

Teacher Identity and Technology use in the Gen Ai Era

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ABSTRACT: The proposed cross-national qualitative research examines how teachers develop and negotiate their professional identity in reaction to the increasing adoption of Generative Artificial Intelligence (GenAI) into the teaching process. It also examines how the adoption or opposition to GenAI is indicative of the changing beliefs, values, and self-perceptions of teachers during the digital age. The participants were thirty Indian, Libyan, Nigerian, Jordanian, South African, Iranian, and Armenian educators who were interviewed in asynchronous and text-based emails to get reflective and narrative answers. The study used the method of cross-contextual patterns to identify the cross-contextual patterns using Braun and Clarke's thematic analysis, using a semi-structured interview guide based on the teacher identity theory and the activity theory. Results showed that GenAI is not only a technological invention but a cultural and ethical mediator that redefines the identity of the teacher, the power and the purpose of pedagogy. Teachers repositioned themselves as contemplative mentors and moral advisors and mediated the conflicts between technological efficacy and ethical accountability. The study has concluded that to remain a teacher in the GenAI era, one must engage in constant reflexivity, ethical literacy, and pedagogical adaptation to the context.

KEYWORDS: Teacher identity, Generative Artificial Intelligence, technology integration, digital pedagogy, professional transformation

1. INTRODUCTION

The fully penetrated use of Generative Artificial Intelligence (GenAI) in classrooms is radically transforming classroom activities and the work of a teacher (Chan & Colloton, 2024; Dobrin, 2025). The technological wave is the stimulus that makes the professional role and identity of educators undergo a critical re-evaluation (Samala et al., 2025). The way teachers think of themselves as professionals: their teacher identity has a significant interaction with their choices to adopt, adapt, or resist the generative AI affordances (Zhai, 2024). Such a situation does not randomly take place, but rather it is a complex interaction of sociocultural context, institutional context, and policy context that mediates this dynamic (Gamlem et al., 2025). A cross-national qualitative inquiry is therefore required to shed light on these nuances and offer critical information to the future of teacher teaching, policy, and curriculum development (Czerniawski, 2025).

The current studies on the intersection of the professional identity of the language teacher and their integration of classroom technology are infantile. Conventional approaches to technology adoption have often overlooked the critical influence of identity in the process of pedagogical decision-making. More so, much of the literature has been under the topic of a one-way influence: considering how the identity affects the technology adoption, without looking at the relationship that is two-way and changing with time. GenAI and its ability to automate processes and come up with new content create new tensions and possibilities of identity negotiation, a fact that recent scholarship is just starting to delve into (Feher, 2025). The given study will help to address these gaps, considering how educators in different cultural and institutional settings form and construct their professional identities when facing the integration of GenAI. It will also examine how the introduction or opposition of these technologies demonstrates and influences the changing beliefs, values and perceptions of teachers towards their pedagogical roles in a more digitalized age. The analysis of these mutually influencing factors will result in a conceptually thick and largely critical account of the changing nature of teacher identity in the era of artificial intelligence, the aim of this research. Therefore, the research questions below are developed to fill this gap.

1. What happens when teachers in different cultural and institutional backgrounds build and negotiate professional identity in reaction to the tendency toward increased integration of Generative Artificial Intelligence (GenAI) technologies in teaching?
2. How do the incorporation or non-incorporation of GenAI technologies indicate changes in beliefs, values, and self-perception of teachers regarding their pedagogical activities in the digital age?

1.2 THEORETICAL FRAMEWORKS

The theoretical framework adopted in this study is synthesized, which entails the combination of theories on identity, sociocultural learning, and technology. To begin with, it is poststructuralist in its perception of teacher identity as dynamic, multidimensional and socially negotiated as opposed to a conventional, internal characteristic. This is based on the knowledge that identity is constantly created and re-created in discourse and social interaction as part of certain contexts (Gee, 2000). The concept of identity is not just the attribute of an individual but a type of person one is perceived to be in a specific social environment, which is why it is a key factor that allows interpreting the choice and behavior of a teacher. Second, the framework is based on sociocultural views, especially the idea of Vygotsky (1978), who provides the basis of his theory that human cognition has its origin in social and cultural interactions. This is elaborated by Activity Theory, which conceptualises human activity as a complex and tool-mediated system. This theory, as formulated by Leont'ev (1978) and extended by Engeström (2014), does not see technology (as well as GenAI) as a neutral object but rather as a mediating artifact in an activity system which includes the teacher (subject), pedagogical goals (object), and wider community with its rules and division of labor. This perspective can be used to systematically examine the fact that GenAI integration introduces contradictions and tensions that lead to a change in the educational activity.

