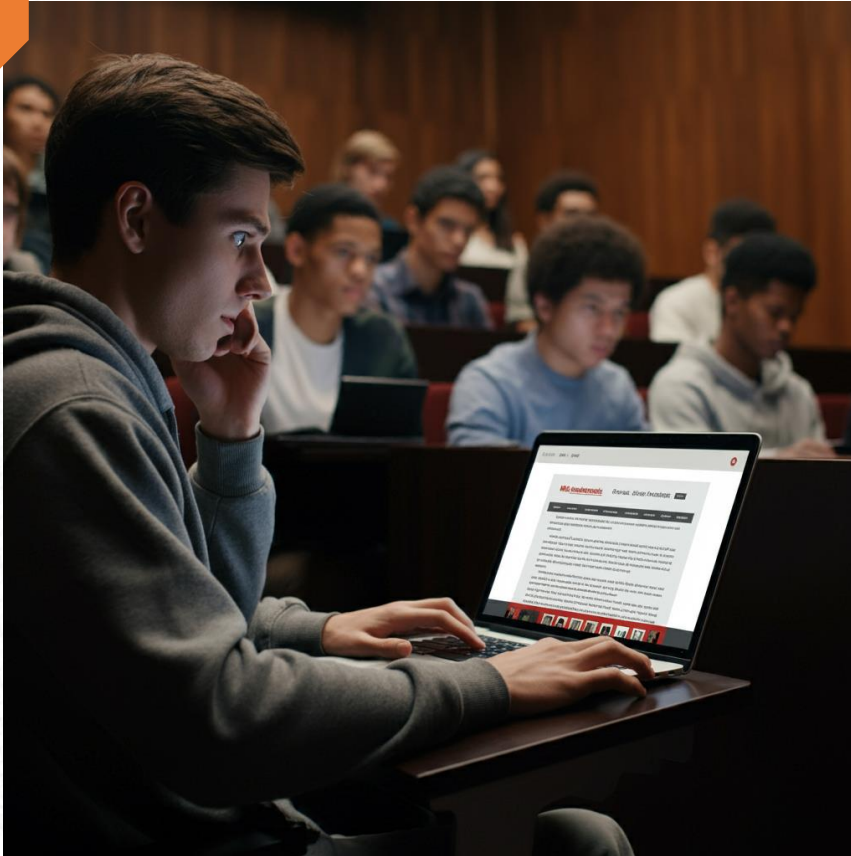
- “There are certain topic or situation where the AI tools like Chat GPT might not be effective or suitable. So, for example, like the highly specialized or technical knowledge. So, the AI tool may struggle with extremely specialized or technical topic. They require deep domain expertise topic with complex, jargon or specific industry knowledge maybe challenging for these tools to handle the accurately.” (I-M-9)
- “So I believe some chat like generative AI like ChatGPT can be more catered to a vast audience or a large audience and not specifically to a local target like us or for the Philippines alone. I believe they do not have that type of like reality checked on what's really happening, for example in the Philippines.” (I-P-13)



It is all content, but is everything done within context?

Accuracy and Reliability Issues

AI



- Concerns about the **accuracy of AI-generated information** emerged as one of the most cited challenges among students.
- **Prone to providing outdated or inaccurate information**, requiring users to verify facts independently. This **need for verification** can make **AI less effective as a time-saving tool**. Further, some students expressed **dissatisfaction with AI's limitations** regarding **up-to-date information**.

- *“I feel like because the information from Chat GPT may not be accurate. So, I feel like sometimes you, I mean like you cannot fully rely on it 100%. So, at the same time you also have to like cross-check with the other information, the correct information like from academic journals or some or stuff like that. You have to cross check whether the information is correct.” (I-M-5)*



