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Research Article

Applied AI and Pedagogical Judgment in Multilingual Teaching and Learning: Bringing EQUAL AI to Life

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Abstract

In recent years, there have been a variety of ethical frameworks proposed for utilizing AI technologies in higher education. A pervasive issue across many of these frameworks is that they do not adequately bridge the gap between theoretical principles and practical application. Several frameworks articulate their underlying theoretical values; however, very few provide concrete examples of how these values are embodied, negotiated, or resisted within day-to-day instructional environments. This article addresses this gap by examining the implementation of the EQUAL AI framework, as proposed by Davoodi in 2024, within a multilingual graduate education context. Utilizing a narrative inquiry approach, this study examines three classroom cases drawn from a graduate-level research methodology course that illustrate the ways AI has transformed pedagogical tensions associated with language, authorship, confidence, and ethical accountability. The findings emphasize the need to view AI use as a function of instructional judgment rather than solely as a compliance issue or a neutral pedagogical tool. Ethical accountability in AI-mediated learning depends on the sustained visibility of students' intellectual labor, as well as on pedagogical strategies that clarify, repair, and reframe AI use as learning unfolds. This article further demonstrates that conceptual frameworks such as EQUAL AI derive pedagogical power only when enacted at the local level through context-sensitive instructional decision-making processes embedded in lived teaching experiences. As such, this study contributes to research on AI in higher education by reconceptualizing AI integration as an adaptive, human-centered pedagogical process within multilingual educational settings, where issues of academic identity, linguistic vulnerability, and legitimacy are continually negotiated.

Keywords: AI in Higher Education; EQUAL AI; Multilingual Writing; Ethical Accountability; Pedagogical Judgment.

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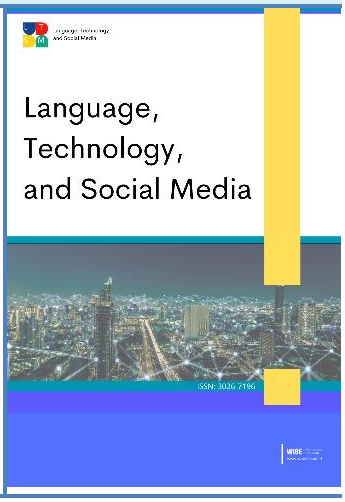

INTRODUCTION

When I first introduced the EQUAL AI framework [1], the goal was intentionally conceptual. I wanted to slow down the conversation around AI in liberal arts education and ask a more basic question than which tools to use or how fast to adopt them. What would it mean to think about AI through equity, understanding, quality, and accessibility, particularly in classrooms shaped by linguistic and cultural diversity? The framework was offered as a way of thinking, a set of guiding ideas meant to help educators make sense of AI's growing presence without surrendering the humanistic commitments of liberal arts education.

Since the publication of that article, something interesting has happened. The conversations I have had with colleagues, graduate students, and instructors have rarely centered on whether the framework makes sense in theory. Instead, they almost always turn to practice. What does EQUAL AI look like in a multilingual classroom? How does it shape decisions when students bring drafts generated with AI, or when a discussion stalls because language becomes a barrier? Where does the framework help, and where does it feel less certain? Those questions persuaded me to write this follow-up paper on how EQUAL AI can be practiced.

Frameworks are useful, but they are also incomplete by design [2]. Teaching, especially teaching multilingual learners, can be particularly complex. Decisions are often made in the moment, under constraints that do not show up neatly in conceptual diagrams. AI complicates this further. It can lower linguistic barriers in one instance and quietly reshape student voice in another. Sometimes it clarifies thinking. Other times it obscures it. The EQUAL AI framework was never meant to resolve these tensions. If anything, it was meant to surface them.

This paper takes the next step by asking how the EQUAL AI framework functions once it is placed into actual pedagogical practice. Rather than expanding the framework or introducing new theoretical constructs, the focus here is more grounded. I draw on three classroom stories from my own teaching in a multilingual context to explore how EQUAL AI informs instructional choices, constraints, and reflections. These stories are not presented as success cases or models to be replicated. They are moments of practice in which AI entered the learning space and made something visible about language, culture, collaboration, and judgment.

The choice to use stories is deliberate. Much of the existing literature on AI in education leans heavily on abstraction, tool evaluation, or outcome measurement [3]. Those approaches have value, but they often miss the everyday pedagogical reasoning that shapes how AI is actually used. In multilingual classrooms, especially, the most consequential decisions are rarely about whether AI is allowed or banned. They are about when to step in, when to hold back, and when to let students struggle productively [4]. These are decisions that live in practice, not in policy documents.

Each of the stories presented here reflects a different dimension of multilingual teaching and learning. One centers on linguistic mediation and the uneasy balance between support and overreliance. Another explores cultural interpretation and creative authorship, where AI becomes both a resource and a provocation. The third focuses on boundary breakdown and unacknowledged AI use, highlighting how uncertainty about responsibility can surface even in the presence of clear policy. Across all three narratives, the EQUAL AI framework operates not as a checklist or set of rules, but as a pedagogical lens that shapes how instructional decisions are made, questioned, and revised over time.