Third, it includes the Gibson (1979) concept of affordances, which can be said to be the actions that an environment or object provides a person with. This was adapted to design by Norman (2013), where he differentiated between real and perceived affordances, that is, what a technology can and what a user believes it can do. This assists in examining the interpretation and use of GenAI by the teachers in the way they have considered the capabilities and limitations of this technology, which are influenced by their identity and context. These theories are finally synthesized using the prism of an identity-in-practice based on the work of Lave and Wenger (1991) on the topic of situated learning in communities of practice. This combined perspective explores the process of the implementation and negotiation of teacher identity in the context of the practical work with GenAI tools. It goes beyond the simple cause-and-effect model and examines the constitutive relationship whereby identity determines usage of technology and vice versa, whereby usage of technology and new practice is a reformulation of professional identity in the long run.

2. METHOD

The proposed research used a qualitative exploratory model to explore subtle and emergent phenomena of teacher identity negotiation in the environment of Generative AI (GenAI). This method was the best because the study aimed at knowing the subjective perceptions, beliefs, and reflective narratives of the educators (Keränen-Pantsu & Heikkinen, 2019)- complexities that could not be easily quantified using quantitative measures. Asynchronous email interviews were the major mode of data collection. This was intentionally selected so that the participants had the liberty to contemplate their experiences to a great extent and were able to express themselves without the time limit associated with synchronous communication that might bring out more detailed and deliberate responses (Meho, 2006). This collaborative interaction made it possible to ask follow-up questions and co-construct the meaning between the researcher and the participants, which was critical to understanding the dynamic relationship between identity and technology use (Ratislavová & Ratislav, 2014).

The semi-structured email interview guide was used to answer both research questions. The questions of the guide were clearly posed to work in coordination. Questions that were used to directly elicit information on the first research question centered on Professional Identity and Identity Negotiation, as they required the educators to explain how they created their own roles according to GenAI. At the same time, the second research question was answered by answering the questions of Technological Integration and Institutional and Cultural Factors, showing how their adoption or non-adoption indicated their changing pedagogical beliefs and values.

2.1 Participants

This study had the target population of teachers in seven different national settings, which included the K-12 and tertiary level teachers in seven different national settings: India, Libya, Nigeria, Jordan, South Africa, Iran and Armenia. The selection of these countries was to represent a variety of sociocultural, policy and institutional contexts, which created a rich comparative context of understanding the relationship between teacher identity and technology. Thirty respondents were recruited: five from India and Libya, and four from Nigeria, Jordan, South Africa, Iran, and Armenia (For the complete demographic details, please refer to Appendix 1). The sampling strategy in the study was a purposive criterion to make the data collected relevant and in-depth. It was a non-probability method suitable in qualitative research when the aim was to choose information-rich cases capable of answering the research questions (Patton, 2015). The inclusion criteria were that the participants had at least one year of teaching experience, which meant that they had a professional background. Additionally, they needed to be actively implementing, investigating or at least familiar with GenAI tools in their instructional practice. Lastly, the participants had the capacity and desire to give reflective written accounts in English. In this purposeful context, care was exercised to bring about diversity in the sample in terms of gender, level of teaching (K-12 vs. tertiary), years of experience, and subject specialization to bring a wide range of opinions and maximize the representativeness of the results.

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2.2 Data collection procedure

Asynchronous text-based interviews were used in the data collection process, as they were a methodology that emphasized rich, reflective narratives by the participants in varied geographical locations. The process had been designed into 4 phases so that it could be clear, deep and ethically rigorous. First of all, in Stage 1, recruitment and consent, the potential participants were determined and approached using institutional email databases and established professional educator networks. All the potential participants were informed by means of an elaborate information sheet that explained the aim of the study, the type of participation, the assurance of confidentiality and the right of the participant to pull out at any time. An online consent form was delivered, and it was only after they gave their consent expressly that the formal data collection process started. This observed ethical conduct of research in terms of informed and voluntary participation.

In Stage 2, the first interview round then took place after consent was taken from respondents. The participant was given an email with five to six broad, open-ended questions. The following questions were aimed at getting in-depth narrative answers about their professional identity, their first experiences with GenAI, and their views on how it was applied to education. A model was given to them: "Please expound, building on particular examples of the teaching experience. The respondents were provided with a lenient period of 7-10 days to write their answers, and they had ample time to reflect on the answer without fear of being pressured to give an immediate answer.

Iterative Follow-Up was essential in obtaining depth and rigor in stage 3. After getting the first responses, the researcher made an initial analysis of each story and created individual follow-up questions. This was a dialogic process that had several purposes: to clarify vague statements, to dig deeper into the emergent themes, and to act as a type of member-checking of the initial interpretations made by the researcher by asking the participants to elaborate further or correct them. This two or even three-round process was repeated multiple times between participants and proceeded until a profound and sophisticated level of understanding was reached. Lastly, in Stage 4, closure was used to end the stage of data collection. When data saturation was achieved, and all the iterative conversations were over, each of the participants was given a succinct summary of his/her major contributions and the new meanings that had emerged for a last validity check. This increased the validity of the data. Each participant was formally informed of the end of participation in the study by receiving a formal thank-you email and a certificate of appreciation to thank them with their contribution.

