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Academic Staff Experiences Regarding the Use of Generative Artificial Intelligence in Teacher Training: A Phenomenological Study

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Abstract: This study aims to examine faculty members' lived experiences regarding the use of generative artificial intelligence (AI) in teacher education from a phenomenological perspective, with a particular focus on uncovering the essence and meaning of these experiences. As generative AI technologies increasingly shape educational environments, they have begun to influence not only teaching practices but also the broader structure of teacher education programs. In this context, examining how academics interpret these technologies and integrate them into teaching practices is critical to understanding their pedagogical impacts. The research was designed within a qualitative framework using a phenomenological approach. The study group consisted of three faculty members selected through criterion sampling, all of whom had prior experience using generative AI tools in teacher education courses. Data were collected via a semi-structured forum, enabling an in-depth examination of the participants' processes of meaning-making. The findings indicate that participants' initial interactions with generative AI were largely driven by curiosity; however, this interaction evolved into a multifaceted experience encompassing pedagogical transformation, professional reflection, and ethical considerations. While generative AI was perceived as a tool that facilitates teaching processes and supports content development, concerns regarding the potential decline in academic integrity, originality, and critical thinking were also highlighted. Additionally, it was found that the integration of AI technologies contributes to the restructuring of faculty members' professional identities and teaching roles. In conclusion, the study emphasizes that generative AI should be viewed not merely as a technical tool, but as a transformative element that reshapes pedagogical practices, professional identities, and the ethical dimensions of teaching. These findings underscore the need for structured pedagogical frameworks and ethical guidelines to support the effective integration of generative AI into teacher education.

Keywords: Generative artificial intelligence, Teacher education, Academic experiences,

Introduction

As the fundamental institutional structures of the teacher training process, faculties of education are not merely institutions that equip prospective teachers with professional competencies; they also play a central role in the production of knowledge and the development of pedagogical innovations in the field of education (Ramaila, 2026). The overarching goal of the College of Education is to prepare qualified teachers by equipping prospective teachers with the knowledge and skills required by the modern era.

In this context, the integration of technology into educational processes—particularly artificial intelligence applications—has become a critical factor shaping the current dynamics of teacher training programs (Topcubaşı, 2025). This integration holds the potential to provide students with personalized learning experiences, optimize teachers' instructional processes, and expand global access to education (Seyrek et al., 2024). Colleges of education bear the responsibility of training teachers who can adapt to changing social and

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technological conditions and play a pivotal role in the transformation of the education system (Darling-Hammond, 2012; Zeichner, 2010).

In today's rapidly digitizing world, generative artificial intelligence technologies have emerged as a key factor influencing teacher training processes (Gamlem et al., 2026). Academics working in education faculties are among the most critical actors in this process. In this context, examining the experiences and views of academics in education faculties regarding artificial intelligence is considered important for understanding how these technologies can be pedagogically integrated into teaching processes (Güler et al., 2025). Academics are not merely individuals who transmit knowledge; they are professionals who shape prospective teachers' pedagogical understanding, guide their professional identity development, and integrate educational innovations into teaching processes. Therefore, academics' perceptions of new technologies and how they position these technologies within teaching processes directly influence the quality of teacher education (Cochran-Smith & Zeichner, 2005; Loughran, 2013).

Academics involved in teacher education bear the responsibility of enhancing teaching practices by leveraging the opportunities that artificial intelligence technologies can offer to educational processes, while also being obligated to take necessary precautions by remaining aware of the potential risks that may arise during the integration of these technologies into educational settings (Öksüz Gül, 2024). However, the effective integration of artificial intelligence technologies into educational settings is closely tied to how academics position these tools not merely as technical support but as pedagogical components capable of transforming teaching processes (Tammets & Ley, 2023). However, it has been noted that this transformation requires careful integration, as traditional teaching approaches must be adapted to ensure that generative AI enriches instructional design while addressing ethical constraints and potential misuse (Giannakos et al., 2025). Furthermore, the technical challenges and ethical concerns faced by academics highlight the need for AI integration to be supported by professionally developed programs planned at the institutional level to ensure its sustainability (Cifci et al., 2024). The inclusion of generative AI technologies in this process is making existing tensions in educational settings more pronounced and prompting academics to reevaluate their pedagogical approaches, professional values, and roles in teaching processes.

The widespread adoption of artificial intelligence technologies in education is driving significant transformations in teaching and learning processes; in particular, generative AI offers new opportunities in areas such as content creation, the personalization of learning processes, and the enhancement of instructional design (Giannakos et al., 2025; UNESCO, 2024). This transformation is shifting the traditional teacher–student interaction to prioritize the teacher–AI–student relationship and necessitates a redefinition of teachers' roles (Molenaar, 2022; UNESCO, 2024). In this context, teacher training programs must focus not only on technical skills but also on developing pedagogical, ethical, and critical usage skills (Ng et al., 2021; UNESCO, 2024). In a study prepared by Giannakos et al. (2025), it is emphasized that generative artificial intelligence offers numerous opportunities in content creation, instructional design, and feedback processes; however, the study also highlights the potential for misuse and ethical implications, underscoring how this technology is transforming the educational ecosystem. Consequently, generative AI is viewed not merely as a tool in education but as a comprehensive transformative element that reshapes teaching processes.

