

AGENCY PRESERVING OR SUBSTITUTING? A SEQUENTIAL EXPLANATORY MIXED-METHODS STUDY OF GENAI USE, DIGITAL LITERACY, AND RESPONSIBLE LEARNING IN A MULTILINGUAL PHILIPPINE UNIVERSITY

Retche P. Colegado

Associate Professor, Bukidnon State University Malaybalay City, Bukidnon, 8700 Philippines

e-mail: retchecolegado@buku.edu.ph

Published: July 30, 2026

ABSTRACT: This study moves beyond technology adoption to examine when generative artificial intelligence (GenAI) supports or substitutes students' intellectual work, investigating how acceptance conditions, digital literacy, multilingual practice, and institutional guidance relate to self-reported responsible GenAI learning. A sequential explanatory mixed-methods design combined survey data from 375 undergraduate GenAI users with four focus groups involving 36 students and interviews with 10 faculty members at a multilingual Philippine public university, using hierarchical regression followed by codebook thematic analysis and mixed-methods integration. The findings revealed that UTAUT conditions explained 44% of the variance in responsible practices, while technical, critical, and ethical digital literacy increased the explained variance to 61%, with ethical literacy emerging as the strongest unique predictor. Students distinguished supportive use, which retained evaluation and authorship, from substitutive use, which displaced them. Bisaya/Taglish-to-English translation widened linguistic participation while creating risks to voice and ownership, and inconsistent institutional guidance made the boundary of acceptable use unstable. The study proposes the TASK heuristic—Task purpose, Authorial contribution, Source verification, and Keeping a disclosure record—for designing task-specific GenAI guidance, and introduces the agency threshold as an evidence-informed boundary between AI scaffolding and substitution, locating responsibility jointly in student literacy, assessment design, and institutional guidance..

Keywords: generative artificial intelligence, digital literacy, learner agency, multilingual education, academic integrity, responsible learning

1. INTRODUCTION

Generative artificial intelligence (GenAI) is becoming ordinary infrastructure for student work. It assists with brainstorming, explanation, literature searching, drafting, translation, and revision. Yet frequency of use says little about whether learning has been supported. The same system can help a student clarify an idea or produce language the student neither understands nor owns. The consequential educational question is therefore not simply whether students adopt GenAI, but what intellectual work remains with the learner after it is used.

Technology-acceptance research provides a strong account of why students use a system. The Unified Theory of Acceptance and Use of Technology (UTAUT) [1] identifies performance expectancy, effort expectancy, social influence, and facilitating conditions. These constructs explain whether GenAI appears useful, manageable, socially legitimate, and institutionally feasible. They cannot determine whether use preserves evaluation, meaning-making, and authorship. A technology can be accepted precisely because it removes the effort that an educational task was intended to cultivate.

Digital literacy addresses this limitation by shifting attention from willingness to competence and judgement. Technical literacy enables students to operate a system. Critical literacy supports evaluation of claims, evidence, and bias. Ethical literacy informs disclosure, attribution, and authorship decisions [2,3]. These capacities can produce different practices among students with comparable access and motivation. Operational fluency may increase use without ensuring that learners verify output or retain responsibility for it.

This tension is especially visible in multilingual higher education. Students who think and converse in regional or mixed languages may use GenAI to move Bisaya or Taglish ideas into academic English. Translation can expand access to English-dominant academic participation, but fluent output can also conceal changes in meaning and voice. It is therefore a boundary case: the potential educational benefit is high, but so is the possibility that linguistic authority is transferred from the learner to the system. Mobile-first and informal use further places these decisions outside formally designed learning environments.

Philippine studies document GenAI use for writing and learning tasks in higher education [4-8]. International research links deeper

use to student agency [9], metacognitive support to stronger self-regulation but not necessarily higher achievement [10], and over-reliance to weakened cognitive and epistemic agency [11,12]. Other work distinguishes reflective from thoughtless reliance [13], maps AI roles in academic sensemaking [14], and shows that unclear guidance discourages disclosure [15]. Three gaps remain: adoption is often a proxy for integration; responsibility is individualized; and multilingual translation is framed as language support rather than agency and ownership.

This study addresses these problems through the concept of the agency threshold: the situated boundary at which GenAI ceases to scaffold a learner's intellectual work and begins to substitute for it. The threshold is not defined by a fixed quantity of AI-generated text. It depends on whether students retain three forms of agency: epistemic agency, or responsibility for evaluating knowledge claims; authorial agency, or control over meaning, attribution, and disclosure; and linguistic agency, or the capacity to judge whether AI-mediated language preserves intended voice and meaning. Institutional expectations and task design can stabilize or destabilize this boundary.