2.3 Instrumentation

This research was based on the semi-structured email interview guide, which was the major tool carefully designed through the synthesis of the most critical theoretical constructs to investigate the peculiarities of teacher interest in the generative AI (GenAI). It had a solid theoretical base in the conventional theory of teacher identity and specifically Beijaard et al. (2004) theoretical framework, which modeled teacher identity as a dynamic construct of subject matter expertise, pedagogical knowledge, and didactical proficiency. This theoretical path was purposely combined with the research on the technology integration models, such as TPACK and the sociocultural activity theory, so that the questions could fully explore the dynamic, intricate interaction between the teacher, the tool (GenAI), and the educational environment. The questions were actually a carefully crafted, open-ended, conversational tone to draw on rich, narrative reflection rather than direct, factual answers in response to the questions. At the systematic level of addressing the research questions, the guide was divided into four major sections: the first, Professional Identity, made the teachers think over the essence of their teaching, beliefs, and professional values; the second, Technology Integration, was aimed at their individual experiences, practice, and attitude to the usage of GenAI; the third, Identity Negotiation section, addressed the empowerment, deskilling, transformation, or resistance of the teachers as they used these powerful new technologies; and the last element, Institutional and Cultural Factors, was intended to reflect on how school policies, curriculum requirements, and the overall cultural context influenced their practice.

2.4 Data analysis

The data analysis was based on a rigorous thematic analysis model (Figure 1), based on the six-step process in relation to the work on the analysis, as the data presented was qualitative (Braun & Clarke, 2006), which identified, analyzed, and reported the patterns in the qualitative data systematically. This interpretive method best fits the discovery of the subtle manner in which educators built meaning regarding their professional identity and GenAI integration. The familiarization was the initial step, in which the researcher read through the entire corpus of asynchronous interview transcripts several times to gain comprehensive immersion into the data. This was followed by the step of coding, where the text was closely and line-by-line open-coded. This was done manually to establish recurring ideas like certain identity statements, expressed emotions, metaphors of describing GenAI, perceived affordances and instances of resistance. These initial codes were then collected and clustered into possible higher-order themes in the third phase, known as theme generation. This was a dynamic process of interpretation, taking descriptive codes to conceptual categories in which meaningful patterns in the data were represented, e.g., Redefining pedagogical authority, Navigating human-AI collaboration, or Ethical ambivalence. After that, the cross-case comparison was performed to study how these themes appeared, met, or deviated within the various national and institutional settings, and provided a critical comparative dimension. The interpretation stage then translated these empirical findings back to the theoretical focus of the study and associated them with theories of technology adoption

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and teacher identity. Lastly, to ensure analytical rigor and credibility, the process included validation using member checking, where early interpretations and thematic summaries were exchanged with the participants to have their opinions on the same, hence basing the analysis on their lived experiences.