A Conceptual Framework

Generative Artificial Intelligence and Teacher Education

Generative artificial intelligence refers to systems that, unlike previous generations of AI applications, are not limited to tasks such as data classification or pattern recognition but are also capable of generating new and original content. At the core of these technologies are large language models (LLMs) trained on massive datasets and containing billions of parameters (Brown et al., 2020). Such models are notable for their ability to generate fluent and context-sensitive text to an extent previously unseen in the field of natural language processing (Wei et al., 2022).

As artificial intelligence technologies become increasingly prominent in the field of education, this has brought the need to reassess teacher training processes within the context of this transformation to the forefront. An examination of prospective teachers' perceptions of artificial intelligence applications reveals that while these technologies offer significant opportunities to support learning processes, they also raise various concerns regarding ethical use, the production of reliable information, and the transformation of the teacher's role. This situation highlights the importance of incorporating provisions for AI literacy and pedagogical application skills

into teacher education programs (Yıldırım & Karagöl, 2025). Although academics' attitudes toward emerging technologies are generally positive, the lack of sufficient guidance on how to use them pedagogically in classroom teaching processes, along with ethical concerns such as data privacy, are considered key factors slowing the widespread adoption of such technologies in educational settings (Karayiğit et al., 2025; Polat, 2025).

Inadequate technical infrastructure and limited support resources remain one of the major structural challenges that academics face when integrating AI-based applications into their teaching processes (Daher, 2025; Ren & Wu, 2025; Turgut, 2024). Low levels of AI literacy and a lack of necessary resources significantly limit the effective integration of these technologies into educational settings (Basty et al., 2025; Lan & Zhou, 2025). The resulting gaps in this context may lead teachers to perceive AI as a potential risk and develop concerns regarding their professional security (Coşkun, 2024). Within this framework, the limited availability of methodological guidance on AI integration, time constraints, and uncertainties regarding appropriate use cases are among the primary barriers hindering teachers' ability to effectively utilize these technologies. When these challenges combine with teachers' lack of knowledge about AI and their ethical concerns, they limit the full realization of the technology's potential in educational processes (Erkoç & Çolak Yazıcı, 2024). To overcome such resistance, it is crucial to enhance teachers' AI literacy and provide them with a more comprehensive understanding of the pedagogical opportunities these technologies can offer in educational processes (Akyel & Tur, 2024; Rui et al., 2025).

Furthermore, the structural and pedagogical limitations frequently highlighted in the literature indicate that AI applications must be addressed within a framework supported by ethical principles, transparent practices, and institutional policies in educational settings (Buele & Llerena-Aguirre, 2025). Nevertheless, beyond the challenges encountered, the innovative pedagogical approaches developed by academics as they integrate AI into their professional practices are emerging as a significant driving force for digital transformation in teacher education (Filiz et al., 2025). In this context, it is anticipated that AI applications can be used more widely and effectively in education faculties once challenges such as ethical concerns, data privacy, and resistance to technology integration are overcome (Meylani, 2024; Uslu, 2023).

The literature examines the opportunities offered by generative AI technologies in the context of teacher education, as well as the limitations they entail—such as reliability and accuracy issues (Jogezai et al., 2025) and ethical concerns (García-López & Trujillo-Liñán, 2025)—from a multidimensional perspective. While current studies demonstrate that these technologies provide significant contributions such as supporting teaching processes, personalizing learning, and facilitating content creation, they also emphasize that factors such as ethical use, data security, lack of pedagogical guidance, and insufficient technical infrastructure limit the integration process (Basty et al., 2025; Cifci et al., 2024; Kasneci et al., 2023). It is anticipated that in the coming years, many activities currently performed by institutions will be carried out more effectively and efficiently by artificial intelligence. Following its integration into educational environments, the implementation of artificial intelligence in academia—as in many other fields—will gain momentum.

Additionally, it is predicted that AI will eventually reach a point where it can fully guide scientific research (Turan, 2025). Furthermore, an assessment prepared by EDUCAUSE Review emphasizes that higher education institutions must adopt comprehensive approaches—including ethical principles, policy development, and risk management—when integrating generative AI, noting that the pace of this technology's adoption is steadily increasing (Diaz, 2024). However, it is noted that there is a limited number of in-depth descriptive studies examining how academics interpret generative AI and the pedagogical approaches they use to incorporate this technology into teacher training processes (Güler et al., 2025; Öksüz Gül, 2024).