Conceptually, these constructs are related in sequence rather than treated as an undifferentiated set of correlates. Acceptance conditions determine the likelihood that a student will use GenAI at all; digital literacy, particularly its critical and ethical dimensions, determines whether that use is governed in ways that protect epistemic, authorial, and linguistic agency; and responsible GenAI learning is the observable outcome of this governance rather than a separate variable operating in parallel. Digital literacy is therefore theorized to moderate the relationship between acceptance and responsible practice: two students who are equally willing and able to use GenAI can diverge sharply in whether that use remains supportive or becomes substitutive, depending on their critical and ethical literacy. Multilingual practice and institutional guidance act on this same relationship from outside the individual learner, stabilizing the agency threshold through consistent expectations or destabilizing it through contradictory ones. This sequence, acceptance enabling use, literacy governing use, and context stabilizing or destabilizing the boundary, organizes both the hypotheses tested in the quantitative phase and the interpretive work carried out in the qualitative phase.

Objectives of the Study

This research examined how acceptance conditions, digital literacy, multilingual practice, and institutional guidance relate to responsible generative AI (GenAI) use among undergraduate students and faculty at a multilingual public university in Northern Mindanao, Philippines.

Specifically, this study sought answers to the following questions:

1. To what extent do UTAUT conditions and technical, critical, and ethical digital literacy explain self-reported responsible GenAI learning practices?
2. How do students distinguish supportive GenAI assistance from substitution of their reasoning, expression, or authorship?
3. How do multilingual practice, mobile access, and institutional guidance shape where students locate this boundary?

2. MATERIALS AND METHODS

The study employed a sequential explanatory mixed-methods design, in which a quantitative survey was followed by qualitative inquiry intended to explain and contextualize the statistical patterns. The quantitative phase measured GenAI adoption patterns, UTAUT constructs, and digital literacy, while the qualitative phase—focus group discussions with students and in-depth interviews with faculty, explored contextual experiences and support needs. Quantitative data provide broad, generalizable findings, while qualitative data offer deeper insight into participants' experiences. The study was conducted at a public university in Northern Mindanao, Philippines, serving a linguistically diverse and partly rural student population.

The participants were a cross-sectional sample of 375 undergraduate students with prior GenAI use (response rate 84%), recruited across six colleges: Education, Arts and Sciences, Engineering, Business, Agriculture, and Computing. Inclusion criteria required current enrollment and use of at least one generative AI tool for academic work. The mean age was 20.4 years ($SD = 1.8$); 62% were female and 38% were male. Additionally, 10 faculty members (7 instructors, 3 administrators) were purposively sampled for interviews. The undergraduate sample was drawn using proportional stratified random sampling from official college enrollment lists, with strata defined by college so that the achieved sample of 375 approximated the relative size of each college's undergraduate population (invited pool ≈ 446 GenAI-using students, yielding the reported 84% response rate). Faculty participants were selected through purposive maximum-variation sampling that prioritized instructors and administrators with direct responsibility for courses or policies affected by GenAI use, so that the ten interviewees spanned differing disciplinary and administrative vantage points on student AI use.

A 42-item survey was developed and validated for the quantitative phase. It comprised 16 UTAUT items (5-point Likert; performance expectancy, effort expectancy, social influence, facilitating conditions; Cronbach's $\alpha = .89$); an 18-item Digital Literacy Scale adapted from an existing instrument, covering technical, critical, and ethical literacy ($\alpha = .87$); four GenAI adoption items; and four Responsible GenAI Learning Practices items measuring self-reported transparency, verification, non-substitution, and citation adherence ($\alpha = .84$). The survey was pilot-tested on 30 students and validated by three experts. The three experts, specialists in educational technology, language education, and measurement, rated each item for relevance and clarity on a four-point scale; item-level content validity indices exceeded .80, and items falling below this threshold were revised or removed before piloting. The 30-student pilot assessed readability, completion time, and item-level reliability, after which minor wording revisions were made to the digital-literacy and responsible-learning-practice items to reduce ambiguity for a multilingual student population before full-scale administration.

