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Reframing Communication Education: The Transformative Impact of Artificial Intelligence on Curriculum and Practice

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Abstract: Artificial intelligence applications present both substantial opportunities and significant challenges for communication education, as in many other disciplines. While the high cost of communication infrastructure prevents institutions without sufficient budgets from establishing application centers, the rapid evolution of technology necessitates frequent renewal of the existing infrastructure. New tools used in various fields such as Journalism, Public Relations and Advertising, Radio Television and Cinema, New Media, Visual Communication Design, Animation and Game Design in communication education bring about radical changes. Artificial intelligence is transforming communication education at every stage, starting with pre-production processes such as scriptwriting, news text generation, sketching, and analysis; continuing through production stages like creating moving or still images without a camera and generating virtual characters and environments; and extending to post-production phases such as editing, design, and layout. In this context, a wide-scale renewal is inevitable, from education curriculum to application centers, from technological infrastructure to faculty composition. Of course, implementing this change is not easy. The inadequacy of resources for students to access current technologies, the lack of human resources, and the constantly increasing pace of technology transformation will create serious difficulties in both planning and implementation processes. The steps required to ensure that communication students meet industry expectations are also of critical importance for social development.

Keyword: AI, Communication, Education, Artificial Intelligence, Digital Transformation

JEL Classification: O33

1. Introduction

Artificial intelligence applications have a dizzying effect in the field of communication, as in many other fields. While the communication discipline and sectors are trying to understand and grasp these new applications, they have also started to implement them immediately. Despite many

opinions, competition and cost reduction concerns are highly prioritized for institutions at this point.

In this academic study based on this qualitative research method, structured interviews were conducted with fifteen people working in the media and communication sector; television, print media, advertising and public relations sectors between May 1–10, 2025. The views of these experts with knowledge and experience in the field were obtained regarding the status of artificial intelligence and its sectoral impact. The views of the participants were evaluated using thematic analysis method. Notably, all participants expressed interest in artificial intelligence, actively sought to understand it, and even applied it in their professional work. Few technologies have penetrated professional and personal spheres as rapidly and pervasively as artificial intelligence. For this reason, it is necessary to focus on the phenomenon of artificial intelligence without missing the key elements.

Moreover, the body of literature on artificial intelligence is expanding rapidly. Considering the limitations of this article, it is useful to mention a few studies especially on the impact of artificial intelligence on the communication sector, communication education, and students' approaches to these developments. The most publicly discussed issue regarding artificial intelligence and its impact on communication was its use in US President Trump's first election campaign. Devran and Özcan's article titled Approaches Extending from "Tool" Priority to "Micro Target" in Political Communication: The Use of Artificial Intelligence Technology in Determining and Communicating Micro Target Audiences addresses this subject. As stated in the article, artificial intelligence technologies have the capacity to determine micro-scale target audiences by analyzing the digital traces of individuals via websites and social media platforms. However, the fact that many accounts in these media are fake or products of artificial intelligence weakens the reliability of these targeting processes. Artificial intelligence is not only about robots. It is also related to the processing and interpretation of big data and is used effectively especially in political communication (Devran and Özcan, 2020: 1978). Personal data consists not only of basic identity information but also of users' browsing, shopping, commenting and liking habits on the internet. This data is used for targeting purposes in advertising and political campaigns; users are confronted with content adapted to their personal characteristics. In addition, some tracking technologies (e.g. cookies and bugs) create privacy problems by collecting data without the user's consent (Devran and Özcan, 2020: 1986).

One of the most striking examples of this situation is the Cambridge Analytica scandal. In this incident, data of nearly 50 million Americans were obtained through an application that only 270 thousand people allowed, and this data was combined with their 'Facebook history' to create psychological profiles. This method, used in Donald Trump's election campaign, applied

behavioral micro-targeting by yielding personalized messages to voters (Devran and Özcan, 2020: 1988).