In particular, qualitative research that reveals how individual experiences, perceptions of professional identity, and teaching practices are restructured in this process is recommended (Güler et al., 2025; Turan, 2025). Linden, Yuan, and Mendoza's (2024) phenomenological study highlights that many existing implementation reports are short-term, small-scale, and limited to a single institution; it emphasizes the need for studies that generalize findings and deeply examine the experiences of faculty members and students. In this context, examining faculty members' experiences with generative AI through a phenomenological approach holds the potential to more comprehensively elucidate the significance of these technologies within the context of teacher education.

Generative artificial intelligence refers to systems capable of creating new and meaningful content—such as text, images, audio, or video—through deep learning-based models trained on large datasets (Feuerriegel et al., 2024). The rapid proliferation of generative AI tools based on large language models, such as ChatGPT, Gemini, and Claude, has sparked a broad discussion regarding the potential impacts and limitations of these

technologies in higher education. These discussions, ranging from the challenges students face regarding academic integrity and originality to the processes by which faculty members adapt to new pedagogical conditions, necessitate a reassessment of the role of academic actors who bear the responsibility for knowledge production and transmission in universities (Kasneci et al., 2023; UNESCO, 2024). The rapidly advancing generative artificial intelligence technologies of recent years have brought about a significant transformation in the field of education. These technologies, which can generate text and content through systems based on large language models, offer new possibilities in areas such as the development of instructional materials, the personalization of learning, and the enrichment of teaching processes (Brown et al., 2020; Kasneci et al., 2023). However, generative AI also raises various debates regarding academic integrity, ethical use, and pedagogical guidance (UNESCO, 2024). This situation highlights the growing need for in-depth research into how AI is understood and utilized in teacher training processes.

In this context, the primary objective of this study is to elucidate the meaning and essence of the experiences gained by faculty members at a college of education when using generative artificial intelligence tools in the teacher training process, from a phenomenological perspective. The research aims to examine how academics interpret this technology, starting from their initial encounters with AI, the pedagogical approaches they adopt in classroom settings, and the types of transformations they experience in their teaching processes. Furthermore, the study aims to conduct an in-depth analysis of the effects of generative AI use on academics' perceptions of their professional identities, their understanding of teacher education, and their teaching roles.

Furthermore, the study's significant dimension involves elucidating the experiences of academics regarding the ethical dilemmas, emotional tensions, and situations of uncertainty they encounter during this process, as well as how they manage these situations. In this regard, the study aims to explain how generative AI technologies are positioned within the context of teacher education from a multidimensional perspective and to develop a comprehensive understanding of the pedagogical transformation in this field. Furthermore, the study seeks to contribute to filling the gap in the literature by adding to the limited number of qualitative studies on the use of generative AI in teacher education.

Method

Research Model

This study was designed within the framework of a qualitative research approach and is based on a phenomenological research design. Phenomenological studies aim to uncover the shared meaning and essence of these experiences by focusing on the lived experiences of individuals who experience a particular phenomenon (Creswell & Poth, 2016). In this study, the phenomenon is defined as the subjective experiences of education faculty members regarding the use of generative artificial intelligence in teacher training courses.

The phenomenological analysis approach, elaborated in detail by Smith and colleagues (2012), is described as a research method that seeks to both understand and interpret people's experiences. In this approach, the researcher engages in an interpretive process while attempting to analyze how participants make sense of their experiences. Therefore, phenomenological analysis involves a structure where the participant's effort to make sense of their own experience intertwines with the researcher's process of interpreting that meaning. Within the scope of phenomenological studies, the literature suggests a sample size of 3–10 participants (Dukes, 1984; Smith et al., 2012). Under the criterion sampling framework, this study comprises a group of three academics.

Study Group

In this study, the study group was selected using purposive sampling, a type of sampling method. In qualitative research, purposive sampling is based on including individuals or situations that are rich in information and best capable of explaining the research problem (Patton, 2014). In criterion sampling, participants are selected based on predetermined criteria (Şimşek & Yıldırım, 2013). The study group for this research consists of academics working in the faculty of education at a state university in Turkey who have experience using generative AI tools in the courses they teach within teacher training programs. Purposive sampling was utilized in participant selection; the inclusion of academics in the study was based on their possession of specific characteristics in line with criterion sampling. Accordingly, the primary selection criteria for participants were: (1) being an academic actively teaching at the faculty of education, (2) teaching in teacher training programs, and (3) having used at least one of the generative AI tools addressed in the study during the teaching process.

In phenomenological analysis, studies are typically conducted with a limited number of participants. The primary reason for this is that this approach is based on a research philosophy that focuses on examining each participant's experience in detail and depth, placing individual experiences at the center (Smith et al., 2012). In this context, the study group consists of three academics. The identities of the participating academics have been kept confidential; code A1 refers to a female academic working in the field of Science Education, aged 40, with 9 years of academic experience; Code A2 represents a male academic working in the field of Counseling and Psychological Counseling, aged 38, with similar seniority; and Code A3 represents a female academic working in the field of Science Education, aged 45, with 23 years of academic experience.