For the qualitative phase, four focus group discussions (FGDs) were conducted with 8–10 students each (total $n = 36$), stratified by college, using semi-structured protocols exploring how AI is used in research, encountered challenges, ethical dilemmas, and desired institutional support. Individual interviews with 10 faculty members (30–45 minutes each) examined their perceptions of student AI use and policy needs. All sessions were audio-recorded, transcribed verbatim, and translated where Bisaya/Taglish were used.

Quantitative data were analyzed using SPSS v.28 through descriptive statistics, Pearson correlations, and hierarchical multiple regression, with responsible learning practices as the dependent variable, UTAUT constructs entered in step 1, and digital literacy dimensions entered in step 2. Qualitative transcripts were analyzed using codebook thematic analysis informed by an established six-phase framework [24] and supported by NVivo 14. Two coders independently coded 20% of the transcripts and reconciled disagreements through discussion; Cohen's κ was .84 for this subset. Themes were then reviewed against the coded extracts and the full dataset, with attention to convergence, divergence, and contextual explanation across student and faculty accounts.

The quantitative and qualitative strands were integrated using a joint-display approach: statistically significant predictors and effect sizes from the regression and median-split analyses were paired with the qualitative themes that explained or qualified them, and the resulting meta-inferences (Table 2) were used to develop the agency-threshold framework. This integration followed a connecting-and-merging logic consistent with sequential explanatory designs, in which qualitative data are used to explain, extend, and, where relevant, complicate the quantitative results rather than simply illustrate them.

The study received approval from the host university's institutional review board. Informed consent was obtained from all participants, data were anonymized and stored securely, and participants could withdraw without penalty.

3. RESULTS AND DISCUSSIONS

This section presents the findings obtained from the 375 student-survey respondents, 36 focus-group participants, and 10 faculty interviewees. These findings focus on GenAI adoption patterns and pedagogical purposes, the conditions that complicate responsible learning practice, the distinction students draw between supportive and substitutive use, institutional conditions for responsible practice, the explanatory value of acceptance conditions and digital literacy, and the mixed-methods integration that grounds the agency-threshold framework.

GenAI Adoption Patterns and Pedagogical Purposes

ChatGPT/GPT-4 dominated tool use (91.1% of students), followed by Grammarly/QuillBot (40.6%) and Google Bard/Gemini (35.6%); Elicit/Semantic Scholar (5.9%), Perplexity AI (1.0%), and other tools (2.1%) were less common. Students reported using AI across all research stages: topic brainstorming (78%), literature summarization (72%), grammar/writing (85%), paraphrasing (68%), citation formatting (45%), and—uniquely in this sample—regional-language translation (54% reported using AI to translate from Bisaya or Taglish into English).

Qualitative analysis revealed five primary uses. On idea generation and brainstorming, one participant shared, "I use AI to spark research questions and overcome creative blocks" (FGD3, Student A). On summarizing complex content, another explained that AI helped them understand difficult parts of academic work (FGD1, Student C). On grammar and language translation, a participant described writing an idea in Bisaya or Taglish and using AI to translate it into English (FGD2, Student E). On study support, one noted using AI to create study guides and review lessons (FGD4, Student G). On literature review assistance, a participant said Elicit helped them quickly gather research insights (FGD3, Student H).

These findings indicate that GenAI use was frequent and multipurpose, but frequency alone does not indicate whether the underlying intellectual work was retained by the student—the question this study takes up next.

Conditions Complicating Responsible Learning Practice

Over-reliance reducing critical thinking was the most frequently cited challenge (43.6%), followed by output inaccuracy (21.8%), ethical uncertainty (11.9%), cost barriers (11.9%), and poor database integration (10.9%). This ordering indicates that participants were attentive not only to output quality but also to the possible displacement of their own thinking.

Qualitative themes elaborated on these challenges. On accuracy concerns, one participant noted that AI sometimes gives incorrect or outdated information and that its references sometimes do not exist (FGD1, Student B). On bias and misalignment, another observed that AI output can give a different view from what they envisioned for their research (FGD3, Student F). On institutional ambiguity, a participant described feeling as though they were disobeying school policy when using AI for essays, since some faculty discourage its use (FGD2, Student D). On the temptation to over-rely, one participant acknowledged knowing that their brain would come to rely on AI and that this would slow their critical-thinking skills (FGD4, Student I).

Reported opportunities included efficiency and time-saving (89% agreed), creativity enhancement (72%), comprehension support for difficult texts (68%), writing improvement (81%), and convenience or mobile access (63%). One student noted the convenience of using AI on a phone while lying down rather than sitting at a desk (FGD2, Student J).

