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Artificial Intelligence In Universities: A Study On Academics' Views¹

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Abstract

Artificial intelligence (AI) has led to rapid and profound transformations in sectors such as education, health, and public administration. Universities are in a key position in this transformation with their role in advancing knowledge production and educating individuals equipped with digital skills. This study examines the perceptions of academics working at universities in the Çukurova Region of Turkey regarding AI, their usage patterns, and the challenges they face. Semi-structured interviews were conducted with 22 academics, and the data were analyzed using MAXQDA 2024 software.

The findings show that AI tools—especially applications such as ChatGPT—are used mainly at the individual level, in areas such as course preparation and research support. However, we understand that this

use is largely superficial, with infrastructure deficiencies and insufficient ethical guidance limiting the integration process. Therefore, the integration of AI in higher education should not only be considered as a technical development but also as a multi-layered transformation process with ethical, cultural, and organizational dimensions. While this study calls the reader to rediscover the core values of being human in the face of technology, it also prepares the ground for change in concrete educational policies and practices with its suggestions.

Keywords: Artificial Intelligence, ChatGPT, Academic Views, Higher Education, Maxqda.

JEL Codes: I23, M15, O33

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1. Introduction

AI has quickly become one of the most important drivers of digital transformation in higher education. People used to think of AI as a futuristic idea with a lot of promise. Now, though, it is a real force that is changing how universities work, how teachers teach, and how students learn. Colleges and universities are now looking at the bigger ethical, educational, and institutional effects of using AI in schools, not just the technical ones. AI has transitioned from a theoretical concept to a practical application.

Students and researchers have been very interested in the increasing use of AI tools like ChatGPT. People in many different fields use these tools, like writing papers, getting help with research, making content, and helping with administrative tasks. As these technologies become more common, many important questions come up: How do teachers know what they are and how to use them in class? How well do colleges have the right rules, infrastructure, and procedures in place to use AI tools in a way that is both ethical and long-lasting?

Are professors ready to teach their students how to use AI in a responsible way?

The Çukurova Region of Turkey is known for having a diverse academic community and a growing educational infrastructure. This study wants to answer these questions by looking closely at this region. The study employed a qualitative method, conducting in-depth interviews with 22 scholars from six different universities in the area. The study's goal is to put the real-life worries, experiences, and insights of faculty members at the top of the list. We must examine AI's use, perception, and application in teaching and research, not just its theoretical benefits. This approach emphasizes the important role of faculty members in making sure that the integration of AI into university systems follows academic standards and ethical concerns.

This study uses MAXQDA 2024 software to collect and analyze qualitative data. It tells us a lot about how to use AI in higher education in a smart and moral way. The results of this study can help school leaders, policymakers, and curriculum developers deal with the problems that come up when schools use AI. The study gives useful advice on how to make rules, set up classes, and train teachers in a way that promotes a fair, moral, and useful use of AI in regional universities, where academic life is different from other places. This study emphasizes the importance of involving faculty members in the process. They need to know how to use AI and have the moral fra-

meworks to help students use these powerful tools.

2. Conceptual Framework and Literature Review

Since the middle of the 20th century, people from many different fields have helped to shape the ideas and theories behind AI. Nilsson (1998) says that technology and information systems will work better if you combine artificial intelligence with knowledge. Kurzweil (2001), on the other hand, says that AI is a system that copies how people think and uses that to control machines. Fathima Anjila PK (1984) states that AI consists of systems that perform tasks in a manner similar to how people do them. These methods show that AI is both a new technology and a powerful force for change in society. Artificial intelligence, which was presented in science fiction movies in the past with its dystopian or utopian dimensions, has turned into a reality that permeates every aspect of life today.

Feng (2021) emphasizes that technological developments in computing, data processing, and data storage have contributed to the popularity of artificial intelligence in many disciplines, including social sciences and humanities. Villarreal et al. (2023) argue that with the rise of intelligent systems, the need to understand the perspectives of these "entities" has never been more critical. This points to the need to consider AI not only as a technical but also as a social and cultural phenomenon.

Although it is difficult to agree on a standard definition of AI due to its interdisciplinary nature (Crompton & Burke, 2023), the example of Stanford University shows how this multidimensionality is reflected in education. Lu (2025) reveals that the university's liberal arts-based education model and its collaborations with Silicon Valley paved the way for pioneering initiatives in human-centered AI education. Programs such as Stanford AI4ALL are among the examples that embody the interdisciplinary approach.

Historically, the Dartmouth Conference organized by McCarthy, Turing, and other scientists in 1956 was the turning point in which artificial intelligence as a research discipline was established (Feng, 2021; Kline, 2010). With this conference, artificial intelligence became a field that could transform cognitive functions and social systems. Artificial intelligence is used in many subfields, such as machine learning, perception, creative writing, autonomous driving, and medical diagnosis (Doğan et al., 2025). Zeydan (2024) and Schiessl et al. (2022) found a significant increase in publications on artificial intelligence in the post-2016 period. Crompton and Burke (2023)

state that the studies conducted in the 2021-2022 period are student-oriented, and the use of AI in higher education is spreading rapidly. The evidence shows that education and academic research practices are being transformed. Islam and Islam (2023) evaluate the impacts of AI in four main dimensions within the framework of research, education, personal skill development, and social contexts. Villarreal et al. (2023) analyze the interaction process with these technologies through “thing ethnography” to understand the opportunities offered by productive AI tools such as ChatGPT in education.