Data Collection Tool and Process

Research data was collected using a semi-structured interview form. The open-ended questions included in the form allowed participants to express their experiences and thoughts in detail. In this context, the researcher initially prepared a draft consisting of fourteen questions, which was then submitted for review to two academics specializing in content validity and a Turkish language expert for language and expression. Based on the feedback and evaluations received, it was decided to remove four questions from the form. A ten-question interview form was used in the final data collection process.

The semi-structured interview technique was utilized in the data collection process of the study. This type of interview allows the researcher to proceed according to predefined topic headings while providing the flexibility to ask follow-up questions to elicit participants' thoughts in detail. Due to this characteristic, semi-structured interviews are recognized as one of the most frequently used data collection methods in interpretive phenomenological analysis studies (Smith et al., 2012).

Data Analysis

In analyzing the data obtained from the study, the phased analysis process outlined by Smith et al. (2012) in their interpretive phenomenological analysis approach was adopted. In this process, interview transcripts were systematically coded, and the emerging concepts were synthesized to form themes and subthemes. By examining the relationships among the codes obtained during the analysis phase, core categories reflecting the academics' experiences with the use of artificial intelligence were constructed.

Validity and Reliability

To ensure the validity and reliability of the findings obtained in this study, various strategies specific to the qualitative research approach were employed. In qualitative research, unlike in quantitative research, the concepts of validity and reliability are addressed through processes aimed at enhancing the study's credibility and consistency (Şimşek & Yıldırım, 2013). In this regard, the data analysis process was first reported in detail, and the methods used to create codes, categories, and themes were clearly outlined.

To enhance the study's credibility, the findings were directly supported by participants' statements, thereby demonstrating that the interpretations were grounded in the data. Additionally, the codes and themes developed were reviewed by a field expert, and necessary revisions were made to strengthen the analysis process. Furthermore, the researcher's role in the data interpretation process was clearly articulated to ensure the study's transparency. These processes were evaluated as important steps toward enhancing the study's consistency and verifiability.

Results and Discussion

In the data analysis process conducted in accordance with the phenomenological analysis approach, five main themes and the associated categorical structures were identified. The themes, categories, and codes identified are presented in Table 1 below. The findings are presented below under the respective theme headings, accompanied by direct quotations, in order to provide a comprehensive reflection of the participants' experiences.

Table 1. Themes, categories, and codes

Theme	Category	Code
First Encounter with Artificial Intelligence and the Process of Making Sense of It	The Drive to Explore	Start with curiosity Perception of necessity Expectation of time savings
	Initial Emotional Reaction	Excitement and amazement Fear of professional stagnation
Pedagogical Integration Practices	Vehicle Selection and Purpose	Presentation/material preparation Comparative criticism workshop Using the app as a discovery tool Generating event ideas
	Transformation in the Teaching Process	Transition to a facilitator role The Transformation of Student Engagement Quick access to information / risk of misinformation
Transformation of Professional Identity	A Shift in Role Perception	The need to keep abreast of developments Transition to a role that fosters critical thinking The loss of meaning in the transmission of information
	The Transformation of the Concept of a Good Teacher	Incorporating the ethical dimension When to teach them not to use it The Importance of Critical Thinking Skills
Ethical Dilemmas and Uncertainty	Concerns About Academic Integrity	The issue of submitting a one-on-one AI assignment Originality and the responsibility for learning Requirement for originality in research The issue of reference reliability
	Pedagogical Conflict	The balance between potential and intellectual labor Concern about being misled by false information Contextual inadequacy
Looking Ahead and Recommendations	Thoughts and Concerns	Cognitive impairment / risk of dependency The obscuring of originality and depth A growing sense of insecurity
	Recommendations for Colleagues	Ethical violation and exploitation Putting learning at the center Avoid using it under any circumstances

Theme 1: First Encounter with Artificial Intelligence and the Process of Making Sense of It

The first theme identified in the study covers the participants' initial encounters with generative artificial intelligence and the cognitive and emotional responses that this experience elicited. While it is evident that all three academics were initially driven by a sense of curiosity when encountering this technology, it is clear that the process gave rise to different layers of meaning for each participant.

The Drive to Explore

All participants stated that curiosity was a key factor in their interest in artificial intelligence. However, the factors that trigger this curiosity vary from person to person. For A1, the process was shaped primarily by a desire for individual exploration, while for A2, the realization that students' exposure to these technologies is inevitable also played a role. A3, on the other hand, stated that they became involved in the process after recognizing the potential of artificial intelligence to save time.