Taken together, these results show that responsible use is complicated less by access than by the tension between convenience and the erosion of independent thinking—a tension that foreshadows the distinction students themselves draw between supportive and substitutive use.

Supportive and Substitutive Use

Students exhibited nuanced ethical awareness. A strong distinction emerged between supportive and substitutive use. One participant explained, “I just use it to facilitate me, not to replace my own thinking” (FGD4, Student K), while another noted, “Disclosing AI use ensures I am adhering to academic honesty policies” (FGD1, Student L). However, 42% reported uncertainty about what constitutes acceptable AI use, citing contradictory instructions from different faculty members, and only 18% had received any formal guidance on AI citation.

This distinction between facilitation and replacement is the empirical core of the agency threshold introduced later in this section: students were already drawing, in their own words, the line between assistance that preserves their contribution and assistance that displaces it.

Institutional Conditions for Responsible Practice

Five support needs recurred across the focus groups: clear, written AI policies, one participant urged institutions to “guide students on how to use AI, but most importantly, WHEN to use it” (FGD3, Student M); digital literacy workshops, including guides, tutorials, and hands-on training on GenAI tools and best practices (FGD1, Student N); language-inclusive training, with materials in Bisaya/Tagalog to supplement English; mobile-friendly resources, given the prevalence of phone-based AI use; and ethical case studies illustrating acceptable versus unacceptable AI use.

Faculty interviews echoed these needs. One instructor stated plainly that they were “flying blind” and did not know whether to penalize or encourage AI use, underscoring the need for a university-wide policy.

Complementary Explanatory Value of Acceptance Conditions and Digital Literacy

A hierarchical multiple regression was conducted with responsible learning practices as the dependent variable. Step 1 entered the four UTAUT constructs; step 2 added the three digital literacy dimensions (technical, critical, and ethical). Results are shown in Table 1.

Table 1. Hierarchical Regression Predicting Responsible GenAI Learning Practices (N = 375)

Predictor	Step 1 β	Step 2 β
Performance expectancy	.52***	.31***
Effort expectancy	.18**	.10
Social influence	.12*	.06
Facilitating conditions	.24***	.15*
Technical literacy	--	.19**
Critical literacy	--	.28***
Ethical literacy	--	.41***
R ²	.44	.61
ΔR^2	--	.17***

Note. * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 1 presents the regression results predicting responsible GenAI learning practices. In step 1, performance expectancy was the strongest predictor ($\beta = .52$, $p < .001$), and the four UTAUT constructs together explained 44% of the variance. In step 2, ethical literacy emerged as the strongest unique predictor ($\beta = .41$, $p < .001$), and the full model explained 61% of the variance in responsible learning practices. The result suggests that acceptance conditions alone do not exhaust the explanation of responsible learning practices: digital-literacy dimensions contributed substantial additional explanatory value, with ethical literacy showing the strongest unique association. Because the data are cross-sectional and self-reported, these coefficients do not demonstrate causal effects.

A complementary descriptive analysis compared students above and below the sample median for ethical literacy. The higher-ethical-literacy group reported less over-reliance ($M = 2.1$ vs. 3.4 , $t(373) = 8.92$, $p < .001$, Cohen's $d = 0.92$) and greater transparency ($M = 4.2$ vs. 2.7 , $t = 9.45$, $p < .001$). These median-split comparisons are supplementary and should not replace analysis of the continuous construct. The pattern implies that ethical literacy is not simply a compliance add-on: it is closely tied to whether students continue to disclose their AI use and resist over-reliance.

Table 2 integrates the statistical patterns with the qualitative explanations. The meta-inferences show that responsible practice is not produced by access or skill alone; it depends on students retaining responsibility for knowing, expressing, and disclosing.

Table 2. Joint Display of Evidence Informing the Agency Threshold

Quantitative pattern	Qualitative explanation	Integrated meta-inference
1. Digital literacy added 17% explained variance beyond UTAUT	Students described checking, revising, and limiting AI assistance	Adoption enables use; literacy helps keep use on the agency-preserving side
2. Ethical literacy was the strongest unique predictor	Students distinguished facilitation from replacement and valued disclosure	Responsible practice depends on judging authorship and permissible assistance