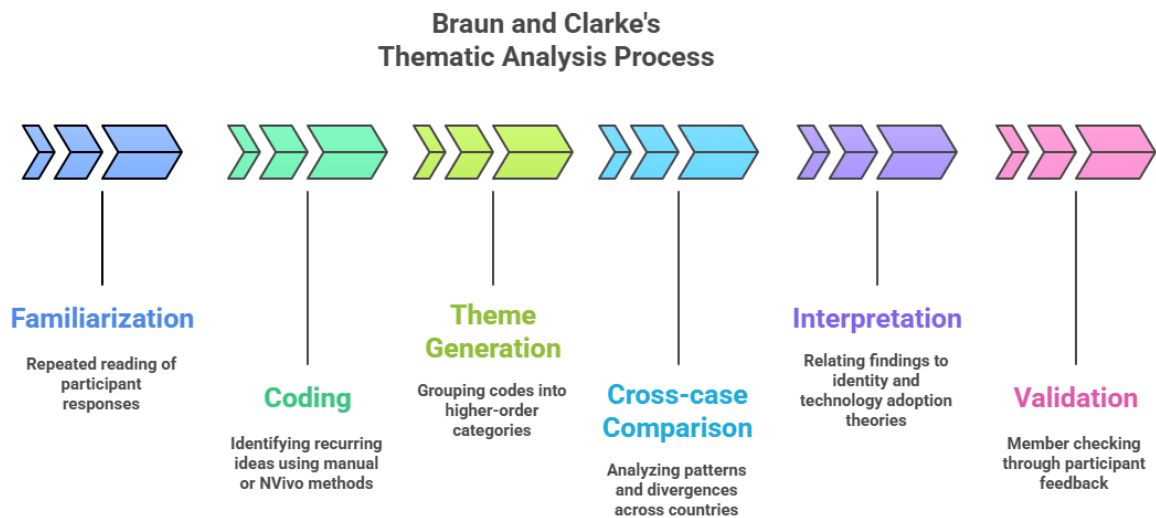


Figure 1: Braun and Clarke's Thematic Analysis Model

2.5 Ethical considerations

The current study was formulated with an absolute dedication to ethical protocols designed for the protection of the rights and well-being of all respondents. Informed consent was secured electronically from each teacher in advance of their participation, such that they would have an in-depth understanding of the goals of the study, the methodologies, and their voluntary participation. To protect confidentiality, all personal identifying information was deleted from the dataset; participant names and institutional affiliations were replaced with pseudonyms in all disassemblies related to the research. Data security was maintained with the archiving of all communication via email and transcripts in encrypted files protected with passwords, which would only be accessible to the researcher. Participants were clearly apprised of their right to withdraw from the research before the onset of the data analysis phase, without providing any formal intimation. Eventually, a high level of cross-cultural sensitivity was maintained throughout the research process with profound veneration for linguistic nuances and diversity in communication practices inherent in a multi-national study.

3. RESULTS

The response to the interview of teachers showed that the integration of GenAI requires a redefinition of the role of a teacher, as the person whose task is to deliver the material is no longer the primary objective, but rather the facilitation of knowledge based on expertise. Educators were ambivalent, weighing the efficiency and individualized learning capabilities of AI on one side and ethical issues (plagiarism, dependency) on the other. It is a strongly contextual adoption process that is mediated by different degrees of institutional support and attitudes to the role of technology by culture. The result of this negotiation is the evolution of teacher-student relations, although there are situations when these relations become strained.

3.1 Theme 1: Redefining the professional identity through AI-mediated practice

In the seven national settings, the educators were able to present a deep-seated redefinition of their professional identity when GenAI was integrated. The role of a knowledge transmitter to a critical mentor became one of the patterns. The shift in philosophy to cognitive mentorship over content mastery was explained by Indian educators in terms of a shift towards ethical facilitation - *"my authority now stems less from possessing answers and more from mentoring students in evaluating AI-generated ones"* (IN-1)-reflecting the philosophical change from content mastery to cognitive mentorship. The same change was reflected by Libyan teachers who focused on the mediation between human cognition and technological agency: *"I see myself as a mediator between technology and human cognition, maintaining intellectual and moral guidance"* (LY-1).

In Nigeria, the participants noted that AI forced them to *"balance efficiency with careful mentoring to maintain conceptual understanding and ethical awareness"* (NG-2), which indicated the shift in expertise as a moral and analytic judgment, but not as something to remember. Likewise, Jordanian teachers indicated that *"authority now derives from the ability to guide interpretation, critical analysis, and ethical reasoning"* (JO-1), emphasizing an enlarged professional identity based on reflections and moral responsibility. The South African respondents placed GenAI as the driver of human-based mentorship: *"My authority now stems from guiding interpretation, fostering reflection, and ethical reasoning"* (SA-1). This conforms to an even wider trend on the

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continent, where AI adoption strengthens and does not weaken the relational and ethical roles of teachers. Iranian teachers also acknowledged that *“human judgment remains central to teaching, even as technology evolves”* (IR-1), as the Armenian teachers claimed to have sustained significance of reflection and moral involvement- *“authority now derives from guiding interpretation, reflection, and ethical reasoning”* (AM-1).

Together, these reflections demonstrate an articulation of a cross-cultural re-articulation of teacher identity as interpretive, ethical and reflexive practice. GenAI tools did not take away the authority of teachers; instead, they have moved it, not as an instance of knowledge but as the stewardship of meaning, which promotes discernment and human judgment as the defining feature of 21st-century pedagogy.

3.2 Theme 2: Agency and ethical ambivalence in technology adoption

Teachers in all seven settings showed the intricate nature of empowerment and ethical uncertainty in their use of GenAI tools. Indian respondents referred to AI as empowering and disturbing, as well as to the agency and ambivalence. According to one of the teachers, *“AI allows me to design tasks more creatively and manage workload efficiently, yet I constantly question whether I am compromising authenticity in my teaching”* (IN-2). One more highlighted moral responsibility: *“I must ensure students do not perceive AI outputs as truth but as tools for thought”* (IN-4). Such considerations exhibit an increased level of professional sensitivity and morality.

The same tension was reflected among Libyan teachers. *“AI enhances creativity, but risks diminishing the emotional connection that defines good teaching”* (LY-2), and the other made the point that *“Without ethical guidance, students may rely blindly on machine-generated information”* (LY-4). These narratives emphasize moral panic-educators are striving to reconcile technological change and pedagogical integrity. The Nigerian teachers expressed agency in a critical autonomy. *“AI makes teaching more dynamic, yet I feel anxious that excessive reliance might erode my intellectual authenticity”* (NG-1). The second teacher commented, *“I use ChatGPT confidently, but I constantly remind students that reflection, not automation, defines learning”* (NG-4).