A1: "I started because I was curious. I don't remember exactly when I first started, but I'd say it was about three years ago."

A2: "At first, I tried it out not so much as a direct teaching tool, but more out of professional curiosity to understand what it could do. However, I realized it could be used not only for individual use but also for academic development. Because students would inevitably encounter these tools anyway, and graduating from college without ever discussing them would leave a gap in their education."

A3: “I’ve been using it for about two years because it offers the ability to access more information in less time, a result of the digital transformation. I made this decision out of curiosity at first, but then realized it saved me a lot of time in many areas.”

Initial Emotional Response

The primary emotion experienced by all three participants during the initial encounter was excitement. However, the development of this emotion over time varied among the participants. While excitement persists to a large extent in A1 and A2, it is evident that in A3, the initial enthusiasm gradually transforms into a concern that professional competence might wane, and this situation limits its use to a more everyday level.

A1: “I’d say I felt both excitement and amazement at such comprehensive answers.”

A2: “My first experience sparked a sense of excitement in me. It made me feel, from a professional standpoint, that I was facing a new tool. For me, that first encounter was a small turning point.”

A3: “I was very excited and happy during my first experience... but when I started to think it was dulling my professional skills, I began using it more for everyday tasks—like recipe searches, directions, and hotel recommendations—rather than professional work.”

The emotional diversity that emerges during initial encounters indicates that, from the perspective of academics, generative AI is experienced not merely as a functional tool, but as a multifaceted phenomenon linked to professional identity. The sense of “awe” observed in A1 and A2 aligns with Daher’s (2025) approach, which suggests that AI literacy encompasses not only cognitive but also affective dimensions. In contrast, the concern about professional obsolescence emerging in A3 parallels the professional security anxieties highlighted by Coşkun (2024), which are particularly pronounced among experienced academics. In this context, participants’ experiences reveal that interaction with AI is not merely a technical adaptation process but also a transformative space encompassing professional meaning-making processes.

On the other hand, the individual-level reflection of the transition to hybrid learning environments, as described by Molenaar (2022), becomes tangibly evident through A2’s “tipping point” metaphor. A notable aspect of this process is that age and professional seniority are not the sole determining factors; the fact that A1 and A2, despite having similar seniority, develop different emotional responses, and that A3 adopts a more cautious approach despite their experience, suggests that attitudes toward technology are closely linked to individual epistemological beliefs (Giannakos et al., 2025). The participants’ experiences, which began with curiosity, indicate that the introduction of artificial intelligence into educational settings is perceived as an inevitable and natural process; this aligns with the findings of Güler et al. (2025), which reveal that a significant portion of academics have developed a positive initial attitude toward artificial intelligence. However, the transformation of the excitement observed in A3 into anxiety over time supports the findings of Erkoç and Çolak Yazıcı (2024), which indicate that negative attitudes toward technology integration may develop.

Theme 2: Pedagogical Integration Practices

The second theme identified in the study examines how academics incorporate artificial intelligence into their teaching processes, the pedagogical principles underlying their choice of tools, and the types of changes this integration brings about in the conduct of the course.

Tool Selection and Purpose

Participants indicated that they integrated artificial intelligence into their classes for various purposes and to varying degrees. A1 noted that they used NotebookLM specifically during the presentation preparation process and encouraged students to utilize such tools in developing activity ideas. A2, on the other hand, adopts a more structured and critical pedagogical approach, ensuring that students first produce their own work and then evaluate it by comparing it with AI outputs. A3, rather than using AI directly as a teaching tool, positions it more as a tool for exploring new applications.

A1: "I use it in my graduate-level courses, especially for preparing presentations. I used the NotebookLM tool in my laboratory safety course because it allows me to create more comprehensive presentations."

A2: "In guidance courses at schools, I asked students to design a guidance activity aligned with a specific learning outcome. First, they created their own plans. Then, I asked them to have generative AI generate a draft activity for the same topic. We then compared the two texts: which one was more practical, which one better accounted for the student's developmental level... We analyzed them critically."

A3: "Right now, in my classes, I only ask for application suggestions; for example, I ask them to suggest an application where I can create a concept map using Web 2.0 tools, and then I experiment with the application myself to try to learn it."

Transformation in the Teaching Process

The integration of artificial intelligence into classroom settings has led to significant changes in the structure of the teaching process and the role of the teacher. A2 articulated this transformation most clearly, stating that the teacher has evolved from a position of merely transmitting knowledge to one of guiding the learning process and fostering a discussion-oriented environment. A3, meanwhile, pointed out that while the ease of accessing information quickly offers benefits, it also carries the risk of misguided direction. A1 noted that due to the limited availability of technology-focused courses, they experienced this change within a narrower framework.

A2: "In a class that incorporates artificial intelligence, the teaching process becomes more interactive but also requires greater attention. The class is no longer just a place where content is conveyed; it has become a space where we collectively examine the quality of the content we produce. Whereas I used to be in a position of providing information, giving examples, and guiding students, I now feel more like a facilitator, a discussion starter, and a guide for critical thinking."