3. Over-reliance was the most salient reported challenge	Students feared that convenience could weaken their own thinking	The threshold is crossed when efficiency displaces productive cognitive effort	These forms of agency clarify why technical literacy alone is insufficient. Technical competence makes interaction possible; critical literacy supports epistemic control; ethical literacy supports authorial accountability. The strong association between ethical literacy and responsible practice suggests that knowing how to operate GenAI is educationally incomplete without knowing how to govern one's relationship with it.
4. Translation was reported by 54% of students	Students moved Bisaya/Taglish ideas into English but worried about voice and meaning	Translation is a high-benefit, high-risk boundary case for linguistic agency	<i>Multilingual Translation as a Boundary Case</i> The Bisaya/Taglish-to-English finding extends beyond this setting. GenAI can widen participation by helping students express ideas developed in familiar languages; AI-assisted EFL writing can support improvement while instructor guidance and peer learning remain indispensable [20], and both native and non-native English speakers negotiate tensions among writing support, authentic voice, and language work they must still perform [21]. The same fluency can mask changes in meaning and voice. Translation remains supportive when students compare versions, explain key choices, revise generated language, and defend the resulting argument; it becomes substitutive when polished English is accepted without comprehension or ownership. The agency threshold therefore prevents inclusion and integrity from being treated as opposites: institutions can permit language scaffolding while assessing whether students retain linguistic and conceptual control.
5. Facilitating conditions remained significant	Students and faculty reported contradictory expectations	Responsibility distributed across learner literacy, task design, and institutional guidance	<i>Responsibility Is Distributed</i> Contradictory faculty expectations show that responsibility is not an individual trait alone. Ambiguous guidance, inconsistent enforcement, and fear of repercussions discourage AI declaration [15]. Students also distinguish grammar assistance from whole-essay production and want university-wide guidance [25]. Because course-specific rules are widespread, institutional principles and assessment guidance must be coherent [22]. Institutional clarity is part of the learning environment: teachers define protected intellectual work, students regulate assistance, and institutions make disclosure safe and meaningful. Blanket prohibition can obscure these distinctions, while unrestricted permission can hide learning purposes. Policy should not equate originality with isolation from all assistance; it should specify the authorship and judgement students must retain [23].

The joint display shows that the quantitative and qualitative strands converge on the same conclusion: digital literacy, and ethical literacy in particular, keeps GenAI use on the agency-preserving side of the threshold, while over-reliance and inconsistent institutional guidance push it toward substitution. The 54% of students who reported using AI to translate Bisaya or Taglish ideas into English illustrates that this boundary is not only cognitive but linguistic.

The Agency Threshold: An Emerging Framework

Building on the quantitative and qualitative results, this study proposes the agency threshold as the situated boundary at which GenAI assistance ceases to scaffold a learner's intellectual work and begins to substitute for it. The threshold framework separates three questions often collapsed in GenAI research. Acceptance conditions explain why use becomes likely: performance expectancy can motivate either productive scaffolding or expedient substitution, effort expectancy may remove unnecessary friction but may also remove productive struggle, social influence can normalize transparent collaboration or undisclosed outsourcing, and facilitating conditions include not only access and connectivity but also the clarity of teaching and assessment expectations.

Digital literacy helps explain how use is governed. Technical literacy supports interaction with GenAI but is educationally indeterminate. Critical literacy protects epistemic agency through corroboration, bias recognition, and evaluation of task appropriateness. Ethical literacy protects authorial agency through attribution, disclosure, and judgement of permissible assistance. In multilingual practice, these capabilities also protect linguistic agency by enabling students to evaluate whether generated English preserves intended meaning and voice.

The agency threshold identifies whether the intellectual purpose of a learning task remains with the student. It is crossed when assistance displaces the cognitive, authorial, or linguistic work that gives a task its educational value. On the supportive side, students interrogate, revise, contextualize, and disclose AI output; on the substitutive side, they accept claims without verification, submit language they cannot defend, conceal material assistance, or delegate the reasoning the assessment was designed to elicit. The location of the threshold varies by task: translation may be legitimate in one assessment and central to the assessed competence in another.

Three Forms of Agency

The findings support a three-part account of agency. Epistemic agency was visible when students checked claims, investigated references, and resisted inaccurate or misaligned output. Authorial agency was visible when students retained their own argument, distinguished facilitation from replacement, and disclosed material assistance. Linguistic agency was visible when students judged whether English generated from Bisaya or Taglish still expressed their intended meaning.