In Jordan, there was also the same ambivalence expressed. One commented, *“AI expands pedagogical possibilities, but my role is to humanize learning by ensuring ethical engagement”* (JO-2). *“Responsible use demands constant judgment to prevent dependency”* (JO-4), another respondent reflected. The respondents of South Africa identified empowerment in the context of ethical warning: *“AI enhances productivity, but it tempts teachers to delegate judgment to machines”* (SA-2); *“Ethical responsibility must grow in proportion to technological ease”* (SA-3). This was the same perspective of Iranian and Armenian teachers. *“AI fosters innovation but threatens moral depth if used uncritically”* (IR-2); *“I feel empowered yet ethically responsible for every AI-mediated decision”* (AM-2). Together, these considerations depict that the agency of teachers to take up GenAI is constantly negotiated by moral reasoning, institutional norms, and personal values, in which empowerment is always tied to the ethical ambivalence.

3.3 Theme 3: Contextual mediation and cultural framing of AI integration

The embedding of GenAI in the educational process was profoundly mediated by cultural demands, institutional policies, and societal norms, which all created the context in which the teachers in the various contexts understood and applied AI tools. Indian teachers insisted on the self-reliance of the institution and cultural openness. According to one of them, *“My university encourages digital innovation, but without clear AI policies, each teacher defines ethics individually”* (IN-3). Another interviewee said, *“In India’s exam-driven culture, teachers are pressured to prioritize efficiency, often overlooking reflective engagement with AI”* (IN-4). These observations indicate that the institutional gaps and performance cultures can have a significant impact on the ethical positioning and the level of comfort of teachers with the GenAI adoption.

Libyan respondents conveyed the same form of structural mediation but in collectivist cultures. *“In Libya, moral responsibility defines teacher identity; AI use must reflect our social values”* (LY-2). The other participant is more detailed: *“Students expect human warmth; I must balance AI efficiency with cultural expectations of empathy”* (LY-4). In this case, the adoption of technology was filtered by ethical and societal duty and placed teachers in the role of ethical guardians. Nigerian teachers emphasize institutional inequalities and structural difficulties. One of them stated, *“Limited policy guidance leaves us experimenting with AI without systemic support”* (NG-1), and another stated, *“Cultural respect for teachers means we must model AI ethics responsibly”* (NG-3). The experiences they undergo highlight the role of hierarchical educational cultures and infrastructural differences in defining the adoption practices.

Contextual mediation in Jordan was focused on authority and responsibility. *“Students see teachers as moral guides; using AI carelessly could damage that trust”* (JO-2). One more mentioned, *“Without cultural dialogue, AI adoption feels externally imposed”* (JO-3). South Africans associated integration with inclusivity and past disparities: *“Our classrooms reflect digital divides; equitable AI use is both cultural and ethical”* (SA-2). Equally, both Iranian and Armenian teachers positioned AI in the context of moral-educational language: *“Technology must serve, not redefine, our pedagogical ethics”* (IR-3); *“In Armenia, teachers mediate between innovation and tradition, ensuring cultural continuity”* (AM-3). These views, taken together, demonstrate that the integration of GenAI is not a dispassionate exercise, but a highly contextualized and culturally mediated process of defining what teacher identity and practice are.

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3.4 Theme 4: Technology affordances and constraints in practice

In any scenario, teachers discovered that GenAI provided important pedagogical opportunities, such as efficiency, personalization, and creative support, but also demonstrated limitations associated with authenticity, reliability, and individualized judgment. Enthusiasm and critical awareness were expressed by the Indian participants. The teacher commented, *“AI helps me design assignments faster and diversify tasks, but it risks reducing intellectual rigor if students depend on it uncritically”* (IN-2). Another one added, *“The affordance of instant content generation is powerful, yet it often lacks cultural and contextual relevance”* (IN-4). The above reflections underscore the fact that technological affordances can never be of any value unless conveyed through pedagogical intent.

The AI also represented a two-sided innovation to Libyan teachers. *“GenAI assists lesson preparation and creativity, but its language bias sometimes distorts cultural representation”* (LY-1). One of them stated, *“While AI saves time, it cannot replicate empathy or human responsiveness in learning”* (LY-4). Their statements indicate that they are conscious of the intersection of material constraints and social and cultural demands, and that the resourcefulness of technology is mediated in the pedagogical relationship. The concept of contextually limited affordances was also characterized by Nigerian teachers. According to Ng-1, *“AI provides accessible resources, yet poor connectivity limits real classroom application.”* One of them was further expounded and said, *“Students trust AI answers more than teacher explanations; this undermines critical inquiry”* (NG-3). The limitation in this case is epistemic authority - the perceived objectivity of AI may replace thoughtful interaction.

Jordanian participants pointed towards the aspect of balance: *“AI’s strength lies in scaffolding ideas, but it cannot replace interpretive dialogue essential in our classrooms”* (JO-1). Another described, *“Its constraint is ethical—it simplifies complex human discussions into mechanical solutions”* (JO-4). South African educators emphasized potential inclusiveness and inequity threats. *“AI promotes differentiation for learners, but digital literacy gaps restrict full participation”* (SA-2). The Iranian and Armenian teachers expressed their concern about the shortcuts in cognition: *“AI assists creativity but weakens analytical depth if overused”* (IR-3); *“The tool’s affordance depends on the teacher’s judgment to frame it critically”* (AM-1). Together with the thoughts, it is highlighted that the value of GenAI does not manifest itself in its functionality but rather in the interpretive agency of teachers to turn constraints into a pedagogical opportunity.