It is worth acknowledging a limitation upfront. These stories come from my own classrooms, and they reflect my positionality as an instructor working within specific institutional

and disciplinary contexts. They are not meant to stand in for all multilingual learning environments, nor do they claim generalizability in a traditional empirical sense. Their value lies elsewhere. They offer a way of thinking through practice, of making visible the kinds of pedagogical tensions that emerge when AI is introduced into spaces already shaped by linguistic diversity. In that sense, this paper is less about proving that EQUAL AI works and more about showing how it works, imperfectly and contextually. Some moments described here align neatly with the framework's intentions. Others expose its limits or raise new questions. If AI is going to play a lasting role in liberal arts education, especially with multilingual learners, educators need room to reflect, adjust, and occasionally hesitate [5].

METHODS

Research Design

This study employs a narrative inquiry approach, which allows for an in-depth examination of how AI impacts teaching and learning in multilingual classrooms. Narrative inquiry is particularly suited for capturing the complexities and nuances of teaching practices, as it preserves the richness of context and acknowledges contradictions and ambiguities. Craig et al. suggest that narrative research is an effective way to make implicit, tacit knowledge explicit across disciplines, thus enabling a detailed exploration of the meaning behind pedagogical decisions [6]. This method was chosen to reflect the lived experiences of educators and students, providing insights into the real-world use of AI.

Participants and Context

The stories in this paper came from my interactions as the instructor of a graduate level research methods course with three multilingual graduate students at a university in Texas, USA. The course is a required component of their graduate education program, which spans various fields of study. The students' diverse linguistic and cultural backgrounds provide a rich context for exploring AI's role in teaching and learning. This setting allows for the investigation of how AI can assist multilingual learners in a manner that is both context-sensitive and pedagogically appropriate.

Data Collection

This study did not involve formal data collection in the traditional empirical sense. Instead, the paper draws on three pedagogical narratives that emerged organically during my teaching of a graduate-level research methodology course. The narratives were selected retrospectively based on their relevance to the central argument of the paper, not as exemplary or ideal uses of AI, but as instances that surface pedagogical tensions arising naturally as AI entered a multilingual instructional context.

These moments were not produced for research purposes; they occurred as part of routine instructional practice and were later examined reflectively to better understand how instructional judgment, ethical accountability, and student learning intersect in AI-mediated environments. By focusing on these organically occurring classroom experiences, the study foregrounds the kinds of situated decisions educators routinely make when integrating AI into teaching.

The value of these narratives lies not in their ability to demonstrate effectiveness or outcomes, but in their capacity to illuminate the interpretive and pedagogical reasoning required when ethical frameworks such as EQUAL AI are applied in real instructional settings.

Narrative Inquiry Approach

The narrative inquiry approach was chosen to study these moments, as it provides a method to explore teaching over time and across contexts through the lens of lived experience. Clandinin and Connelly describe narrative inquiry as a way of studying the practices of teachers by focusing on their lived experiences and how these experiences shape their educational decisions over time and in various contexts [7]. This approach is essential for understanding how AI is applied in education, as there are no standardized guidelines for its use in teaching. The decisions about AI integration emerge through the interactions between teachers and students, which narrative inquiry can capture in a meaningful and reflective manner.

Data Analysis

The analysis focused on close, reflective examination of three classroom narratives to understand how instructional judgment operated when AI use intersected with multilingual teaching and learning. Each narrative was examined as a situated pedagogical episode, with attention to the decisions made by the instructor, the contextual constraints shaping those decisions, and the ethical and instructional tensions that emerged as AI entered the learning process. Consistent with narrative inquiry traditions in language education, which emphasize understanding variation in practice across contexts rather than producing generalized claims [8], the analysis foregrounded how meaning was constructed within each instructional moment, particularly in relation to language support, authorship, responsibility, and student confidence. Rather than abstracting findings into generalized categories, the analysis traced how pedagogical reasoning unfolded in practice and how the EQUAL AI framework informed instructional responses over time. In this way, the analysis highlights the interpretive work educators engage in when applying ethical AI frameworks within real multilingual classroom contexts

Ethical Considerations

This paper is grounded in reflective pedagogical practice rather than systematic human-subjects research. The classroom narratives discussed emerged organically during routine instructional activities and were examined retrospectively for analytical purposes. No data were collected specifically for research, and no interventions were introduced beyond normal course instruction. To protect privacy, all student names are pseudonyms and identifying details have been altered. The analysis prioritizes ethical transparency, respect for student agency, and responsible representation of classroom experiences, particularly in relation to AI use in multilingual educational settings. In this way, ethical considerations are addressed through anonymization, contextual sensitivity, and careful attention to the pedagogical implications of sharing instructional narratives.

Framework and Theoretical Basis

This study draws on the EQUAL AI framework [1], which emphasizes equity, understanding, accessibility, and quality in the application of AI to multilingual education. The framework was applied to analyze how AI is used within multilingual classrooms to support learning while maintaining ethical accountability and pedagogical integrity. Dewey's discussion of experience as a foundation of education serves as a reminder that effective educational decisions are made within a contextually supported educational system over time [9]. On the other hand, Connelly and

Clandinin, narrative inquiry provides an entry point into the multiple layers of meaning that exist between teachers' experiences and the context of those experiences, which is essential for understanding how frameworks like EQUAL AI can guide decision-making in teaching [10].