In the article "The Impact of Artificial Intelligence on Media and Publishing ", Burcu Kaya Erdem defines artificial intelligence as systems that perform certain tasks by imitating human intelligence. In her article, Erdem states that the historical origin of this technology dates to the idea of calculating machines in the 17th century and Turing's question "Can machines think?". Today, artificial intelligence has managed to produce systems that learn by modeling the functioning of the human brain through artificial neural networks (Erdem; 2021: 897).

Erdem emphasizes that the use of artificial intelligence in the media sector is becoming increasingly widespread and that applications such as robot journalism, algorithmic news production and automatic content editing are particularly prominent. In this context, she points out that thanks to the Digital News Initiative supported by Google, a new journalism model has emerged in which news can be produced without human intervention, and that robot journalists or algorithmic journalism are one of these applications. Robot journalists are capable of filtering current and reliable data from digital platforms and converting it into publishable news content. These robots can constantly produce news in this way without receiving any instructions. Erdem also mentions Reuters' artificial intelligence-based tools such as Lynx Insights in his article, citing Akgül and Ayer. With this tool, Reuters can obtain data that a reporter can obtain at a higher speed and size and produce news from this data (Erdem; 2021: 898).

In his article, Erdem points out how effective artificial intelligence can be in the future of cinema by mentioning examples such as the film Sunspring's script which was written by artificial intelligence, and Morgan's trailer which was edited by artificial intelligence (Erdem, 2021: 899). On the other hand, artificial intelligence can also analyze audience behavior and thus offer content that is specific and appropriate for individuals. She also states that artificial intelligence can perform target audience analysis, interaction tracking, and data-based campaign design in the field of public relations and advertising (Erdem, 2021: 900). While Erdem talks about the different and deep impact of artificial intelligence on the communication sector, she also sheds light on possible risks and threats. According to her, artificial intelligence has become effective in the media field not only in content production but also in disinformation production. Fake content created with technologies such as deepfake videos in particular poses serious risks in terms of information security and manipulation of public opinion. On the other hand, the same artificial intelligence technologies offer powerful tools that can be used in verification and combating disinformation (Erdem, 2021: 902).

Elif Köse, Yusuf Adıgüzel and Cengizhan Aynacı, in their article titled " The Effects of Artificial Intelligence on Journalism Students: An Investigation of the Artificial Intelligence Anxiety Levels of Sakarya University Journalism Department Students ", have conducted an important study by addressing the students' approaches to this new application. As stated in the article, it is seen that 65% of the 139 students who participated in the survey voluntarily experienced moderate anxiety about artificial intelligence (AI), while 25% experienced high anxiety. 58% of the students think that AI can be misused, 50% think that humanoid robots can lead to job loss, and 47% think that their professions are under threat. Female students (70%) experience more anxiety about AI than male students (50%). The rate of those who express high anxiety is measured as 30% in women and 20% in men. The article states that these concerns can be eliminated by institutions providing journalism education developing awareness-raising and application-oriented programs about AI technologies. It is also pointed out that education on media literacy and digital ethics should be strengthened in order to alleviate students' concerns about the misuse of AI and ethical issues (Köse, Adıgüzel, Aynacı; 2024: 161).

Tolkun Soldan and Uğur Soldan also reveal in their study titled "The Effect of New Media Tools on Educational Processes" that new media tools are increasingly taking on a more decisive role in education. They state that new media technologies, which are effective in providing students with the skills required by the age, enrich educational materials, personalize learning processes, increase student participation and facilitate cooperation between teachers (Soldan and Soldan; 2024:202). On the other hand, they emphasize the concern they have gained as a result of their research as follows. Easy access to information can reduce students' learning effort. Excessive use can shorten attention span and make it difficult to focus for long periods. In addition, the negative effects of long periods spent in front of the screen on physical health and the effects of unhealthy content on online platforms on mental health should not be ignored. Soldan and Soldan also point out that respecting the rights of content producers and adhering to ethical principles in accessing information are fundamental conditions for a healthy digital education environment (Soldan and Soldan; 2024:203).