Multilingual Translation as a Boundary Case
The Bisaya/Taglish-to-English finding extends beyond this setting. GenAI can widen participation by helping students express ideas developed in familiar languages; AI-assisted EFL writing can support improvement while instructor guidance and peer learning remain indispensable [20], and both native and non-native English speakers negotiate tensions among writing support, authentic voice, and language work they must still perform [21]. The same fluency can mask changes in meaning and voice. Translation remains supportive when students compare versions, explain key choices, revise generated language, and defend the resulting argument; it becomes substitutive when polished English is accepted without comprehension or ownership. The agency threshold therefore prevents inclusion and integrity from being treated as opposites: institutions can permit language scaffolding while assessing whether students retain linguistic and conceptual control.

Responsibility Is Distributed

Contradictory faculty expectations show that responsibility is not an individual trait alone. Ambiguous guidance, inconsistent enforcement, and fear of repercussions discourage AI declaration [15]. Students also distinguish grammar assistance from whole-essay production and want university-wide guidance [25]. Because course-specific rules are widespread, institutional principles and assessment guidance must be coherent [22]. Institutional clarity is part of the learning environment: teachers define protected intellectual work, students regulate assistance, and institutions make disclosure safe and meaningful. Blanket prohibition can obscure these distinctions, while unrestricted permission can hide learning purposes. Policy should not equate originality with isolation from all assistance; it should specify the authorship and judgement students must retain [23].

Implications for Educational Policy, Curriculum Development, and Institutional Governance

These findings also speak to the broader, fast-moving international literature on GenAI governance in higher education. A 2026 global Delphi study spanning 22 countries identifies academic integrity, ethical and responsible use, privacy, equitable access, AI literacy, integration strategy, human oversight, and institutional infrastructure as the core components of GenAI governance [26]. The present findings substantiate several of these components empirically, particularly the centrality of ethical literacy and disclosure, while extending the framework with two elements that are underspecified in the global consensus: a measurable agency threshold and the linguistic-agency risks specific to multilingual, translation-mediated academic writing. A separate review distinguishing restrictive, permissive, and guided institutional policy types finds that restrictive policies constrain digital literacy development and permissive policies foster over-reliance, while guided frameworks support higher-order engagement and calibrated confidence [27]. The contradictory faculty expectations reported here are consistent with an unintentionally mixed policy environment, part restrictive, part permissive, rather than a coherently guided one, which helps explain why students experienced the boundary of acceptable use as unstable. For curriculum development, this implies embedding the TASK heuristic directly into course and assessment design across colleges rather than treating it as supplementary guidance, so that source verification and disclosure become routine components of research-methods, writing-intensive, and capstone courses. For institutional governance, it implies establishing a standing GenAI

committee, representing academic affairs, language and literacy support, and the six colleges sampled here, that issues coherent, regularly reviewed, university-wide policy rather than leaving interpretation to individual instructors.

The TASK Heuristic for Innovative Teaching and Policy

The findings are translated into a four-question heuristic for designing and discussing GenAI-supported tasks: (1) Task purpose—what knowledge, reasoning, language, or skill must the student demonstrate personally; (2) Authorial contribution—what part of the interpretation, expression, or decision remains recognizably the student's; (3) Source verification: how claims, references, translations, and biases will be checked against authoritative sources; and (4) Keep a disclosure record: what tool was used, for which function, and how its output was evaluated or changed.

The TASK heuristic is an evidence-informed design heuristic, not a validated intervention. It locates responsible practice inside assignments: research-methods students could diagnose fabricated citations and document verification; multilingual writers could compare Bisaya/Taglish and English versions and explain meaning changes; and literature-review students could distinguish AI-generated orientation from claims supported by original sources. Because students' reported practices were informal and phone-based, short decision prompts, disclosure templates, and source-checking routines embedded in learning-management systems and assignment briefs are especially important. The innovation lies not in adding another AI tool but in redesigning the interaction so that students must make their judgement visible.

4. CONCLUSION AND RECOMMENDATIONS

This study highlights the significant role that acceptance conditions, digital literacy, multilingual practice, and institutional guidance play in shaping responsible GenAI use among undergraduate students. The findings reveal that UTAUT conditions explained substantial variance in self-reported responsible practice, but digital literacy added meaningful additional explanatory value, with ethical literacy emerging as the strongest unique predictor. Students distinguished supportive use, which preserved their evaluation and authorship, from substitutive use, which displaced them, and Bisaya/Taglish-to-English translation illustrated how GenAI can simultaneously widen academic participation and create new dependencies. Responsibility for keeping GenAI use on the agency-preserving side of the threshold is consequently distributed among students, teachers, and institutions.