RESULTS AND DISCUSSION

Context and Approach: Teaching Setting and Story Selection

All student names used in this article are pseudonyms, and identifying details have been altered to protect participant privacy. The stories presented in this paper are drawn from a graduate-level research methodology course at a university in Texas, USA. The students major in various graduate-level education fields and take this required course to satisfy the research expectations of their degree programs. The course provides opportunities for students to learn how to conduct research, with the ultimate goal of developing a research proposal. The stories will demonstrate how the use of AI in the classroom has evolved through ongoing observations and reflective analyses of student performance while providing insight into how I processed these relationships through the lens of personal experience and growth.

I served as both the instructor of the course and the researcher for this study. This dual role is significant in that it affords an insider perspective for the reflection and synthesis of experience, rather than an external or detached viewpoint [11]. In this course, I try to teach my students some important research elements including identification and development of a researchable problem, proposal writing, engagement with scholarly literature, articulation of methodological decisions, and the development of an academic writing style that is appropriate to the research audience. For many multilingual students, the use of generative AI will have repercussions on their longstanding questions regarding language use, legitimacy, and authorship. With the introduction of generative AI into this space, these dynamics will only be amplified.

As the course began, I established guidelines for the responsible use of AI that created boundaries for responsible usage. These guidelines specified that brainstorming, editorial support, and stylistic enhancement could be supported by AI. However, the generation of substantive content, the replacement of analytical reasoning, or the critical review of data was not permitted. All use of AI must be documented. These guidelines were not intended merely as a mechanism of compliance; rather, they were aimed at establishing a level of visibility for the expectations associated with their responsible use and creating an opportunity to discuss the expectations for appropriate use of AI technologies in the context of writing for research.

The stories presented in this paper are from a larger pool of classroom examples that were specifically selected for their pedagogical integrity. They were not selected because they demonstrate effective use of technology; however, they were chosen because they represent examples of pedagogical tension created by the integration of technology into multilingual educational contexts. Collectively, these examples will raise questions regarding issues of confidence, authorship, intellectual ownership and ethical boundary setting. In addition, there will be an example of failed use of AI that was beyond the scope of agreement and was not documented.

The reader is encouraged to interpret the examples presented in this paper not only as examples of success or failure, but also as examples of pedagogical reasoning at their core. Ultimately, the importance of the examples presented lies in the decisions made, the uncertainties expressed, and the negotiation of AI technology within the framework of a graduate course that promotes and insists upon the integrity of research and the importance of scholarly writing.

Story One: Linguistic Support, Confidence, and the Right to Participate as a Researcher

Cielo is a multilingual speaker, with Spanish as her first language. At the time of the course, she was pursuing a master's degree in education. Her journey toward completing the research methodology course was shaped by many years of professional experience; however, she entered the course with a considerable amount of anxiety about her ability to produce academic writing. This anxiety surfaced during the topic selection assignment. Cielo had great clarity in her understanding of conceptually appropriate ideas to pursue but lacked confidence in her ability to articulate those ideas "correctly" through written expression. Consequently, her early drafts were so highly scrutinized (to the point of hesitation) as she attempted to find the best possible expression and the correct words and syntax to use. This tendency to focus on external factors (language level use) rather than internal factors (i.e., idea generation) resulted in a high number of revisions within a limited amount of time to develop an idea.

When introducing generative AI, especially when paired with the course policies, Cielo was very cautious in her approach. Her initial questions were more concerned with the legitimacy of using AI in her research process rather than how she might utilize AI effectively. The level of clarity provided from the policy was instrumental in separating her form of thought from her expression. As she was informed that AI could assist her with refining language but could not assist her with developing content, she began her writing individually and incorporated AI to develop clear prose. This was especially true in her literature review, where the density of typical academic writing had previously intimidated her.

During the methodological and final proposal stages, Cielo exhibited a significant transformation in her writing. In addition to being more effective in presenting her argument, her certainty grew as she developed her methodological justification and continued to display this confidence whether she used AI in the completion of her assignments. Her final reflection highlighted how her personal perspective of her writing changed as a result of the learning experience. Although AI did not replace her voice, it provided her with the ability to trust her voice. This illustrates how generative AI, when viewed through the lens of having defined boundaries, may be utilized as linguistic scaffolding and not as a method of substitution. This is consistent with the EQUAL AI framework's emphasis on providing access to knowledge and understanding without compromising authorship.

The story of Cielo serves as an example of how EQUAL AI processes work when linguistic access is viewed as a component of pedagogy (as opposed to a 'tech fix'). The change in Cielo's writing was not based on a more extensive use of AI; it happened because there was a change in how the institutional framework for linguistic support was utilized in the course. AI's instructional use allowed for a clear boundary between intellectual labor and linguistic refinement; thus, EQUAL AI's focus on access to understanding without undermining authorship was achieved through the integration of AI. AI supported Cielo in articulating her ideas through the medium of academic English but did not intervene in her thinking, argumentation, or methodological decisions. In other words, by providing AI support to Cielo, AI decreased both cognitive and affective demand that existed when attempting to communicate her ideas through academic English. Access within the framework is not necessarily equated to automation, and support does not equal substitution. Cielo's ongoing confidence (even when she was not using AI) supports this assertion. The scaffolding that AI provided to her was temporarily applied and responsive, which allowed her to take ownership of her academic writing voice, as opposed to using someone else's voice. In other words, EQUAL

AI serves as a conceptual resource for assisting in identifying appropriate times and ways to use AI to increase opportunities for participation without undermining the integrity of research writing.