While Bareh (2025) addresses the contribution of big language models to the thematic synthesis process in qualitative research through content analysis and a SWOT approach, Kujundziski and Bojadjev (2025) analyze the institutional guidelines for generative AI in German universities, focusing on AI literacy, ethical principles, and strategic integration processes. Both studies reveal that AI plays a critical role in pe-

dagogical transformation and institutional planning. While Qian et al. (2025) assess the potential of AI-based technologies in education reform and resource optimization, Henadirage et al. (2025) draw attention to barriers such as lack of policy, digital inequality, and cultural resistance through the case of Sri Lanka. These studies raise the necessity of holistic policies for the sustainable integration of AI, especially in the context of the Global South. Hmoud et al. (2024) show that generative AI contributes to learning processes by revealing the positive effects of using ChatGPT on students’ task motivation.

In conclusion, the literature’s theoretical and empirical findings make it clear that AI should be considered more than just a new technology in higher education systems. We should view it as a complex tool for change, requiring restructuring at the levels of teaching, ethics, and institutions. Table 1 shows how the sources used in this study, which looks at the role of artificial intelligence in higher education,

Table 1. Literature Used in Research on Artificial Intelligence in Higher Education

Theme	Sources	Description
1. Conceptual and Historical Foundations of AI	Nilsson (1998), Kurzweil (2001), Fathima Anjila PK (1984), Feng (2021), Kline (2010)	Studies provide theoretical definitions, early foundations, and interdisciplinary perspectives of AI.
2. Pedagogical Applications and Learning Innovation	Siemens & Long (2011), Holmes ve Fadel (2019), Zhai vd. (2021), Doğan vd. (2025), Stan vd. (2025), Luckin vd. (2022), Hmoud vd. (2024), Vilarino (2025), Zawacki-Richter, Marín, Bond, & Gouverneur (2019)	Works exploring AI in teaching, learning design, and educational transformation.
3. AI Literacy, Academic Readiness, and Faculty Perception	Wang vd. (2025), Gayed (2025), Dempere vd. (2023), Crompton & Burke (2023), Chan & Hu (2023), Francis vd. (2025), Smith (2022)	Research on AI awareness, digital skills, and academic adaptation in higher education.
4. Ethics, Integrity, and AI Risks in Academia	Royer (2024), Dockens ve Shelton (2025), Oladele (2024), Escotet (2023), Minkkinen vd. (2022), Olorunfemi vd. (2024), Güner vd. (2025), Zawacki-Richter vd. (2019), Popenici & Kerr (2017)	Sources discussing academic ethics, bias, transparency, and responsible AI use.
5. Strategic Governance and Institutional AI Policy	McDonald vd. (2025), Francis vd. (2025), Korseberg ve Elken (2024), Kujundziski & Bojadjev (2025), Ataş & Gündüz (2019)	Papers examining university-level AI policies, planning, and administrative frameworks.
6. Regional, Infrastructure and Cultural Contexts	Henadirage vd. (2025), Hamedinasab & Rahimi (2025), Abdurashidova vd. (2023), Livberber ve Ayvaz (2023)	Studies focusing on barriers and adaptation in diverse regional and sociocultural contexts.
7. AI Tools in Research and Academic Support	Tate vd. (2023), Villarreal vd. (2023), Bareh (2025), George & Wooden (2023), Zeydan (2024), Schiessl vd. (2022)	Research on the integration of AI tools for research enhancement and administrative automation.
8. Methodology, Question Design, and Survey-Based Literature	Eti (2025), Ünal & Yıldırım (2024), Soldan (2022), Aruğaslan (2025)	Methodological studies on interview guides, AI-based survey tools, and sampling design.

Source: Created by the author with artificial intelligence support.

are grouped by theme.

2.1. Artificial Intelligence in Higher Education

AI is having a big impact on how colleges and universities teach, do research, and train people. According to Zawacki-Richter et al. (2019), colleges use AI in many ways, such as to help students plan their courses and make course materials. Siemens and Long (2011) say that these technologies improve productivity and help students learn by making it more personal. Holmes and Fadel (2019) say that AI-supported solutions can help students do better in school and help teachers manage their time better in big classes by giving each student individualized content depending on how they learn best and how fast they learn.

Research on the application of AI in colleges and universities reveals that these technologies can assist in various aspects of teaching. It is important to note, nonetheless, that several essential problem areas should not be overlooked in addition to these contributions. While Kutlucan & Seferoğlu (2024) draw attention to issues such as the privacy of student data, biases in algorithms, and changes in the roles of instructors, Smith (2022) points out the importance of instructors having sufficient digital literacy levels for a sustainable AI integration.