It is recommended that institutions adopt clear, consistent, and task-specific GenAI policies, communicated university-wide rather than left to individual faculty discretion, paired with digital literacy workshops that emphasize ethical and critical literacy alongside technical skill. Consistent with recent international governance scholarship, this coordination is best anchored in a dedicated institutional GenAI governance committee that reviews policy on a regular cycle and embeds the TASK heuristic into curriculum and assessment design across colleges, rather than treating policy, training, and curriculum revision as separate undertakings [26][27]. Language-inclusive and mobile-friendly training materials should be developed to support the sizable share of students who translate between Bisaya/Taglish and English, so that participation is expanded without transferring linguistic or epistemic authority away from students. Further, it is suggested that faculty adopt the TASK heuristic (Task purpose, Authorial contribution, Source verification, and Keeping a disclosure record) when designing GenAI-supported assignments, and that future research validate the agency threshold and the three forms of agency, epistemic, authorial, and linguistic, across other tasks, disciplines, and language communities using longitudinal, experimental, and artifact-based designs. Because this study is cross-sectional, single-institution, and reliant on self-report,

its findings should be interpreted as evidence-informed propositions rather than validated causal claims.

5. REFERENCES

- [1] Venkatesh, V., Morris, M.G., Davis, G.B., & Davis, F.D. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly*, 27(3), 425-478. <https://doi.org/10.2307/30036540>
- [2] Eshet-Alkalai, Y. (2004). Digital literacy: a conceptual framework for survival skills in the digital era. *Journal of Educational Multimedia and Hypermedia*, 13(1), 93-106.
- [3] Ng, W. (2012). Can we teach digital natives digital literacy? *Computers & Education*, 59(3), 1065-1078. <https://doi.org/10.1016/j.compedu.2012.04.016>
- [4] Diloy, M.A., Comparativo, C.P.E., Reyes, J.C.T., Eusebio, B.J.M., & Morona, L.I.C. (2023). Exploring the landscape of AI tools in student learning: an analysis of commonly utilized AI tools at a university in the Philippines. *Proceedings of the 2023 6th Artificial Intelligence and Cloud Computing Conference (AICCC '23)*, 266-271. <https://doi.org/10.1145/3639592.3639629>
- [5] Giray, L., De Silos, P.Y., Adornado, A., Buelo, R.J.V., Galas, E.M., Reyes-Chua, E., et al., & Ulanday, M.L. (2024). Use and impact of artificial intelligence in Philippine higher education: reflections from instructors and administrators. *Internet Reference Services Quarterly*, 28(3), 315-338. <https://doi.org/10.1080/10875301.2024.2352746>
- [6] Junio, D.A., & Bandala, A.A. (2023). Utilization of artificial intelligence in academic writing class: L2 learners perspective. *2023 IEEE 15th International Conference on Humanoid, Nanotechnology, Information Technology, Communication and Control, Environment, and Management (HNICEM)*, 1-6. <https://doi.org/10.1109/HNICEM60674.2023.10589003>
- [7] Miranda, J.P.P., Bansil, J.A., Fernando, E.Q., Gamboa, A.B., Hernandez, H.E., Cruz, M.A., et al., & Penecilla, E.M. (2024). Prevalence, devices used, reasons for use, trust, barriers, and challenges in utilizing generative AI among tertiary students. *2024 2nd International Conference on Technology Innovation and Its Applications (ICTIIA)*, 1-6. <https://doi.org/10.1109/ICTIIA61827.2024.10761175>
- [8] Villarino, R.T. (2025). Artificial intelligence (AI) integration in rural Philippine higher education: perspectives, challenges, and ethical considerations. *IJERI: International Journal of Educational Research and Innovation*, (23), 1-25. <https://doi.org/10.46661/ijeri.10909>
- [9] Yang, Y., Luo, J., Yang, M., Yang, R., & Chen, J. (2024). From surface to deep learning approaches with generative AI in higher education: an analytical framework of student agency. *Studies in Higher Education*, 49(5), 817-830. <https://doi.org/10.1080/03075079.2024.2327003>
- [10] Xu, X., Qiao, L., Cheng, N., Liu, H., & Zhao, W. (2025). Enhancing self-regulated learning and learning experience in generative AI environments: the critical role of metacognitive support. *British Journal of Educational Technology*, 56(5), 1842-1863. <https://doi.org/10.1111/bjet.13599>
- [11] Yan, L., Pammer-Schindler, V., Mills, C., Nguyen, A., & Gašević, D. (2025). Beyond efficiency: empirical insights on generative AI's impact on cognition, metacognition and epistemic agency in learning. *British Journal of Educational Technology*, 56(5), 1675-1685. <https://doi.org/10.1111/bjet.70000>
- [12] Zhai, C., Wibowo, S., & Li, L.D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: a systematic review. *Smart Learning Environments*, 11, Article 28. <https://doi.org/10.1186/s40561-024-00316-7>