Story Two: Authorship, Ownership, and the Anxiety of Being Judged

The second story within the same course focuses on Reina whose first language was Spanish, and she learned English as a second language. She was a graduate student in education and had a great deal of academic capability and engagement within the course, and demonstrated significant uneasiness with the integration of AI as a component of a course explicitly focused on research integrity. Specifically, during the literature review stage, she questioned whether utilizing AI to refine her vocabulary or structure blurred the lines between receiving assistance and being an author. Unlike many who might have been reluctant to utilize AI for fear of violating course rules, Reina's anxiety stemmed from how the use of AI would be perceived by others.

Reina continually returned to the same theme: if the utilization of AI to refine my writing, is the work that I produce my work, or is it the work of AI? Is AI simply a tool, or does its use create a condition where it is effectively a silent co-author? This feeling intensified as she prepared her final research proposal, which she perceived to be the ultimate representation of her scholarly identity. Though the course policy required that students disclose their utilization of AI, Reina was worried that this disclosure might lead to someone judging her or lessening the rigor of her work.

Through ongoing feedback and continual reference to the policy's emphasis on responsibility as it relates to AI rather than prohibition, Reina developed an important distinction. AI can assist me with the expression of my work, but it cannot claim ownership of my intellectual property. AI did not create my research questions, determine my methodology, or synthesize sources. By the time she submitted her final proposal, Reina was comfortable disclosing her utilization of AI and clearly articulated that she had used AI as a tool to enhance, rather than create, her writing.

Reina's experience shines a spotlight on a facet of practical AI that is often overlooked when policies are enacted: the social and ethical implications associated with disclosure. Reina was not worried about violating the course's policies; rather, her concern was how simply acknowledging her use of AI would impact how others interpreted her research and scholarly identity. By analyzing this situation using the EQUAL AI framework, it can more accurately demonstrate the reason for the disconnect between ethical accountability and technical compliance. The EQUAL AI framework illustrates how ethical accountability emerges through relational and social processes, enabling a more nuanced understanding of how norms of authorship, legitimacy, and credibility are established within the academic community. In this way, the EQUAL AI framework assists in identifying the divide that exists between a policy expressly authorizing the use of an AI versus the ethical apprehensions everyone has with their own use of an AI. As exemplified by the situation presented by Reina, the responsible use of AI includes more than just adhering to stated policies but requires individuals to assess whether the expectations placed on them by their institution conform with their personal understanding of authorship. Framing ethical accountability within a broader perspective of academic socialization, the EQUAL AI framework illustrates that an individual's accountability to being transparent is not simply that of their own but also one that involves everyone who serves as a student or teacher within the same educational experience. Therefore, the EQUAL AI framework will serve as a tool for studying how an ethical approach is

implemented in the production of AI-assisted writing through conversation, modeling and continued self-reflection instead of compliance with an established policy.

Story Three: Brainstorming, Boundaries, and When Responsible Use Breaks Down

This third narrative focuses on a graduate student in education, Sierra, whose first language is Spanish, and describes a moment when she exceeded the limits of using AI as established by the course policy and did not acknowledge this occurrence. When compared with previous narratives, this case did not appear to be productive use of AI at first glance; instead, it presented as inconsistencies among drafts of a core research assignment. Sierra submitted an articulate, polished and stylistically assured piece of writing; however, it was noticeably different from her previous attempts at articulating key concepts and developing a conceptual base for her research. The contrast raised questions about not only writing quality, but also the relationship between fluency in a language and the ability to engage intellectually with what is being written.

When Sierra's situation was addressed through individual feedback and discussion, she did not describe her use of AI as malicious intent, but rather as confusion over where appropriate assistance ends and excessive reliance begins. Although the policy explicitly states that AI must be acknowledged, Sierra indicated that she did not believe her use of AI was excessive because she did not believe it fell outside the parameters of appropriate use. In her opinion, AI had actually assisted her in "putting ideas together". However, upon further analysis of her work, it appeared that it was AI that was responsible for the bulk of the structure and language of the draft.

This incident highlighted a major disjunction between policy articulation and the process of interpreting such policies in the context of AI use. Regardless of the specific guidelines or policies, Sierra was unable to recognize the influence of AI upon her work. The lack of acknowledgement of her use of AI was not due to receiving another author’s work, but rather related to her underdeveloped view of authorship in AI-mediated writing. By reflecting upon the assignment, Sierra was able to see how the polished appearance of her work diminished her ability to engage conceptually with research material, which is particularly challenging for graduate students who are multilingual and are currently navigating academic standards with which they are unfamiliar.

Sierra's instructional response to this incident was not primarily punitive, nor did it solely involve enforcing the policy; rather, it combined a degree of reflection, clarification of expectations, and revision of work. Once Sierra had the opportunity to reread her draft and articulate her own understanding of the literature, it became clear that revision was necessary in order to foreground her analytical reasoning. The process helped to visualize what had been lost through the use of AI as a substitute rather than a support. Most significantly, it reframed the incident as an opportunity for learning about responsibility, authorship, and purpose in writing for research rather than focusing solely on violation.