The application areas of AI are not limited to teaching and assessment. Hannan & Shuguang (2021) state that many administrative and support processes in universities, such as enrollment management, library automation systems, academic success prediction, student satisfaction analysis, and campus

security, are also made more efficient with AI algorithms. George & Wooden (2023) reveal that processes such as literature search, resource management, hypothesis testing, and data analysis in research activities are increasingly integrated with AI tools.

Zhai et al. (2021) state that using AI in education strengthens its theoretical foundation and creates a channel for collaborative research between educators and AI engineers. Stan et al. (2025) state that ChatGPT has the potential to increase student engagement and improve learning outcomes. In this context, it is emphasized that strategies for its effects on language skills, age-related technology integration, and teacher training should be developed. Tate et al. (2023) explain that tools like Iris.ai, Semantic Scholar, and VOSviewer help with reviewing literature, while Scite, SciScore, and iThenticate assist with understanding citations, checking if reports are suitable, and detecting plagiarism. They also emphasized that effective prompt strategies should be developed to reach the correct conclusions, and AI outputs should be ethically verified and used.

According to Villarreal et al. (2023) and Bareh (2025), the SWOT assessment clearly outlines the strengths, weaknesses, opportunities, and threats of using AI-supported academic tools. It guides students and researchers in terms of ethical and safe integration processes. In the following, the author presents a blended SWOT analysis of the use of AI-assisted academic tools, combining the information provided by the authors. This SWOT analysis will also provide guidance for students and researchers on how to integrate more effectively, safely, and ethically (Villarreal et al., 2023).

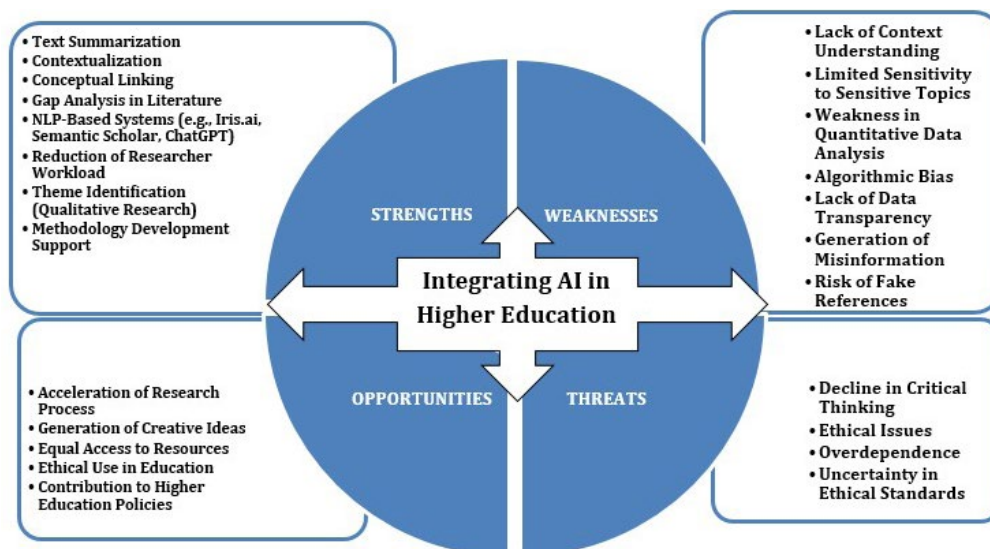


Figure 1. SWOT Analysis for the Use of Artificial Intelligence in Higher Education

Source: Based on Tate et al. (2023), Villarreal et al. (2023) and Bareh (2025).

Using the grounded theory approach, Hamedinasab and Rahimi (2025) identified the main barriers to artificial intelligence applications in higher education based on the opinions of 14 educational technology experts. Among these obstacles, technological infrastructure deficiencies, cultural-religious resistance, uncertainties in legal regulations, and human resource inadequacies stand out. Hammad (2023) states that AI systems, such as large language models, cannot still generate original ideas and develop creative thinking; these systems are based on statistical modeling and probabilistic operations. However, it is also predicted that advanced algorithms capable of generating entire chapters of scientific papers may emerge shortly.

Luckin et al. (2022) propose a seven-stage model, the GenAI Readiness Framework, to support educators using AI ethically and effectively in a pedagogical context. This framework includes raising awareness of the possibilities offered by AI, solving educational problems through AI, structuring data collection and analysis processes, and re-evaluating and optimizing learning processes. This framework, called EThICAL, is defined as follows:

1. Excite: Introducing the possibilities offered by AI in a way that generates excitement.
2. Tailor and Hone: Concretize and specify educational problems in a way that AI can solve.
3. Identify: Define the available data and explain how it relates to the problems.
4. Collect: Collect the additional data needed to solve the problems that have become clear.
5. Apply: Choose the appropriate AI technique and start applying it.
6. Learn: Analyze, check the results and make inferences from the data obtained.
7. Iterate: revisit, improve and recheck the process based on the results.

As a result, artificial intelligence technologies in higher education should be considered a digital innovation and a pedagogical, ethical and managerial transformation tool, and multidimensional strategies should be developed accordingly.