Amit Sangwan, in his article titled "Exploring the Impact of Artificial Intelligence on Media Education: A Study" , which he wrote as a result of his research involving one hundred academics from four different universities in India, states that artificial intelligence technologies, especially with tools such as natural language processing and sentiment analysis, make the analysis of media texts in educational environments more efficient and detailed. He also states that artificial intelligence supported chatbots make the learning process more participatory and effective by establishing interactive dialogues around concepts related to media literacy, and learning environments built on AI-based games offer students the opportunity to develop critical thinking skills in simulated media scenarios (Sangwan, 2024: 99).

In his article, Sangwan emphasizes that models based on human and artificial intelligence collaboration will be important in media education in the future, he suggests that artificial intelligence can support teachers, especially in content production, student assessment and the development of personalized learning paths. Sangwan states that as a result of his research, university instructors have a positive approach to the integration of artificial intelligence into media education. On the other hand, he states that artificial intelligence can also bring ethical issues to the agenda and points to algorithmic biases, drawing attention to the importance of ensuring human control in artificial intelligence supported media education tools (Sangwan, 2024:100).

2. The Impact of Artificial Intelligence on Communication Education

This section investigates how artificial intelligence may influence communication education. Participants interviewed within the scope of this study were asked about their views and opinions on the impact of artificial intelligence applications on communication education in general.

Abdullah Altun sees artificial intelligence applications as an effective tool in eliminating the practical deficiencies of communication students. According to him, "being able to carry out the process from beginning to end in the form of manual practice by observing each stage of the study step by step and minimizing the costs caused by trial and error" should be considered as a critical advantage in terms of students' professional development. Abdurrahman Barstugan emphasizes that artificial intelligence provides great convenience in terms of "accelerating communication by providing independence from time and space", but he also states that this convenience necessitates "awareness against manipulation and disinformation" training.

Alp Eren Erbay makes a distinction between theory and practice in communication education. According to him, artificial intelligence undertakes functions such as "analytical thinking, fast information access, data analysis" in theoretical education; and in practical education, it produces results such as "standardization in production processes, technical convenience, and the prominence of ideas in content production". Fatih Selek states that artificial intelligence "breaks classical patterns" in journalism and creates new professional fields such as "prompt engineering, artificial intelligence editing" and that this situation has an inevitable effect on communication education. Mehmet Fatih Ertugan argues that artificial intelligence will provide strong applications especially in the fields of marketing, crisis and political communication by "creating information sets and models" and that this should be directly integrated into communication education. Tolkun Soldan states that concepts such as "data mining" and "big data" have gained importance with the digitalization of communication. Soldan, who argues that digital communication processes have

become more manageable with artificial intelligence, also remarks "It is now mandatory to know artificial intelligence to be a good communicator.". Yusuf Ziya Çataklı emphasizes that artificial intelligence technologies transform the role of the instructor into "supervisor and guide" positions and points out that we are entering a period in which "dependence on place in education will decrease". Kenan Bölükbaşı, who highlights that academia should abandon its sluggishness in a period when technology is developing at a dizzying pace, emphasizes that education curricula should be constantly updated and improved. Moreover, Bölükbaşı sees "the development of local artificial intelligence tools as a precaution against cultural assimilation" as a necessity. Furkan Yıldırım states that artificial intelligence "accelerates human perception" by increasing the speed of access to information but emphasizes that this speed can be harmful if individuals do not develop "self-control". According to Musa Kesler, artificial intelligence AI "will be a popular instrument of the coming years" and will become the "leading actor" in communication education. While some participants see the contribution of artificial intelligence in the practical field as important and positive, Mecit Oyar argues that artificial intelligence will "deform" human relations and "cause a decrease in social skills." In other words, Oyar makes an important warning that technology can harm the human aspect. Edanur Piraz draws attention to a similar issue and accepts that artificial intelligence allows us to "realize our own style and mistakes" but emphasizes the human deficiency by saying that "it cannot provide the warmth and intuition that make us who we are." While Cabir Turgut states that artificial intelligence can provide "equality of opportunity" in education, he also remarks that it may have risks such as "a decrease in cognitive capacities and a decrease in teacher-student interaction."