Sierra's experience through the EQUAL AI framework demonstrates the characteristic of ethical accountability and understanding as pedagogical processes rather than rules that are static and unchanging. EQUAL AI does not presume that the limitations of AI use will be uniformly interpreted or automatically clear, particularly for multilingual graduate students negotiating new academic customs and practices. The framework supports instructional responses where use that would be considered "misuse" is treated as being of diagnostic significance. Sierra’s failure to acknowledge her use of AI was not perceived by her as a violation of expectation, yet it nevertheless constituted a breakdown in ethical accountability that required instructional intervention. By

responding to Sierra's situation through clarification and revising rather than excluding her from the course, EQUAL AI helped to maintain academic integrity while also promoting learning; thus, the framework acts as a guide for pedagogical repair when ethical boundaries are broken down rather than simply as a mechanism for punishing students.

Discussion

The classroom narratives provided above illustrate that the EQUAL AI framework does not function as a checklist or a set of best practices for educators. Rather, the EQUAL AI framework should be viewed as a pedagogical orientation to support instructional judgment during times of uncertainty [12]. The three narratives of Cielo, Reina, and Sierra, show that the five elements of the EQUAL AI framework [Figure1] do not appear as mutually exclusive categories but rather as overlapping concerns that emerge at various stages of the research process. By considering the areas of overlap, there is a much deeper understanding of what it means to implement and operationalize the EQUAL AI framework rather than simply endorsing it.

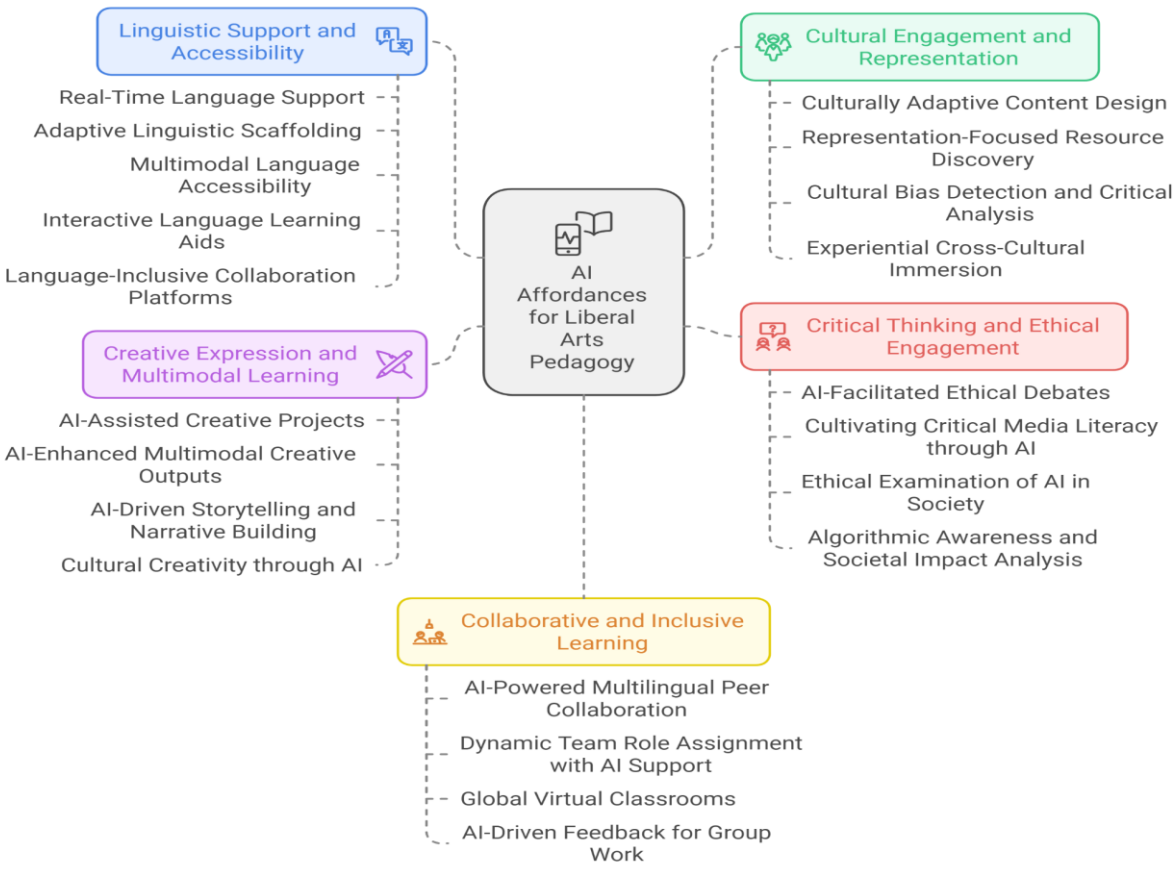

Figure 1. EQUAL AI Framework: Enhancing Equity, Quality, Understanding, and Accessibility in Liberal Arts through AI [1]

Linguistic Support Without Linguistic Displacement

The first domain of the EQUAL AI framework, linguistic assistance, is usually where the conversation around AI starts and has often ended. The initial use of AI in the multilingual graduate course described here focused around AI's linguistic affordances, particularly during the literature

review and proposal writing stages. However, Cielo's experience complicates the assumption that having linguistic assistance or access to it is an inherently positive experience.