3.5 Theme 5: Evolving teacher–student dynamics in the GenAI classroom

In all seven contexts, the educators reported that GenAI implementation has significantly changed the nature of the teacher-student relationship, whereby interactional dynamics have been authority-centered and didactic in nature. The Indian participants termed this a trend towards co-learning. One teacher commented, *“GenAI has redefined my relationship with students; I am no longer the sole source of knowledge but a co-investigator guiding interpretation”* (IN-3). Another reported, *“Students now question AI outputs with me, transforming our exchanges into critical dialogues rather than information delivery”* (IN-4). These stories indicate that AI promotes dialogic learning and redefines existing hierarchies.

This change was reiterated by Libyan teachers who were cautious of the relational distance. *“Students engage more independently through AI, yet emotional connection and mentorship are harder to sustain”* (LY-2). The other one noted *“The teacher’s role now involves humanizing AI-mediated learning, ensuring empathy remains at the center”* (LY-5). These considerations suggest that though GenAI advances the autocratic aspect, it also undermines the affective aspects of pedagogy. Nigerian teachers focused on the renegotiation of authority. *“Students see AI as more reliable than human teachers; I must reassert credibility by interpreting and contextualizing AI content”* (NG-1). One of them declared, *“My role has become that of an ethical guide who teaches discernment rather than memorization”* (NG-4).

Teachers in Jordan had a balance between mentoring and partnership. *“AI allows students to explore independently, but I ensure our discussions transform machine answers into human understanding”* (JO-1). *“Students now expect collaboration; I model how to question technology critically”* (JO-3). Participants in South Africa emphasized an inclusive involvement: *“AI has bridged communication gaps, allowing differentiated support, yet it risks depersonalizing learning if overused”* (SA-2). The opinions of the Iranian and the Armenian teachers were similar: *“AI encourages autonomy but weakens interpersonal rapport if not moderated”* (IR-2); *“I now mentor students to balance technological efficiency with moral and emotional sensitivity”* (AM-3). Taken together, these considerations point to a new pedagogical paradigm in which teachers will become not only authoritative sources but also understanding intermediaries, co-creating meaning in an ecology of human-AI learning.

The five themes combined are a revelation of the radical change in how teachers conceptualize and practice their professional identities in GenAI-mediated teaching. In all settings, educators are transforming themselves into reflective guides (as opposed to knowledge tellers), combining ethical arguments, imagination, and technological literacy. GenAI is economical, customized and innovative, but its own affordances cause new tensions- posing questions of authenticity and agency and moral responsibility. These changing dynamics are also influenced by institutional support, sociocultural norms and digital equity to determine how teachers negotiate these changes. Finally, the paper identifies that the key to successful GenAI integration is not technical acquisition but identity transformation, one based on critical reflection, ethical literacy, and relationship pedagogy that maintains the human nature of teaching in the face of technological change.

4. DISCUSSION

This research examined the processes through which educators in different cultural and institutional settings develop and establish their professional identity in reaction to the growing adoption of generative artificial intelligence (GenAI) tools in the teaching process. Although earlier studies have been carried out to research the technology acceptance of teachers based on models like TAM and UTAUT (e.g., Al-Karasneh et al., 2025; Zhai, 2024), such studies have rarely addressed the active reconstruction of teacher identity as a result of GenAI integration, and have rarely considered the sociocultural negotiation of identity-in-practice. Specifically, the mutual interaction between the changing teacher identity and GenAI adoption in cross-national settings is a phenomenon that has not been studied extensively.

The key results reveal that across seven countries, educators redefined their role as less of transmitters of knowledge than of moral instructors of AI learning; one Indian lecturer pointed, “.... *my authority now stems less from possessing answers and more from mentoring students in evaluating AI-generated ones....*” (IN-1). Libyan teachers characterized themselves as “*I see myself as a mediator between technology and human cognition, maintaining intellectual and moral guidance*” (LY-1). Nigerian academics commented about the tension between efficiency and authenticity – “*Digital tools have made teaching more interactive and learner-centered*” (NG-2). According to the Jordanian teachers, their “.... *authority now derives from the ability to guide interpretation, critical analysis, and ethical reasoning, emphasizing human-centric aspects of teaching alongside technological fluency....*” (JO-1). Here, South African teachers also defined their position as the facilitators of human reflection in AI-enhanced classrooms. When asked about the role of technology in the teaching field, Iranian and Armenian teachers concurred that human judgment will always be a key factor in teaching despite technological advancements. These considerations indicate that the affordances of GenAI created new possibilities of teacher agency, but altered professional identity in mediated ways that are significant and context-specific.