A3: "In a class that incorporates artificial intelligence, accessing information or examples related to a topic is easier and faster; however, this can sometimes lead to incorrect information or examples and cause confusion."

Findings on this topic indicate that educators do not use artificial intelligence based on a single, uniform understanding, but rather in various ways grounded in their own pedagogical approaches. In particular, the comparative critique activity developed by A2 appears to align with the TPACK framework, which emphasizes the importance of pedagogical knowledge and skills in the integration of artificial intelligence (Rui et al., 2025). This approach also aligns with findings pointing to the potential of generative AI to support critical thinking (Giannakos et al., 2025). A1's positioning of AI primarily as a supportive tool can be linked to Daher (2025), who notes that deficiencies in technical infrastructure and guidance are factors limiting integration. In contrast, A3's experiential and inquiry-based approach highlights the importance of the teacher being an active agent in the face of technology.

The strategy of "limiting one-on-one use," which participants collectively adopted, can be viewed as an individual response to the lack of guidance regarding the use of artificial intelligence (Güler et al., 2025). In this context, the comparative analysis method used by A2 aligns with the critical evaluation dimension of AI literacy proposed by UNESCO (2024) and supports pre-service teachers in using technology in a critical and reflective manner. The verification-based approach presented by A3, on the other hand, parallels studies emphasizing that academics assume a supervisory role in the face of artificial intelligence (Buele & Llerena-Aguirre, 2025). However, it is evident that the epistemological structure of the field is a determining factor in the differentiation of the developed strategies; the contrast between the experimental structure in the natural sciences and the interpretive processes in the field of guidance diversifies approaches to technology integration (Erkoç & Çolak Yazıcı, 2024).

Theme 3: Transformation of Professional Identity

The third theme examines how interaction with generative artificial intelligence has reshaped academics' self-perceptions, their understanding of the academic profession, and their perspectives on the training of qualified teachers.

Changes in Perception of Role

All three participants stated that they had reevaluated their academic roles to some extent following their interaction with artificial intelligence; however, the scope and direction of this change varied among the participants. For A1, since academia was already viewed as a process requiring the tracking of innovations, artificial intelligence served to reinforce rather than transform this understanding. In contrast, A2, as the participant experiencing the most significant transformation, is redefining their role to focus on supporting students' reasoning processes rather than merely transmitting knowledge. In A3's case, an approach centered on enabling students to experience how knowledge is acquired, rather than simply presenting it, appears to be taking precedence.

A1: "That's not the case; after all, being an academic means keeping up with developments. So if we don't incorporate advancements in artificial intelligence, we might fall behind."

A2: "I've come to realize more clearly that my role is less about imparting knowledge to students and more about helping them develop critical thinking skills."

A3: "Sometimes I find myself thinking that conveying a lot of information is pointless just because it involves artificial intelligence; but here, our goal isn't to provide information, but rather to help students experience how information is presented—or how it should be presented."

The Transformation of the Concept of a Good Teacher

From the perspective of the three participants, the concept of "training qualified teachers" has taken on a more comprehensive structure with the addition of ethical responsibilities and digital literacy alongside artificial intelligence. In this context, A2's emphasis on "teaching when not to use it" highlights that imparting technical skills alone is insufficient; it also underscores the necessity of fostering a critical perspective.

A1: "I believe artificial intelligence can be beneficial—provided we do not neglect ethical considerations."

A2: "Today, it is not enough for a good teacher to simply master their subject; they must also be able to establish a relationship with technology within a conscious, limited, critical, and ethical framework. Therefore, I believe we need to teach prospective teachers not only 'how to use artificial intelligence' but also 'when not to use it.'"

A3: "Information is everywhere; what matters is the ability to find and question the right information. Having access to more sources requires more reading."

Findings related to this theme indicate that artificial intelligence is experienced not merely as a functional tool, but as an element that reshapes the academic's professional identity. The transformation observed particularly in A2 aligns with the approach emphasizing that teacher educators must engage in continuous professional renewal (Cochran-Smith & Zeichner, 2005). The change emerging in this context evokes a hybrid learning paradigm based on human–AI interaction and redefines the teacher's role on the basis of collaboration rather than competition (Molenaar, 2022). A3's assessment that the transmission of knowledge may lose its meaning aligns with approaches indicating that teachers must increasingly assume the role of facilitators and critical guides (UNESCO, 2024). This situation demonstrates that AI literacy transcends its technical dimensions to acquire pedagogical and identity-related qualities.