Cielo's first barrier in regard to using AI was not that she was lacking ideas; rather, it was long-standing internalized beliefs regarding the use of academic language. The same existed regarding the use of AI to enhance pedagogically productive outcomes only occurred after both parties clearly defined the boundary or framework of what AI was to be. The influence of using AI to construct confidence was determined by the use of AI as a tool for refinement versus generation.

From a critical lens, this particular story demonstrates that linguistic assistance is not a purely technical matter of logistical support; rather, it is also relational and psychological. In this regard, the main contribution of the EQUAL AI framework is that access to AI must also equate to understanding of AI. Multilingual learners benefit from the use of applied AI when the cognitive and emotional burden of the language is reduced and the learner does not perceive the use of AI as having created ownership of meaning [13]. Once learners have met these conditions, the scaffolding provided by linguistic assistance is able to recede, as was the case for Cielo, thereby instilling confidence in place of dependence.

Cultural Representation and the Limits of Algorithmic Neutrality

Even though students do not always acknowledge the presence of cultural representation in their interactions, it nevertheless appears in very subtle ways across the continuum of the course. The research topics chosen by students illustrate culturally situated contexts of education as well as how some AI-generated ideas are often based on dominant and generalized views that do not match the lived experience of students within these culturally situated contexts [14].

At this point in the framework, the importance of cultural engagement becomes evident when viewed through the lens of AI output. AI often presents itself as a source of authority, which can obscure the assumptions underlying its representations of culture. Multilingual students may therefore feel pressure to adopt or defer to the language and framing generated by AI, particularly when they lack sufficient confidence in their own situational and cultural knowledge to act outside the AI's perceived authority. Although none of the stories documented explicit instances of cultural misrepresentation, they reveal how quickly fluency can become conflated with accuracy, as well as how unevenly accessible culturally specific norms, codes, and practices may be for multilingual students.

In Practicing EQUAL AI, instructors must position the AI as contestable (the students can contest the authority of the AI) rather than as authoritative. While the framework does not eliminate cultural representation, it offers the opportunity to question it. It reinforces that role of the instructor to serve as a mediator to utilize instances of AI output that reflect the dominant cultural norms rather than those instances of cultural understanding as situated.

Creative Expression, Voice, and Academic Authorship

The second narrative, which represents Reina's experience with AI, raises one of the most overlooked side effects of generative AI in higher education: the effect of AI on students' experiences of their academic voice and academic authorship. Reina's questions about whether the AI operated as a co-author have deeper implications for her fear about the legitimacy of her scholarship. In graduate-level research writing, voice represents not only a stylistic manifestation, but an inseparable part of identity, authority, and belonging.

The particular emphasis of The EQUAL AI framework on encouraging creativity in all forms and in numerous ways includes the ability to communicate unique arguments, the ability to take intellectual risks, and the ability to claim authorship. The success of students in producing polished, refined, and finished prose would be compromised by encountering too smoothly written documents; thus, there would be no connection to their original thoughts.

Reina's experience illustrates that responsible AI use should not rely only on policy. While transparency is necessary for responsible use of AI, it will not eliminate resistance to judgment. Practicing EQUAL AI provides teaching/learning spaces where students can feel comfortable sharing their AI experiences and using AI as a means of developing their scholarship, so that students would have legal authority to comply with legally binding policies while continuing to have an ethical unease about how their scholarship would be received by third-party assessors.

Critical Thinking, Ethical Accountability, and Boundary Negotiation

The third narrative in this collection draws a stronger connection to ethical accountability when viewed as an outcome of engaging in critical thinking. Sierra's experience of using AI-generated brainstorming demonstrated that defining an objective purpose allows critical thinking to occur that would not ordinarily be enabled through the executive function of using AI-generated outputs to yield a previously defined outcome. As a cognitive access point to a defined purpose, the AI-generated outputs provided Sierra clarity of thought, enabling her to develop a sense of direction of thought, and to develop her ideas without fundamental errors [15].

In contrast to the examples of successful critical thinking enabled by clearly defined objectives, there were instances in which students exceeded established limits of AI use and failed to acknowledge that use, resulting in polished work that obscured the location of intellectual labor. In these cases, the ethical concern was not simply the degree of AI assistance, but the breakdown of transparency that the course policy was designed to sustain.

While institutional framing of such cases as violations may be necessary, that framing alone is insufficient to account for their pedagogical implications. From the perspective of Practicing EQUAL AI, these moments should not be understood solely as failures, but as indicators of misalignment between student understanding, task complexity, and expectations for responsible AI use. In many cases, students described uncertainty about where permissible assistance ended and intellectual ownership began, suggesting that non-acknowledgment often reflected limited experience with emerging academic norms rather than intentional misconduct. Practicing EQUAL AI means choosing to view violations of ethical behavior in the use of AI as instances for learning and clarification rather than as situations deserving of disciplinary actions. Furthermore, practicing EQUAL AI requires that practitioners acknowledge that ethical behavior in engaging with AI is a developmental process. For example, multilingual graduate students are typically engaging not only in learning the methodologies of research, but also in how to display their academic identity within academic structures/norms. This can be complicated by the introduction of new methodologies in the form of AI that have not yet been widely accepted within academia.