2.2. Ethical Dimension of Artificial Intelligence in Higher Education Institutions

The swift incorporation of artificial intelligence (AI) into higher education has necessitated immediate discourse over its intellectual, ethical, and pedagogical ramifications. Tate et al. (2023) characterize the increase in AI-generated journal submissions as a "impending tsunami." Zhai et al. (2021) caution that inappropriate utilization of AI may alter the functions of educators and learners, leading to social and ethical dilemmas. Royer (2024) contends that technologies such as ChatGPT are revolutionizing assessment, authenticity, and critical thinking in aca-

demics, highlighting the necessity for a measured, critical appraisal rather than uncritical optimism or apprehension.

Even though AI makes things more efficient, issues like digital inequality and compromised assessment integrity show how important it is to rethink how things are done now.

AI makes academic work easier by quickly processing data, finding patterns, and summarizing information. However, it also causes big problems like algorithmic bias, lack of ethics, false information, and a lack of creativity. Because of these issues, organizations need to have clear rules about what is right and wrong. Using only computers to grade could make academics less fair. Escotet (2023) says that AI should help teachers make decisions, not take over for them. Faculty should still be able to make evaluations.

Another big reason why students use AI tools is that they trust them.

Güner et al. (2025), Zawacki-Richter et al. (2019), Popenici and Kerr (2017), and Gayed (2025) all talk about the good and bad sides of using AI in higher education, including moral, teaching, and administrative issues. Güner et al. talk about how useful big language models are, but they also say that they can make data less safe and make people think less critically. Zawacki-Richter et al. talk about how AI can help with distance learning and say that cultural and moral issues should get more attention. Popenici and Kerr agree that AI should be used in schools in a way that is ethical and focuses on people. However, Gayed says this is hard to do because schools don't give enough direction.

Dockens and Shelton (2025), Korseberg and Elken (2024), and Oladele (2024) all write a lot about how schools use generative AI (GAI). Dockens and Shelton talk about how useful it can be for publishing and processing data, but they also warn about moral issues and a lack of digital literacy. Korseberg and Elken say that tools like ChatGPT change how knowledge is created and what values are important in school. They want organizations to talk to each other and make plans that include people from a wide range of fields. Oladele says that ethics are very important in AI-based evaluations and that they should be taught to students and used in school governance. All of these studies agree that GAI needs a strong moral and educational base to work well.

Gayed (2025) also says that teachers are generally okay with AI, but schools don't support it, so it can't be used. At the same time, McDonald et al. (2025) and Francis et al. (2025) stress how important it is for colleges and universities to have clear rules about AI. According to McDonald et al., colleges in the U.S. are making rules about how to use generative AI in class. Francis et al. say that we need to think about the pros and cons of generative AI in light of our worries about fairness, ethics, and academic

honesty. They both say that policies aren't enough; people also need to know how to use AI.

To make sure that AI is used in a responsible way, ethical assessments must put accountability, openness, explainability, and fairness at the top of the list (Minkkinen et al., 2022). Universities should set up monitoring groups and teach students both ethics and digital skills to build trust and acceptance.

In conclusion, AI in higher education is a big change not only in digital skills but also in teaching, ethics, and governance. As Ataş and Gündüz (2019) argue, successful implementation depends on professional development, student digital literacy, and institutional policies addressing ethics and data security. Only under such conditions can AI be applied equitably, efficiently, and sustainably in academic contexts.

Crompton and Burke (2023) emphasized that the use of artificial intelligence in higher education generally focuses on students and that studies considering academics' views will fill the literature gaps. This study aims to examine the perspectives of academics in the Çukurova Region on artificial intelligence technologies and how they integrate them into their universities and educational processes. The study constitutes a critical step in planning the effective use of artificial intelligence technologies. The study looks at how schools use AI tools, especially ChatGPT, what they are used for, and how adding AI to schools can make learning better. It also looks at the suggestions of academics very carefully to see which factors can speed up the adaptation process and make it work better. The research uses qualitative research methods.

3. Research Method

3.1. Purpose and Research Design

The goal of this study is to find out what university professors in Turkey's Çukurova Region think about using artificial intelligence (AI) technologies in higher education. We used interpretative phenomenological analysis (IPA) as a qualitative research method to get a better idea of how academics think about, experience, and deal with AI. We chose this approach to focus on how each person experiences and makes sense of using AI in school.

3.2. Participants and Sampling

There were 22 academics (12 women and 10 men) in the study group. They came from six universities in Adana, Mersin, and Osmaniye. The institutions were state and foundation universities that offered a variety of academic fields, such as education, engineering, medicine, and social sciences. We used a purposive sampling method to choose participants with different levels of knowledge about AI. These

included professors, associate professors, assistant professors, lecturers, and research assistants. This variety made sure that a lot of different points of view could be seen.