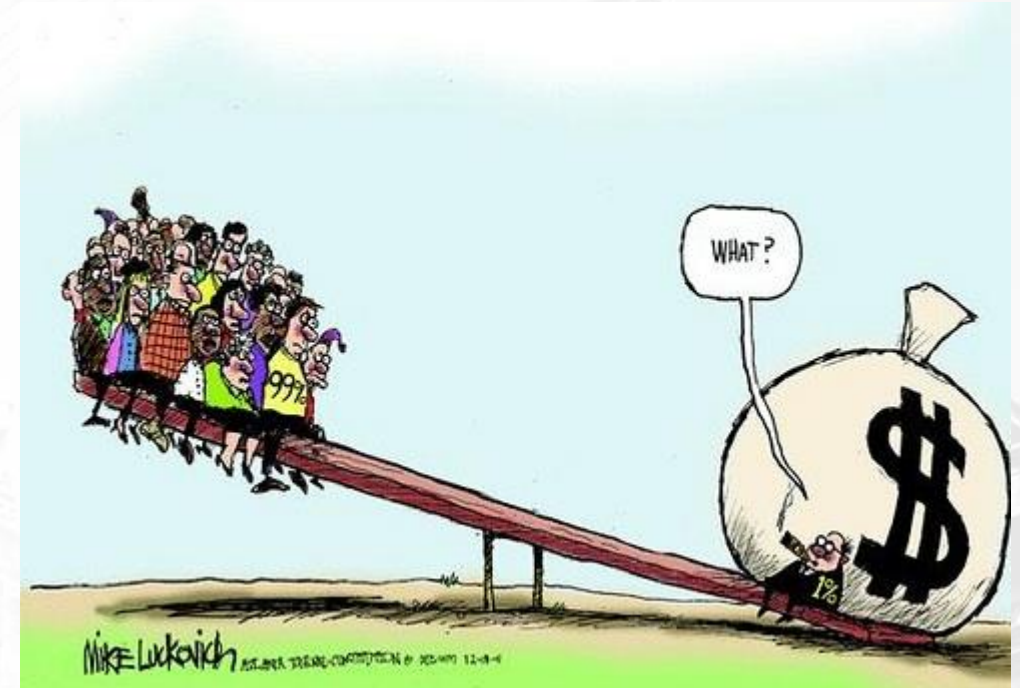
Often, the perfect grammar and neat answers displays a halo of goodness and expertise, but just because it looks good, does it mean it's the truth?

Practical Constraints in Use

- There is an expressed frustration over the **limited availability of advanced features** in popular tools unless paid for.
- AI's delivery **lacks the dynamic quality that human instructors provide**, which they feel enhances engagement and retention of information.



- “Yes, in some way because most AI tools are not as available in the market because most AI costs much. They cost money instead of being free for the public to use.”
 - “So do you think the free ones aren't really up to par?”
- “Some of them are not.” (I-P-12)



Ethical Concerns



“Copy and
Paste” Culture



Bias in AI and
Privacy
Concerns



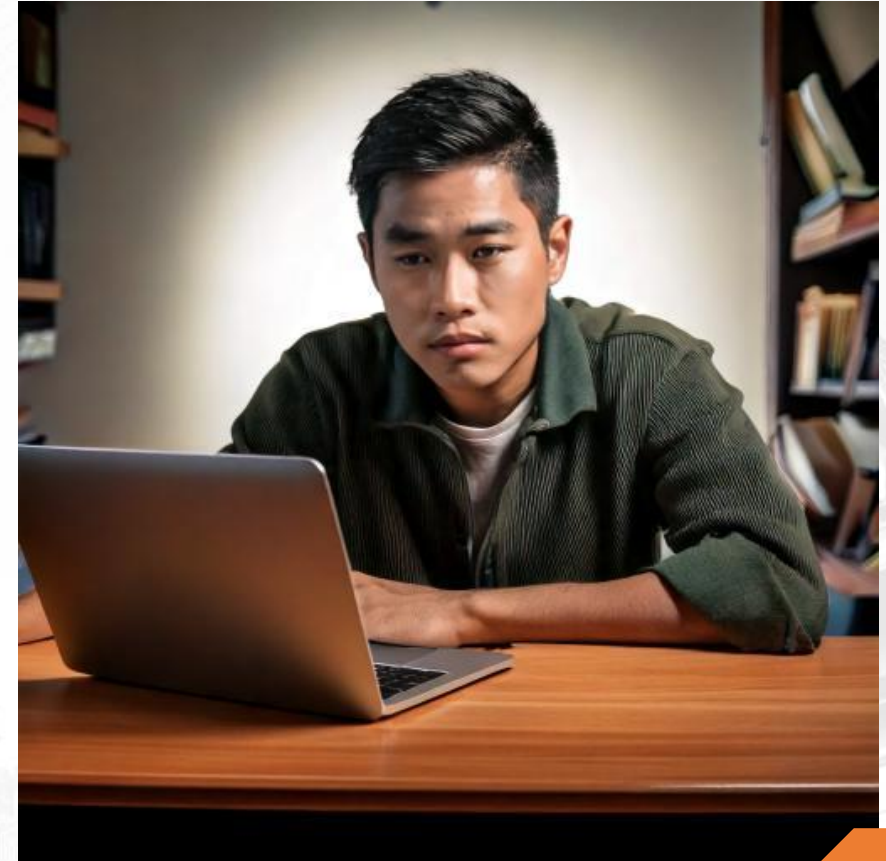
Problematic
Information and
Misinformation



Fabrication of
Data

“Copy and Paste” Culture

- The creation of a **“copy-and-paste” culture**, which can lead to **academic dishonesty and diminish students’ commitment to original thinking**, is an ethical concern
- AI's ability to generate text rapidly can make it **tempting for students to rely on AI-generated responses without fully processing or synthesizing the information.**



- *“Currently what I know is that in my perspective that AI is a big hurdle to the current educational scene as most students use it as a shortcut in completing their task. Instead of helping them, they use it to finish a certain task and learn nothing, I guess.” (I-P-14)*



“I’ll put the essay question in ChatGPT then call it a day!”