From Framework to Action: Pedagogical Responses Enabled by EQUAL AI

The previous narratives have described how AI enters multilingual graduate classrooms as an agent of change instead of simply a neutral tool, transforming long-standing pedagogical tensions related to language, authorship, and responsibility. However, the central challenge that remains is

determining what becomes pedagogically possible through EQUAL AI once those tensions emerge. Without an explicit orientation toward pedagogical action, frameworks such as EQUAL AI risk remaining descriptive rather than generative, offering interpretation without guidance for instructional response.

Ethical accountability in this paper is understood as a relational condition sustained through transparency and visibility of intellectual labor and developed through ethical engagement rather than enforced through policy alone. Framed this way, the contribution of the EQUAL AI framework lies not in prescribing correct uses of AI, but in enabling educators to respond pedagogically when tensions around language, authorship, and responsibility emerge in practice. By offering a principled yet non-prescriptive structure, the framework supports instructional judgment in contexts where educators must make situated decisions about how AI use either clarifies or obscures students' intellectual work [16].

At the level of pedagogical practice, EQUAL AI reframes linguistic support within the context of multilingual research writing. Linguistic assistance in multilingual research writing is often framed in binary terms. It is treated either as a necessary accommodation or as a source of suspicion, leaving little room for pedagogical nuance. Through the lens of EQUAL AI, linguistic assistance becomes a question of how it is positioned instead of whether it is "allowed." As was evidenced in the earlier examples, when educators explicitly delineate between intellectual labor and linguistic refinement, the introduction of AI does not interfere with authorship. Making this distinction allows educators to intervene pedagogically through framing rather than enforcement. In doing so, instructional attention shifts from regulating behavior to clarifying intellectual expectations. In practice, this approach allows educators to clarify which aspects of cognitive work remain non-negotiable. One way this occurs is by explicitly addressing questions such as, "What aspects of the assigned task am I not permitted to use AI?" This change enables teachers to move away from monitoring compliance while expanding opportunities for meaningful engagement in learning.

Furthermore, the EQUAL AI framework provides educators with productive options to address the anxieties surrounding authorship and disclosure. The narratives provided have indicated that ethical transparency alone does not automatically assure trust or comfort. Students may follow disclosure protocols but remain unsure how their work will be evaluated. The EQUAL AI framework positions ethical accountability as an ongoing conversational process rather than a one-time disclosure requirement. Thus, through the lens of EQUAL AI, educators may normalize disclosure as a normal aspect of scholarly conduct instead of an identifier of a lack of scholarly competence. Accordingly, demonstrating how to acknowledge authors, discussing disciplinary standards explicitly, and providing students with forums to discuss their concerns regarding their legitimacy are all valid avenues for pedagogical response [17]. By expanding the concept of ethical accountability beyond the individual to also include the educator, the EQUAL AI framework enhances the collaborative aspect of instruction.

Similarly, the EQUAL AI framework provides further clarity for educators regarding how to respond when the use of AI exceeds expectation. Traditional instruments for breach response are generally rewarded with corrective action or punishment. However, by using the narratives that were present to develop a patterned approach, it becomes clear that instances of the inappropriate use of AI often represent uncertainty with regard to the conceptual model, sometimes compounded by failure to recognize when acknowledgment itself becomes an ethical obligation, rather than

being examples of willful misconduct. The EQUAL AI framework allows for these moments to be considered "pedagogical points of diagnostic evidence." While there will still be penalties associated with the inappropriate use of AI, such penalties may be better contextualized from a developmental perspective, as opposed to being viewed as punitive during the learning process to develop the required skills to conduct research and socially accepted behaviors within academia.

In each of these responses, it is clear that the use of EQUAL AI continues to support the educator in making pedagogical decisions in contexts where definitive solutions do not present themselves. Rather than providing a one-size-fits-all solution, the EQUAL AI framework provides a systematic method for educators to explore and resolve their pedagogical issues through the process of questioning as issues related to AI application are approached as reflective pedagogical challenges rather than purely technical problems.

Within the application of EQUAL AI, the primary value of the EQUAL AI framework relates to how to facilitate effective pedagogical decisions, with AI being viewed solely as a technical challenge within a multilingual learning environment. By focusing on the interrelatedness of access, types of knowledge, critical thinking, creative authorship, and educator responsibility, the EQUAL AI framework provides educators with the time to reflect upon their classroom environment and support their students rather than reacting to them. By using the EQUAL AI framework to shift from a focus on regulating student behavior to a focus on rational analysis of the facts when making pedagogical decisions, the EQUAL AI framework functions to support genuine pedagogical practices rather than simply an articulation of philosophical principles.

Taken together, these pedagogical responses make visible where ethical accountability for applied AI is enacted in practice. Reframing instructor judgment as an active site for AI integration represents a substantial shift in understanding AI integration [18]. The EQUAL AI framework does not prescribe a universal model for balancing competing values (access, authorship & ethical accountability). Therefore, the educator must engage with these tensions on a contextual basis; the assumption is there will always be tension between these values [19]. [20].