4.1 RQ1: Cultural-institutional contexts shape AI identity

The teacher identity theory puts stress on identity as a dynamic and socially constructed identity (Gee, 2000; Beijaard et al., 2004). Using this lensed interpretation, we can observe that GenAI does not merely get adopted; rather, it is a medium by which identity is practiced and negotiated. The activity theory emphasizes the role of artefacts (in this case, GenAI tools) in mediating practice and how they may restructure roles, rules, and division of labour (Engeström, 1987). The stories by teachers imply that GenAI has caused identity work: they become new kinds of practitioners (mentor, curator, co-learner) and negotiate the institutional-cultural demands reflexively (e.g., Indian and Libyan focus on moral guidance). There are also some opposing arguments: e.g., one may say that the issue of adopting technology is more of a technical ability rather than identity. Nevertheless, our data is in opposition to this limited perspective: the teachers focused on value-oriented elements of their job (ethics, authorship, authority) as opposed to mere use of tools. In addition, the framework of affordance-constraint (Gibson, 1979; Norman, 2013) can be used to understand that GenAI technologies provide opportunities, but also limit them, i.e., identity negotiation became possible just because teachers have to exist between the possibilities of the affordances (e.g., efficiency, personalization) and the constraints (e.g., relational loss, ethical risk). Therefore, these results will add to the current theories of technology-adoption since they indicate that GenAI integration is influenced by, and influences teacher identity in a context- and culture-dependent manner.

4.2 RQ2: GenAI integration alters teacher identity and pedagogy

The reflection on GenAI integration by teachers demonstrated that their beliefs, values and perception of themselves changed significantly, which helps understand how the adoption of technology contests their pedagogical ideologies and supports them. The results indicate that the use of GenAI tools is reconstructing the epistemic and moral orientations of teachers- most of the teachers said they were both empowered by efficiency as well as restricted by moral confusion. This ambivalence can be compared to the research that indicates AI in education generates cognitive and moral dissonance as educators strike the equilibrium between innovation and integrity (Knox, 2022; Matos et al., 2025). The teacher identity of teachers thereby became more of ethical enablers of human-machine interaction rather than knowledge brokers with authority, as defined by Beijaard et al. (2004) as identity being a value-mediated practice.

Nonetheless, the results are contrary to the instrumentalist theories of technology acceptance, like TAM and UTAUT, which are more inclined to perceive change of belief in a linear and utility-oriented manner. In opposition to these models, the stories of teachers demonstrated that the change of belief was not only a reaction to the sense of usefulness but also the display of strong professional and cultural values. In particular, although the educators of Nigeria and Libya emphasized the pedagogical potential of AI, they were not ready to adopt it blindly because they did not want to lose the relational and ethical aspects of the teaching process. This is reminiscent of the observation of Du et al. (2025), who state that moral agency and pedagogical philosophy mediate digital integration by teachers, rather than technological fluency in isolation.

Moreover, the redefined self-perception of teachers corresponds to the sociocultural and posthumanist conceptualization of teaching as a distributed agency between the human and technological (Selwyn, 2019). Their opposition to the entire automation, however, restate humanist beliefs regarding empathy, judgment, and authenticity as the key aspects of education. In that way, the inclusion or non-inclusion of GenAI ends up being an ethical activity of professional self-identification. The results add to the theory by

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framing the concept of transforming teacher belief as a negotiating process that is reflexive and ethically charged instead of a mechanistic process of adapting to an innovation.

4.3 Implications

In theory, this paper contributes to the teacher identity theory, showing that digital mediation through GenAI not only triggers the negotiation of the identity but also makes the negotiation faster and reorganized. It is not that teachers are just picking up technology, but they are rewriting the definition of what it means to be a teacher in human-AI hybrid ecosystems. By doing so, the process of adopting technology turns into identity work: teachers renegotiate competence, power, pedagogical principles, and their standing in relation to the students and machines (Lan, 2024; Satvati et al., 2025). In this way, the results refute the linear theories of technology acceptance and highlight the co-constitution of teacher identity and technological integration.

The pedagogical implications are significant: teacher education and continuous professional growth will need to involve critical AI literacy- inclusive of ethical reasoning, bias awareness, prompt engineering awareness, and reflective pedagogical adaptation. Instead of just training teachers to use tools, there must also be identity building in programs: helping teachers to think of GenAI as collaborative and co-constructive, as a learning partner, but not as supporting or opposing. Educators need to be encouraged to wonder how AI alters their beliefs, values and self-perception in classroom teaching; identity-centred PD has the potential to infuse more authenticity and agency in AI-mediated classrooms (Engeness, 2020; Nyaaba, 2024).