Bias in AI and Privacy Concerns



- One significant ethical concern students raised is the **inherent bias in AI-generated information**.
- AI tools are trained on existing data sets, they **can reproduce and amplify the biases embedded in those sources**.
- The risk of perpetuating stereotypes or inaccuracies through biased information could **lead to a distorted worldview among students**.

- *“AI is already altering the way most people think, it can also polarize people understanding, misinformation or biased information pushing one’s agenda is especially prevalent nowadays.” (I-T-18)*



Problematic Information and Misinformation

- Due to limitations in the training data, **AI can sometimes generate incorrect, outdated, or misleading information.**
- Such a discussion can further into complications of **whether allowing AI to parse and manipulate data influences the actual learning of a student, or whether the changes brought about by the AI reinforces what the student knows, whether correct or not, to satisfy the user's intentions.**



- *“For example, you write something and say that from with the author of this sentence and Chat GPT gives your wrong answer. And if you want to mention that sentence in your paper publication report anything, which citing? With wrong citation, so it is against the research ethic” (I-M-6).*

AI Hallucinations



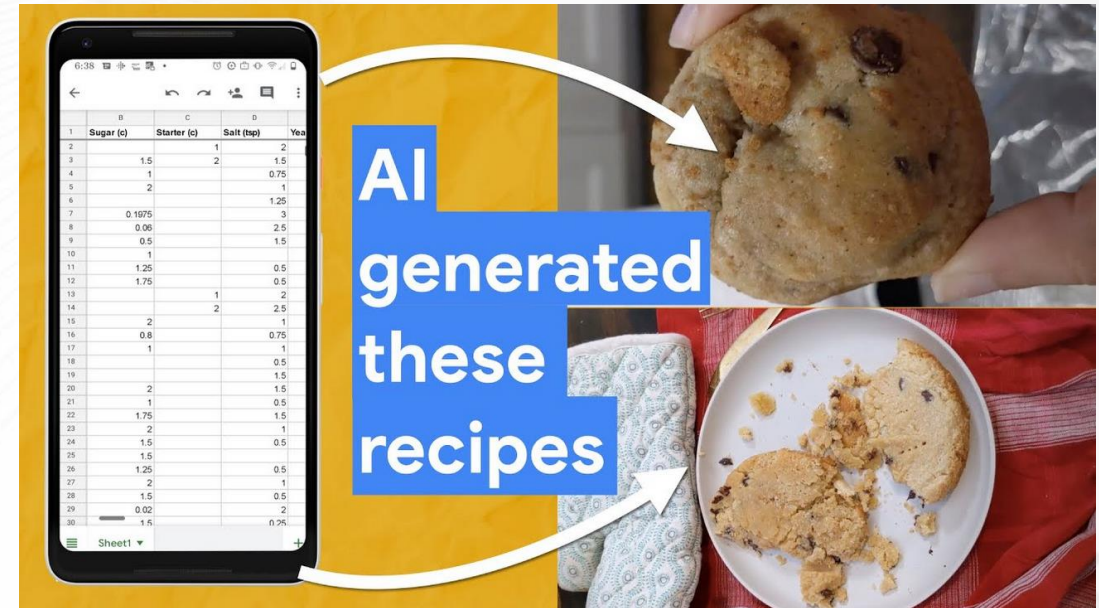
AI hallucinations occur when an AI model generates incorrect or nonsensical information, often confidently presented as fact. This can happen due to limitations in training data, biases in the model, or misunderstandings of prompts.

Fabrication of Data

- The ease with which AI can generate seemingly plausible but fictitious data **creates a significant temptation for students to fabricate information.**
- Such **unethical practices can lead to serious consequences** particularly if students rely on AI to produce data that does not genuinely represent real-world phenomena or study results.



- *“So if we use chat GPT to make like a recipe, it's not, I think it's not going to be 100% the best or like a practical solution since they might just mash up online recipes and the such.” (I-P-14)*



Tips AI has given to users for recipes include:

- Bad safety temps. (Cook chicken to 125F)
- Using wrong oils for cooking. (Deep fry at 375F with walnut oil)
- Adding water to cooking oils over 300F.
- Using certain ingredients at levels that could be unsafe. (Serving raw honey to child under 2yrs old)
- And more!

To recap:

Strength

- AI shows strength in allowing users to use a technology that they are able to easily navigate to assist in means of research, study, immersion and creation, often quickly and conveniently.

Limitation

- AI however is limited by access towards what is generally free and available and are severely limited by the training such a program has received, thus being unable to provide up to date information and struggle to act within contexts.

Dangers

- AI becomes dangerous in its tempting offering of quick, instant and well-written responses that may be inaccurate, flawed or even completely fabricated. Dependence on what looks correct from a seemingly capable program without critical assessment can impact learning, integrity and experience.

Thank you!



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