3.3. Data Collection

Data were collected through semi-structured interviews, which allowed for the flexible exploration of key themes while maintaining consistency across participants. The interview protocol consisted of 12 open-ended questions developed based on the literature (Eti, 2025; Ünal & Yıldırım, 2024; Soldan, 2022; Aruğaslan, 2025, Livberber & Ayvaz, 2023, Dogan et al. 2025, Villarreal et al. 2023, Crompton & Burke, 2023). Topics included participants' AI literacy, frequency and context of AI use, ethical concerns, institutional readiness, and suggestions for effective integration.

Interviews were conducted face-to-face (n=10) and via telephone (n=12), depending on participant availability. Each interview lasted between 8 and 28 minutes, with an average of 18 minutes. All interviews were audio-recorded and transcribed verbatim to ensure accuracy. Interview questions:

- Have you ever received training related to artificial intelligence?
- Do you use AI-supported applications in your daily life? Which ones?
- How would you define artificial intelligence?
- Do you use artificial intelligence technologies at your university? In which areas?
- How do you integrate artificial intelligence technologies into your teaching and research processes?
- How do you evaluate the impact of artificial intelligence applications on the education process? (For example, do these technologies provide convenience in exams, course management, and student guidance?)(What kind of convenience?)
- In your opinion, what are the attitudes of stakeholders such as students, academic staff, and management towards using artificial intelligence technologies in universities?
- How do you think these attitudes contribute to the adoption of technology?
- What factors should be prioritized for adopting and effectively using artificial intelligence technologies in universities? What can be done to facilitate this process?
- Do you think a framework should be developed for the more effective adoption of artificial intelligence in higher education institutions in Turkey?
- What factors should be considered for the more

- qualified use of artificial intelligence in higher education institutions?
- What kind of work have you done with the latest artificial intelligence support?

3.4. Data Analysis

MAXQDA 2024, a computer program that helps with qualitative data analysis, was used to look at the qualitative data. We used thematic analysis to find patterns, groups, and new themes. The coding method used Braun and Clarke’s (2006) six-phase model, which included getting to know the data, making initial codes, looking for themes, reviewing themes, defining and labeling themes, and writing the report.

In addition to traditional coding, code frequency analysis, code co-occurrence matrices, and conceptual maps were generated within MAXQDA to enhance the depth of interpretation. These tools facilitated the identification of relationships among key themes such as ethical concerns, academic applications of AI, institutional infrastructure, and pedagogical impacts.

3.5. Trustworthiness and Ethical Considerations

To ensure research rigor, the criteria proposed by Lincoln and Guba (1985) were applied:

- Credibility: Achieved through member checking and prolonged engagement during
- interviews.
- Transferability: Supported by providing rich, thick descriptions of context, participants,

- and procedures.
- Dependability: Ensured via an audit trail detailing each step of data analysis.
- Confirmability: Maintained by the researcher’s reflexive notes and triangulation of data.

Prior to data collection, ethical approval was obtained from Çağ University’s Ethics Committee. Participants were informed about the purpose of the study, and written or verbal consent was obtained. Confidentiality and anonymity were preserved throughout the research process.

4. Findings

This section presents the thematic and analytical findings derived from in-depth semi-structured interviews conducted with 22 academics employed across six higher education institutions in Turkey’s Çukurova Region. The data were subjected to qualitative content analysis using MAXQDA 2024, incorporating code frequency matrices, co-occurrence charts, and conceptual mapping. The findings are organized around core thematic axes that reflect both the current landscape and the nuanced challenges of AI integration in academic contexts.

4.1. Participant Demographics and Institutional Diversity

As shown in Figure 2, the participant group consisted of 10 male (45.5%) and 12 female (54.5%) faculty members, representing a variety of academic disciplines including social sciences, engineering, medical sciences, education, natural sciences, and vocational studies.

Table 2. Demographic Information of Participants Interviewed

No	University	Gender	Age	Department	Title	Interview Type	Duration (min)
K1	Osmaniye Korkut Ata University	Male	37	Faculty of Economics and Administrative Sciences	Assoc. Prof. Dr.	Phone	15
K2	Çağ University	Female	55	Graduate School of Social Sciences	Assist. Prof. Dr.	Phone	8
K3	Çukurova University	Female	55	Faculty of Agriculture	Prof. Dr.	Phone	16
K4	Çukurova University	Female	60	YADİM	Prof. Dr.	Face-to-face	25
K5	Toros University	Male	59	Industrial Engineering	Assoc. Prof. Dr.	Phone	25
K6	Çukurova University	Male	37	Pozantı Vocational School	Assoc. Prof. Dr.	Face-to-face	20
K7	Osmaniye Korkut Ata University	Female	34	Faculty of Economics and Administrative Sciences	Assist. Prof. Dr.	Phone	16
K8	Mersin University	Female	49	Faculty of Medicine – Statistics	Prof. Dr.	Phone	20