On the other hand, the diversity of experiences regarding identity transformation indicates that the impact of generative artificial intelligence on academia is not uniform. The transformation experienced by A2 can be explained by approaches that emphasize the importance of pedagogical awareness in teacher education (Loughran, 2013). A1's more limited perception of change, however, can be linked to a concept of expertise that emphasizes adaptability (Darling-Hammond, 2012). In contrast, the reframing of the sense of meaninglessness observed in A3 over time toward the development of pedagogical skills aligns with concerns regarding AI becoming a dominant force in academia (Turan, 2025). In this context, it is evident that the technical, epistemological, and social dimensions of teacher education are being re-examined (Cochran-Smith & Zeichner, 2005).

Theme 4: Ethical Dilemmas and Uncertainty

The fourth theme addresses the ethical dilemmas, pedagogical tensions, and uncertainties arising from a lack of institutional guidance that academics encounter in the process of using artificial intelligence.

Concerns About Academic Integrity

The direct submission of artificial intelligence outputs as assignments emerged as a key area of concern on which all three participants agreed. Although it was stated that this situation was experienced by all, the solution approaches developed varied. A1 noted that their own use of AI never amounted to direct copying and that a similar approach is common among their colleagues. A2 emphasized students' responsibility for original production during the evaluation process, while A3 highlighted that originality is at the core of academic work.

A1: "Bad example: assigning a presentation generated entirely by artificial intelligence as homework."

A2: "As an instructor, I want to introduce students to new tools; but in doing so, I believe I must protect academic integrity, personal data, privacy, and the responsibility for learning."

A3: "Sometimes I see work done by AI, and I think it's unethical."

Pedagogical Conflict

A2 described the tension between using a tool with high potential and preserving the student's cognitive effort using the metaphor of a "double-edged sword." A3's concerns about the risk of being misled by incorrect information and A1's doubts regarding the reliability of sources indicate that a certain level of caution toward artificial intelligence has emerged among all participants. However, it is evident that all three academics indirectly point to the absence of a clear policy or guidance at the institutional level.

A1: "... I can say I just received support, so I didn't feel any anxiety or anything like that. After all, the presentations that emerged once I added my own research turned out quite well."

A2: "My main tension lies between using a tool with high potential and protecting the student's intellectual effort. I sometimes think of this as a double-edged sword."

A3: "There are times when I worry that I might go down the wrong path, that it might distract me from my goal, or that it might confuse me. That's why, when using AI, I try to write precise search queries and avoid general terms."

These findings are directly consistent with recent research showing that key debates surrounding generative artificial intelligence center on ethical use, data privacy, originality, cognitive superficiality, and reliability. García-López and Trujillo-Liñán's (2025) systematic review demonstrates that generative AI in education raises serious ethical issues such as data privacy, bias, inequality, and the need for regulation. The "double-edged sword" metaphor emerging from this study strikingly summarizes this paradox, as articulated by A2: The tool carries the risk of both deepening and superficializing learning (Jogezai et al., 2025). Concerns regarding academic integrity stand out as one of the most prominent areas of tension raised by artificial intelligence in the higher education context, a finding that parallels the results of Kasneci and colleagues (2023). In particular, A2's work in the field of guidance and psychological counseling makes concerns about data privacy and confidentiality much more pronounced compared to other participants; this suggests that field-specific ethical considerations should be reflected in teacher training programs.

Theme 5: Looking Ahead and Recommendations

The fifth theme explores participants' expectations, hopes, and concerns regarding the future of generative artificial intelligence in education, as well as the recommendations they offer to those new to the field.

Thoughts and Concerns

All three participants agree that artificial intelligence simplifies daily life and teaching processes. However, they all share a common concern regarding the potential development of dependency and the weakening of critical thinking skills. The sense of unease expressed by A3, meanwhile, reflects not only a distrust of technology but also a broader societal concern.

A1: "I think artificial intelligence makes life easier; I just think that when people become too dependent on it, they'll experience a decline in critical thinking—because nowadays, people ask Chat directly without even thinking."

A2: "These tools can help teacher candidates think more creatively, diversify their materials, and develop their own work more thoughtfully. However, this convenience can sometimes overshadow the depth and originality of thinking."

A3: "The growing trend toward artificial intelligence has frankly increased the sense of distrust I already felt; there are times when I pause to examine an image, a piece of music, or a news story, wondering, 'Is this even real?'"

Recommendations for Colleagues

Each participant, drawing on their experiences, offered various recommendations for their colleagues. These recommendations generally fall under the following headings: using technology within an ethical framework, prioritizing learning processes, and avoiding the uncritical use of technology.

A1: "... I would tell my colleague that they can make use of artificial intelligence without violating ethical standards."

A2: "Don't become dependent on artificial intelligence, nor should you ignore it. As long as you prioritize learning over the tool itself, you can find a healthier path."

A3: "I don't think it's appropriate to use generative AI tools in every situation and under all conditions."