- [13] Hou, C., Zhu, G., & Sudarshan, V. (2025). The role of critical thinking on undergraduates' reliance behaviours on generative AI in problem-solving. *British Journal of Educational Technology*, 56(5), 1919-1941. <https://doi.org/10.1111/bjet.13613>
- [14] Silvola, A., Kajamaa, A., Merikko, J., & Muukkonen, H. (2025). AI-mediated sensemaking in higher education students' learning processes: tensions, sensemaking practices, and AI-assigned purposes. *British Journal of Educational Technology*, 56(5), 2001-2018. <https://doi.org/10.1111/bjet.13606>
- [15] Gonsalves, C. (2025). Addressing student non-compliance in AI use declarations: implications for academic integrity and assessment in higher education. *Assessment & Evaluation in Higher Education*, 50(4), 592-606. <https://doi.org/10.1080/02602938.2024.2415654>
- [16] Scherer, R., Siddiq, F., & Tondeur, J. (2019). The technology acceptance model (TAM): a meta-analytic structural equation modeling approach to explaining teachers' adoption of digital technology in education. *Computers & Education*, 128, 13-35. <https://doi.org/10.1016/j.compedu.2018.09.009>
- [17] Chen, K., Tallant, A.C., & Selig, I. (2025). Exploring generative AI literacy in higher education: student adoption, interaction, evaluation and ethical perceptions. *Information and Learning Sciences*, 126(1/2), 132-148. <https://doi.org/10.1108/ILS-10-2023-0160>
- [18] Dwivedi, Y.K., Kshetri, N., Hughes, L., Slade, E.L., Jeyaraj, A., Kar, A.K., et al., & Wright, R. (2023). Opinion paper: "so what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management*, 71, Article 102642. <https://doi.org/10.1016/j.ijinfomgt.2023.102642>
- [19] Kasneci, E., Seßler, K., Küchemann, S., Bannert, M., Dementieva, D., Fischer, F., et al., & Kasneci, G. (2023). ChatGPT for good? On opportunities and challenges of large language models for education. *Learning and Individual Differences*, 103, Article 102274. <https://doi.org/10.1016/j.lindif.2023.102274>
- [20] Wang, Y. (2024). Cognitive and sociocultural dynamics of self-regulated use of machine translation and generative AI tools in academic EFL writing. *System*, 126, Article 103505. <https://doi.org/10.1016/j.system.2024.103505>
- [21] Wang, C. (2025). Exploring students' generative AI-assisted writing processes: perceptions and experiences from native and nonnative English speakers. *Technology, Knowledge and Learning*, 30(3), 1825-1846. <https://doi.org/10.1007/s10758-024-09744-3>
- [22] An, Y., Yu, J.H., & James, S. (2025). Investigating the higher education institutions' guidelines and policies regarding the use of generative AI in teaching, learning, research, and administration. *International Journal of Educational Technology in Higher Education*, 22, Article 10. <https://doi.org/10.1186/s41239-025-00507-3>
- [23] Luo, J. (2024). A critical review of GenAI policies in higher education assessment: a call to reconsider the "originality" of students' work. *Assessment & Evaluation in Higher Education*, 49(5), 651-664. <https://doi.org/10.1080/02602938.2024.2309963>
- [24] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- [25] Johnston, H., Wells, R.F., Shanks, E.M., Boey, T., & Parsons, B.N. (2024). Student perspectives on the use of generative artificial intelligence technologies in higher education. *International Journal for Educational Integrity*, 20, Article 2. <https://doi.org/10.1007/s40979-024-00149-4>
- [26] Mehl, E., & Tsibolane, P. (2025). AI governance in higher education: linking policy, cognitive effort, and academic confidence. *ACIS 2025 Proceedings*, 83. <https://aisel.aisnet.org/acis2025/83>
- [27] Crompton, H., Burke, D., Nickel, C., Bozkurt, A., Miao, F., Sharples, M., et al., & Yu, S. (2026). Governing generative AI in higher education: a global Delphi study on policy and practice. *International Journal of Educational Technology in Higher Education*, 23, Article 21. <https://doi.org/10.1186/s41239-026-00602-z>