At the policy level and the institutional level, there should be clear frameworks for the incorporation of GenAI. The policies needed by institutions should be established in such a way that they strike the right balance between innovation and ethical responsibility, equity and cultural responsiveness. The development of cross-cultural policy should be aware of the mediating role of sociocultural values in the teacher acceptance of and utilisation of GenAI tools; policies that do not account for identity aspects are likely to face only cosmetic adoption or resistance. Also, institutions must acknowledge and certify identity shift of teachers- by giving them professional recognition, mentoring rings and infrastructural facilities to maintain morale and long-term faithfulness of AI integration.

4.4 Limitations

A major limitation is about data contextuality. Such text-based, asynchronous email interviews as those the current study employed provided a certain degree of flexibility and reflexing time on the part of the respondents, but the lack of emotional sensitivity and paralinguistic elements and immediacy of other techniques, including synchronous and face-to-face communication. By the nature of electronic interviewing, as it has been observed, the lack of non-verbal cues may decrease the richness and restrict the researcher in spontaneous probing (Amri et al., 2021).

Second, the problem of language and cultural subtext should be resolved. Since all interviewees responded in written English, a second language for many interviewees, perhaps there was not an opportunity to bring out subtle dimensions of identity, e.g., embodied teaching practices, cultural metaphors or emotional registers. This language constraint may limit the richness of the insight and may skew the answer to higher-order and reflective language forms instead of lived experience. Third, there is the limitation of sample representation: the purposive sample consisting of 30 educators in seven countries offers admirable depth and cross-cultural breadth, but the non-probability sampling prevents generalization of results to other teacher groups. Such sampling as literature on purposive sampling articulates increases the richness of the context, yet limits the statistical representativeness (Campbell et al., 2020). Lastly, one can mention the constraints related to time: the study captures the perceptions of participants at one moment in time, namely, at the initial stages of GenAI tools adoption, which restricts the insight into the possible changes in teacher identity, beliefs, and practices throughout time (Zhai, 2024). The long-term changes necessitate long periods of observation and measurement, as identity research in teaching demonstrates. Taken together, these limitations emphasize the need to view the findings as contextually situated and exploratory but not necessarily generalizable while indicating the potential of more engaging, multi-modal follow-up and longitudinal studies.

4.5 Future research recommendations

To begin with, longitudinal designs should be used in future research to follow the development of the teacher identity as GenAI will become more integrated with teaching practices. Indicatively, a recent study of the identity reconstruction process among Iranian university lecturers during the COVID-19 shift used repeated semi-structured interviews and reflective journals in two semesters, thus capturing the temporal nature of identity change (Shobeiry, 2024). This can be applied to GenAI to show how beliefs, values, and practices change over time and not at a point in time. Second, the mixed-methods methods that would involve digital ethnography, classroom observation, and analytics of AI use will provide insight into the phenomenon. A recent Chinese research on teacher well-being has involved digital ethnography and quantitative metrics and showed how situations on the ground and community formations impacted results (Lei, 2024). Similarly, the triangulation of real-time identity enactment and AI tools mediation would be achieved by combining analytic log data of GenAI tool use, teacher interviews, and classroom observations. Third, the discipline-specific identities (e.g., language vs. STEM educators) should be examined to learn how the affordances and constraints of GenAI differ depending on the subject domain. This kind of differentiation can demonstrate customized professional

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identities and technology functions (Zapata, 2025). Moreover, the additional studies should cover the perceptions of the students regarding the changing role of teachers in the context of AI-mediated instruction, which is a relatively under-investigated aspect. Lastly, researchers need to investigate the institutional power relations, policy discourses, and ethics of AI co-authorship in curriculum design, which would explore the structural and systemic levels of analysis that are usually overlooked by the teacher-technology research. These guidelines will increase the theoretical and practical understanding of the concept of teacher identity in the GenAI era beyond technology adoption to a multi-layered and longitudinal understanding.

5. CONCLUSION

This cross-national study indicates that teacher identity interaction with GenAI integration is recursive, dynamic and culturally mediated. Indian, Libyan, Nigerian, Jordanian, South African, Iranian and Armenian educators always aligned their professional identity with a spectrum between tradition and change, having conservative pedagogical values and being highly accepting of technological change. GenAI does not currently appear as a dispassionate tool but as a cultural product that redefines the agency of teachers, changes the definition of authority, and encourages ethical reflexivity. The research evidence using the integrated lenses of teacher identity theory, activity theory, and affordance-constraint perspectives illustrates that the technology uptake is no longer a technical shift but rather a humanistic process of negotiating meaning, belief and professional values. The identity reconstruction of teachers during the GenAI era is important to emphasize that the enduring integration is possible only with the help of reflective praxis, but not due to proficiency. The results highlight the fact that authentic adoption should be based on empathy, moral consciousness, and pedagogical mindfulness. The challenge of maintaining the human heart of the teaching process will be timeless as education systems across the world become increasingly AI-mediated, but to make sure that technological advancements support and do not eliminate the ethical and relational aspects of the teaching process. Finally, the teacher identity resilience, which is based on ethics, agency and constant reflection, will continue to play a critical role in defining humane and fair digital futures.

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