Findings regarding the future indicate that all three academics adopted an approach toward artificial intelligence that was neither entirely dismissive nor unconditionally accepting, but rather converged on a critical acceptance stance. This stance aligns with studies that examine academic perceptions of artificial intelligence in higher education within the framework of "conscious acceptance" (Buele & Llerena-Aguirre, 2025). On the other hand, concerns regarding dependency and the weakening of critical thinking skills align with findings highlighting the potential risks of artificial intelligence in university settings (Uslu, 2023).

The "reality check" experienced by A3 serves as a stark warning that AI not only threatens educational processes but also the perception of cognitive reliability. This situation is linked to Turan (2025)'s assessment of the potential for AI to "take root" in academia. AI's emphasis on "ethical violations" and A2's "learning-centered" framework validate the importance of professional development programs necessary for the sustainability of AI integration, as noted by Meylani (2024). While academics strive to develop individual ethical frameworks, they also require more systematic support mechanisms at the institutional level, as emphasized by Cifci et al. (2024). A2's learner-centered approach reflects the understanding that teacher education should be structured based on pedagogical principles rather than technology. In contrast, A3's emphasis on the growing uncertainty regarding the distinction between real and artificial content highlights that digital literacy must encompass critical verification processes, not merely the ability to use tools.

Conclusion

In this study, the experiences of three academics working at a college of education with generative artificial intelligence tools in the teacher training process were examined using a phenomenological analysis approach. It was observed that the interaction process, which began with curiosity, eventually led to a reinterpretation of professional identity and the development of a critical acceptance of the future; this process has been interpreted under five main themes: the initial encounter with and interpretation of artificial intelligence, pedagogical integration practices, transformation of professional identity, ethical tensions and uncertainty, and perspectives on the future and recommendations.

One of the most striking findings of the study is that academics do not perceive artificial intelligence as a single, homogeneous experience; rather, they interpret it in different ways based on their fields, pedagogical approaches, and professional expertise. The fact that A1 views keeping up with technology as a natural part of their professional identity, that A2 uses artificial intelligence within a critical pedagogical framework, and that A3's initial enthusiasm has evolved over time into a more cautious approach demonstrates that different patterns of experience can emerge within the same institutional context.

Findings regarding the transformation of professional identity constitute one of the study's key aspects. Participants A2 and A3 stated that they had moved away from the role of knowledge transmitters and evolved into a guiding role, steering students' approaches to knowledge, technology, and reality. This shift offers a contemporary perspective on the "knowledge or wisdom?" dilemma discussed in educational literature and highlights that teacher training should not be limited to content delivery but must also encompass students' abilities to question and make sense of knowledge.

The findings regarding ethical dilemmas point to a clear lack of policy, particularly at the institutional level. While it is evident that academics have developed individual ethical stances, it is clear that these approaches are not sufficiently supported by institutional regulations and collaboration among colleagues. This situation underscores the need to integrate artificial intelligence into educational settings not merely as a tool, but through a holistic approach that addresses its pedagogical, ethical, and institutional dimensions collectively.

One of the study's key contributions is the emergence of an approach among all participants that could be described as "critical acceptance." Rather than completely rejecting or unconditionally embracing artificial intelligence, this approach emphasizes using it in appropriate contexts and with a sense of ethical responsibility. For this reason, it is considered important for teacher training programs to reflect this understanding in both their curriculum structures and teaching processes. Ultimately, this study demonstrates, from a phenomenological perspective, that generative artificial intelligence serves not merely as a technical tool in teacher training processes, but as a transformative experience that prompts educators to reevaluate their pedagogical approaches, professional identities, and ethical responsibilities.

Recommendations

Future academic studies could explore the integration of artificial intelligence literacy into teacher education programs; in this context, research could examine how to develop not only prospective teachers' practical skills but also their critical thinking and ethical judgment competencies. The role of artificial intelligence in lesson planning, activity development, and assessment processes can be investigated through the design of pedagogically focused content.

Additionally, the contribution of activities based on comparing AI outputs with student work to critical thinking can be evaluated, and processes for raising awareness regarding situations where artificial intelligence should not be used can be examined. It is recommended to conduct a comparative analysis of academics across different disciplines regarding their experiences with generative artificial intelligence, utilizing broader and more diverse samples. Furthermore, it is crucial to thoroughly examine the decisive role of institutional culture in artificial intelligence integration processes among education faculties located in different regions. On the other hand, it is anticipated that longitudinal research designs examining how pre-service teachers' experiences with AI use develop in interaction with academics' perceptions and practices will make significant contributions to the field.

Scientific Ethics Declaration

* The authors declare that the scientific ethical and legal responsibility of this article published in EPESS journal belongs to the authors.

* This study was conducted with the approval of the Social and Human Sciences Ethics Committee of Necmettin Erbakan University, under decision number 2026/336, following application number 30665 (Meeting number: 07).

Conflict of Interest

* The authors declare that they have no conflicts of interest

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