In multilingual graduate education, where students are continuing to create their academic identity and where there are increased levels of linguistic vulnerability, the notion of contextual responsiveness warrants an ethical practice. As such, the instructor acts as a mediator of meaning and respect for ethical accountability. The instructor's administration of AI's entry into these graduate students' experience serves to identify what constitutes intellectual work, provide an interpretation of authorship and describe how (and why) the absence of transparency has come to exist and can be improved. By prioritizing reflective judgment over procedural compliance, EQUAL AI aligns the integration of AI with the core humanistic focus of a liberal arts education and allows for the retention of ambiguity but also provides a basis for developing an understanding of the ambiguity of integration.

CONCLUSION

This article responds to one of the primary weaknesses of conceptual frameworks: the separation of theory and practice [19]. This article outlines the EQUAL AI framework, as a means to describe principles of applying AI in ways that still hold to the value of human agency, making meaning and being responsible for those meanings within the context of Liberal Arts education, thus, to create principles for effectively and ethically applying AI. While the initial literature identified five

elements that were interrelated and provided guidance for ethical and pedagogically sound use of AI, it did not elucidate how the principles are enacted, negotiated, and at times, challenged in instructional contexts. Thus, this study situates the framework for use from within the context of multilingual graduate research writing. This study contributes to scholarship on AI in higher education by showing how a conceptual framework gains pedagogical force only when enacted through situated instructional judgment. The classroom stories examined within this study further support the premise that the uses of AI do not exist as fixed points with expected outcomes. Rather, the pedagogical value of AI differs according to the learner's stage of developing their research, and for multilingual graduate students, AI may be used as a linguistic bridge; as a cognitive support at the beginning of developing their ideas; or as a source of ethical tension surrounding authorship and academic authenticity. These uses of AI are not properties of the technology itself; but rather are constructed from the pedagogical design, institutional expectations, and instructor judgment regarding the use of AI. Therefore, this confirms one of the central arguments of the EQUAL AI framework that AI cannot be evaluated meaningfully without consideration to the relational and situational factors associated with the AI usage. This study extends that argument by demonstrating how ethical accountability in applied AI depends on maintaining visibility into intellectual labor and the instructional work required to restore it when obscured.

The findings further demonstrate that the instructor's role in AI-mediated educational settings extends beyond policy enforcement toward interpretive and pedagogical mediation. Clarifying boundaries, responding to student uncertainty, and revisiting expectations as tasks evolve emerge as central instructional responsibilities. This is more evident in multilingual graduate contexts where academic identity, language vulnerability, and legitimacy are negotiated simultaneously. In addition, this study acknowledges the limitations posed by any framework (including the EQUAL AI framework) with respect to the construct of social impact or how the EQUAL AI framework may affect the social interactions between teachers and students, as well as how institutional resources can contribute to the effective implementation of the EQUAL AI framework. The limitations imposed by such frameworks indicate that frameworks cannot be used to eliminate issues related to misuse, resolve social pressures related to disclosing the use of AI in an educational setting, provide the institutional clarity, disciplinary norms, or the gradual establishment of ethical protocols that surround new technologies. Thus, the limitations that the EQUAL AI framework imposes do not render the framework unusable; rather, they serve to highlight the importance of conceptualizing applied AI as an education practice that is continuously evolving rather than as an education practice that has been established.

In summarizing the lived experiences of Cielo, Reina, and Sierra within the context of classroom-imposed expectations of how AI will be integrated into the classroom, I provide a foundation for advancing the discussion from theoretical concepts to real-world applications of AI with the goal of demonstrating how to discuss the nature of AI integration as a process of pedagogy and ethics rather than a matter solely of technology. Furthermore, this study reveals how human judgment continues to play an integral role in multilingual teaching and learning and suggests that proper mediation of AI can ultimately aid graduate education by allowing students to achieve their intellectual and ethical goals. By grounding ethical AI integration in pedagogical judgment rather than technical compliance, this study offers educators a way to engage AI as a human-centered practice.

LIMITATIONS

This study is deliberately situated within a specific instructional context: a multilingual graduate research methodology course taught by the author. Its aim is not to generalize across institutions or to evaluate the effectiveness of particular AI tools, but to examine how an ethical framework is enacted through pedagogical judgment in practice. The narratives presented reflect instructor-mediated decision-making within a particular disciplinary and institutional setting and should be understood as analytically transferable rather than universally prescriptive. Future research could extend this work by incorporating student perspectives, longitudinal designs, or comparative studies across disciplines and institutional contexts. Rather than limiting the study's contribution, these boundaries clarify its focus on how ethical AI frameworks such as EQUAL AI gain pedagogical force when enacted within lived instructional experiences.

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AUTHOR CONTRIBUTION

A.D. was responsible for conceptualizing the study, designing the research methodology, conducting the literature review, analyzing the data, writing the discussion and conclusion sections, and finalizing the manuscript. The author read and approved the final version of the manuscript for publication.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

DECLARATION OF USE OF AI IN SCIENTIFIC WRITING

The author used OpenAI's ChatGPT to support language refinement and Napkin AI to generate graphics. All content was carefully reviewed and revised by the author, who assumes full responsibility for the final manuscript.

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