K9	Çağ University	Female	41	Graduate School of Social Sciences	Assoc. Prof. Dr.	Face-to-face	28
K10	Çukurova University	Female	45	Faculty of Communication	Lecturer	Phone	19
K11	Çukurova University	Male	41	Abdi Sütçü Vocational School	Lecturer	Face-to-face	15
K12	Toros University	Male	51	Industrial Engineering	Lecturer	Phone	16
K13	Çukurova University	Female	45	Faculty of Science and Literature – Mathematics	Assoc. Prof. Dr.	Face-to-face	20
K14	Çukurova University	Male	38	Fisheries Faculty	Assoc. Prof. Dr.	Face-to-face	18
K15	Adana Alparslan Türkeş Science and Technology University	Male	31	French Department	Lecturer	Phone	16
K16	Çukurova University	Male	37	Industrial Engineering	Research Assistant	Phone	10
K17	Adana Alparslan Türkeş Science and Technology University	Female	45	English Language and Literature	Assoc. Prof. Dr.	Phone	15
K18	Çukurova University	Female	42	Imamoğlu Vocational School	Prof. Dr.	Phone	15
K19	Çukurova University	Female	50	Faculty of Medicine	Prof. Dr.	Face-to-face	20
K20	Çukurova University	Female	41	Faculty of Education, Educational Sciences – Guidance and Psychological Counseling	Assist. Prof. Dr.	Face-to-face	20
K21	Çukurova University	Male	56	Faculty of Medicine	Assoc. Prof. Dr.	Face-to-face	15
K22	Mersin University	Male	38	Faculty of Economics and Administrative Sciences	Assist. Prof. Dr.	Face-to-face	25

Source: Created by the author

The average age of participants was 45 years, signifying a professionally mature and experientially rich group capable of providing reflective insight into the implications of artificial intelligence within higher education. The universities represented in this study include both state and foundation institutions, thereby ensuring a cross-institutional perspective on AI usage and readiness.

The diversity in institutional type, academic rank (ranging from research assistants to full professors), and disciplinary focus reinforces the generalizability of findings within the regional higher education context. The interviews were conducted either face-to-face (45.5%) or via telephone (54.5%), with durations ranging from 8 to 28 minutes (mean = 18 minutes), yielding a total of 396 minutes of recorded discourse. This methodological plurality enhanced the richness, triangulation, and credibility of the qualitative data.

4.2. AI Literacy: Training Deficits and Self-Directed Learning

A significant proportion of participants (63.6%) reported a complete absence of formal training in artificial intelligence technologies, underscoring a critical institutional gap in AI-related professional development. The remaining 36.4% engaged with AI through informal avenues such as online courses, self-directed tutorials, or academic webinars. This asymmetry in access to structured knowledge underscores the uneven terrain of AI literacy within the regional academic ecosystem.

Despite this training gap, there was a consensus among participants that AI literacy should be an institutional priority. Participant K3 articulated the challenge succinctly: "I had to learn AI on my own. There was no university-level support or orientation." Such sentiments reflect broader systemic deficiencies in academic preparedness for AI integration.

4.3. Current Patterns of AI Utilization in Academia

An overwhelming majority (81.8%) of the academics surveyed reported active engagement with AI tools, including ChatGPT, Gemini, and Google Assistant. These tools were used across diverse pedagogical and research functions. Specifically:

- 68% utilized AI to generate or enhance course content (e.g., preparing lecture notes, designing assignments, developing learning modules),
- 54% for translation and summarization of academic texts,
- 45% for conducting literature reviews, drafting abstracts, or analyzing research data,
- 27% for applied disciplinary work (e.g., productivity consulting, HR analytics, quality control in technical fields).

The participants described AI as an essential part of their academic routines. For example, K2 stated: "I use it for lesson preparation, research, and writing—it's indispensable." Meanwhile, K22 emphasized its analytical utility: "I asked AI to draft the introduction to my thesis and used it to cross-verify statistical outputs."

4.4. Perceptions and Definitions of Artificial Intelligence

Analysis of conceptual codes related to AI perception revealed a functional orientation among most participants:

- 63.6% viewed AI as a practical tool that simplifies academic workload,
- 40.9% defined it as a digital assistant supporting educational efficiency,
- 27.2% characterized it as possessing quasi-human cognitive traits,
- 22.7% expressed apprehension about its potential misuse or ethical ambiguity.

Such responses indicate a prevailing pragmatic, albeit cautiously optimistic, approach to AI. Participants valued the convenience and efficiency it offered, yet remained vigilant about its unintended consequences.

4.5. Institutional Readiness and Policy Gaps

While individual adoption was high, participants unanimously reported a lack of institutional frameworks guiding AI integration. K10 observed, "There's no infrastructure here. Everything I do is self-initiated." Participant K12 added, "There are programs emerging, but no cohesive strategy."

Emergent subthemes included:

- **Policy Vacuum:** 17 references emphasized the absence of national or institutional regulatory frameworks.
- **Awareness Deficits:** 15 references highlighted the need for comprehensive training programs.
- **Academic Engagement Challenges:** 12 references cited the erosion of interpersonal pedagogical dynamics due to AI.
- **Infrastructure Limitations:** 11 references pointed to insufficient technological or administrative capacity.

K11 summarized these concerns: "Without legal and ethical guardrails, AI's academic use is risky." Such feedback underscores the urgent need for system-level policy design, including curriculum integration and administrative protocols.

4.6. Pedagogical Impact: Efficiency vs. Educational Depth

Participants discussed AI's dualistic educational effects. On the one hand, the technology was seen as a time-saving, workflow-optimizing asset; on the other, as a factor potentially undermining critical thinking and originality:

- **Positive effects:**
 - Increased time efficiency (68%),
 - Enhanced instructional planning and delivery (59%),
 - Support for interdisciplinary learning (36%).
- **Negative effects:**
 - Suppression of critical thinking skills (41%),
 - Compromised academic originality (45%),
 - Superficial learning practices (32%).

Participant K16 remarked, "AI helps, but students rely on it too much—it hampers deep engagement." This tension highlights the pedagogical paradox of AI: as a tool that can simultaneously enrich and dilute the learning process.

4.7. Practical Applications and Research Integration

Respondents shared numerous examples of their AI usage in academic practice:

- 12 participants used AI for drafting papers and conducting literature reviews,
- 9 employed it for visual content and presentations,
- 7 for multilingual translation and editing,
- 4 in scientific simulations or technical validations,

- 3 in creative and design-based applications.

Participant K14 reported, “We use AI in image processing to assess fish spoilage for quality control,” illustrating the technology’s utility in research-inten-

sive disciplines. Others, like K20, voiced reservations due to reliability issues, e.g., “I asked ChatGPT, and it admitted the information was fabricated.”

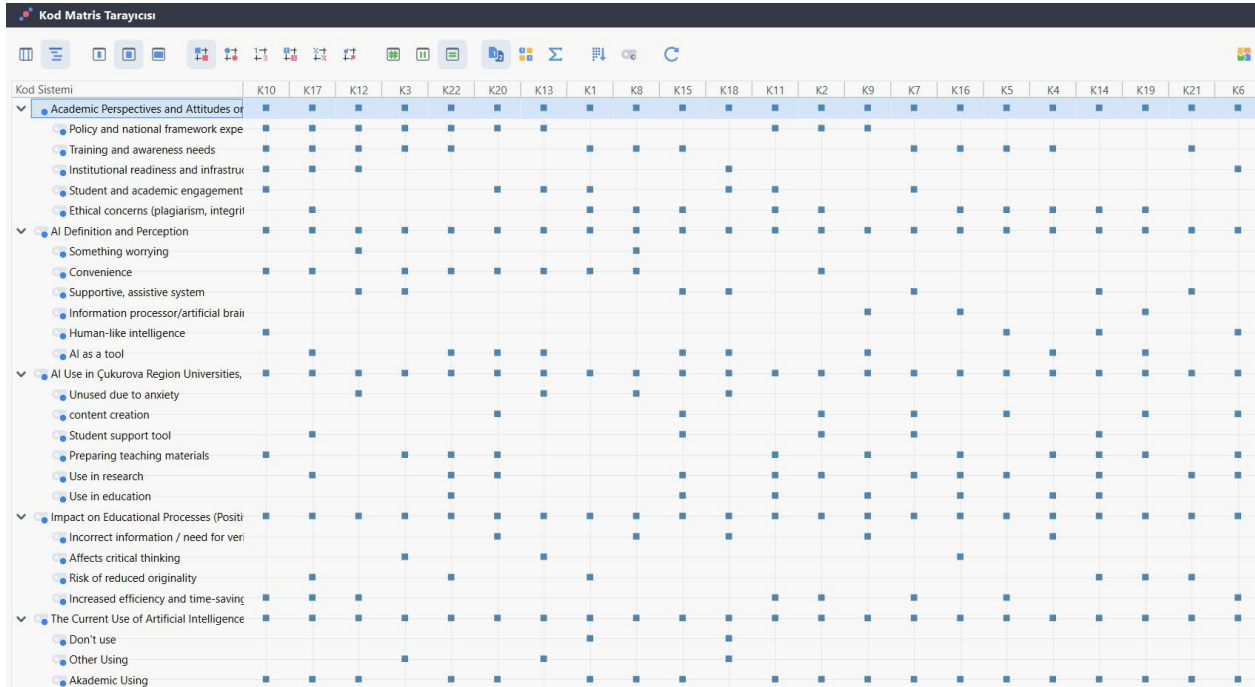


Figure 2. Main Theme and Subcodes Content Analysis Code Matrix Scanner

This MAXQDA code matrix systematically presents the themes with which the participants’ (K1–K22) views on artificial intelligence overlap. Looking at the coding system in the figure, it can be seen that the subcodes policy and national framework expectations, training and awareness needs, institutional readiness and infrastructure, and student and academic engagement under the theme “Academic Perspectives and Attitudes on AI” were marked by many participants. This indicates that participants have a strong awareness of the need for artificial intelligence to be considered not only from a technological perspective but also from ethical, institutional, and pedagogical perspectives.

5. Discussion, Conclusions & Recommendations

This study offers a multi-faceted, experience-driven analysis of AI integration in higher education through insights from 22 academics across six universities in Türkiye’s Çukurova Region. Our findings reveal that AI implementation remains largely ad hoc, shaped by individual academics rather than being embedded within institutional frameworks. This aligns with the explosion of AI research in 2021–2022, when publication rates nearly doubled or tripled compared to prior years, particularly in areas like learning analytics, curriculum sequencing, instructional design, and student clustering (Crompton & Burke, 2023).

Most of the people who took part said that AI tools like ChatGPT, Gemini, and Google Assistant were useful for things like editing content, gathering sources, developing projects, making exams, and designing presentations. This point of view is in line with Oladele (2024), who says that precision, scalability, and efficiency are some of the main benefits of AI in education. Renkema and Tursunbayeva (2024) and Dwivedi et al. (2023) also talk about how AI could change the way policies are made and research is done. Their main point is how generative conversational AI could change the way scientists work. Al Zahrani and Alasmari (2024) talk about how AI could make school more personal and keep students interested in the meantime. Even though these are good things, our participants learned more about the problems with using AI in education, like shallow learning, less originality, ethical issues, and data security. Some people said that AI might “solve problems without explaining” or even help students cheat on tests. These ideas support Dempere et al.’s (2023) concerns about how clear algorithms are, how safe data is, and how much less people talk to each other.

Even though these are good things, our participants learned more about the bad things about using AI in education, like shallow learning, less originality, ethical issues, and data security. Others said that AI might “solve problems without explaining” or even help students cheat on tests. These ideas support Dempere et al.’s (2023) concerns about how clear al-

gorithms are, how safe data is, and how much less people talk to each other.

These findings are similar to Thomas’s (2023) work on vulnerabilities in data manipulation, Miller’s (2023) focus on the erosion of critical thinking, and Royer’s (2024) idea of AI’s “bullshit” outputs and hallucinations—things he says should be faced with critical education, not naive trust. Royer does say that teachers should be facilitators of AI-skeptical inquiry, not pushed aside by technology. Instead, they should be empowered by it as mentors who help people think, reason creatively, and make moral decisions.

Also, the moral, social, and educational issues brought up by Al Zahrani & Alasmari (2024), Clune (2023), and Bayne (2015) make it clear that AI needs to be built into systems that value fair access, fair grading, student involvement, and long-term teaching. Popenici and Kerr’s (2017) criticism of the hoopla around MOOCs makes it even more clear that we need to implement AI in a way that is more humanized and sustainable for institutions, rather than making changes right away that are driven by technology.

7. Recommendations

Aim	Strategic Intervention	Justification
Governance & Ethical Standards	Develop interdisciplinary guidelines emphasizing justice, transparency, security, and accountability (Oladele, 2024; Crompton & Burke, 2023). Integrate AI ethics into institutional policies and revise accreditation criteria (Popenici & Kerr, 2017; Clune, 2023).	To safeguard academic integrity and balance automation with human oversight.
Infrastructure & Technical Support	Invest in secure AI platforms, robust internet, data privacy, and technical support staff (Hamedinasab & Rahimi, 2025). Incorporate AI readiness into strategic planning and accreditation frameworks.	Ensures equitable and sustainable institutional adoption.
AI Literacy & Capacity Building	Launch AI training for both academics and students using workshops, online modules, and case-based learning (Doğan et al., 2025; Jose & Jose, 2024).	Aims to transform users into critically literate, ethically responsible agents.
Curricular Integration with Pedagogy	Embed AI into curricula with a focus on ethical use, critical thinking, creativity, and reflective learning (Vilarino, 2025; Royer, 2024). Humanities and social sciences should emphasize critical questioning over rote responses.	Strengthens pedagogical coherence and redefines the teacher’s mentoring role.
Research & Evaluation Studies	Employ longitudinal and cross-cultural analyses focusing on attitudes, learning outcomes, equity, and ethical impacts (Chan & Hu, 2023; Milano, McGrane & Leonelli, 2023; Rasul et al., 2023).	To create nuanced, evidence-based implementation strategies.

8. Final Reflections

The advent of AI represents more than a technological shift—it heralds a pedagogical and epistemological metamorphosis within higher education. As Royer (2024) reminds us, the real challenge is not “handing over humanity to the machines,” but reasserting the irreplaceable worth of human judgment, ethics, and creativity. By integrating AI thoughtfully—grounded in institutional readiness, pedagogi-

6. Conclusions

1. AI as a pragmatic tool: Academics predominantly utilize AI for its functional advantages, as noted by Oladele (2024) and Crompton & Burke (2023).
2. Critical awareness emerging: Participants are aware of the possible hazards of losing uniqueness, acting unethically, and AI hallucinations. This supports the findings of Dempere et al. (2023), Miller (2023), and Royer (2024).
3. Institutional gaps: The lack of clear rules, training, infrastructure, and ethical guidelines is a common problem, as shown by Al Zahrani & Alasmari (2024) and Hamedinasab & Rahimi (2025).

Collectively, these ideas emphasize that the incorporation of AI in higher education goes beyond simple technology adoption; it requires a fundamental transformation in pedagogy, ethics, and institutional alignment.

cal intention, and ethical deliberation—universities can transform this “education crisis” into an opportunity for re-emphasizing human-centric values in teaching, learning, and research.

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