In conclusion, it can be said that, on the one hand, the participants exhibit a functional perspective that highlights the contribution of artificial intelligence to technical facilities, personalized education and production processes. On the other hand, they express concerns about the ethical, social and cognitive dimensions of these developments. In this context, it can be stated that the future of communication education may depend not only on technological tools, but also on how these tools are used and to what extent human-centered approaches can be preserved.

3. The Impact of Artificial Intelligence Applications on Advertising, Television, Press and Public Relations Fields

This section analyzes the impact of artificial intelligence applications in the fields of advertising, television, journalism, and public relations. During the interview, the second question asked the participants about the general impact of artificial intelligence applications on advertising, television, press and public relations. The answers given by the participants in this context can be gathered under the headings of content production and automation, creativity, reality and ethical

discussions, sectoral transformation and employment, advertising and marketing, press and journalism, public relations and strategic communication. The common view of the participants is that artificial intelligence provides both operational convenience and structural changes in the media sectors.

While the speed of content production, cost reduction and personalization opportunities come to the fore in the answers given to the questions, ethical issues, loss of originality and employment risks are also seriously discussed.

Abdullah Altun expressed the impact of artificial intelligence on content production by saying, "AI applications provide efficiency in areas such as content production, target audience detection and strategy creation. These contributions will increase as applications develop" and "Many processes such as advertising texts, content enrichment with media and graphics, subtitle and translation systems in television have been automated." Ahmet Tarık Bilge said, "Approximately 3 new developments every week make production easier in the sector. This is the costless embodiment of imagination," drawing attention to production speed and cost. Alp Eren Alpay pointed out the risk of becoming identical by saying, "Although models such as ChatGPT has accelerated text production, they create uniformity."

Some participants find AI personalizing content positive but warn that it could distort perceptions of reality. For example, Barstugan argues that "Blurring the distinction between AI and reality could increase manipulation," while Özboyacı says, "The press should carry a certain level of reality since advertising is artificial, AI finds its most natural application in this domain." Alp Eren Alpay also points to the issue of reality, saying, "AI-generated content is still not widespread in traditional mass communication because it is not 'real'" while Piraz draws attention to human emotion and intuition with the sentence "Human intuition still has its place, artificial intelligence has not been able to fully replace it."

Participants said that artificial intelligence is important for sectoral transformation and employment. They claim that it will transform business processes in the media sector and create change in employment. For example, Abdullah Altun says, "More work will be done with less staff, but new business areas will also open up in the long run," while Ahmet Tarık Bilge points out that "Agencies that do not integrate AI may have difficulty in budget competition." Mecit Oyar and Alp Eren Erbay, on the other hand, express optimism that although the sector may face certain constraints, new areas of employment will emerge, and fresh opportunities may arise.

Advertising and Marketing are among the areas where artificial intelligence applications are most effective. In this context, Abdullah Altun highlights that "Personalized advertising has been used for a long time. Content creation, graphic-supported narration and analysis have become easier" Kenan Bölükbaşı on the same subject points out the sentence, "Advertisements are now personalized with behavioral data and campaign flexibility has increased." Cabir Turgut also notes that "Advertising has become interactive, and with data analysis, personalized content is possible." Director Özboyacı states that "Surreal characters in advertising can be produced more easily with artificial intelligence."

The impact of artificial intelligence in the press is discussed in a wide range from news production to ethical issues. According to TRT reporter Yusuf Ziya Açıkel, press bulletins can now be generated almost entirely by simply entering data. Mecit Oyar added that while editors receive AI support during content preparation, the final oversight is still performed by humans. Kenan Bölükbaşı expresses his concerns by saying, "The automation of news writing and verification processes via AI raises significant ethical concerns."

In public relations, AI is used in functions such as crisis management, media monitoring and strategic planning. Tolkun Soldan notes that, "PR processes work with data. AI no longer just plays a technical role, it also plays a strategic role." Abdullah Altun points out that AI "provides great budget savings and extensive scanning opportunities in media monitoring." Fatih Selek highlights, "Media reports prepared with AI are now in our morning e-mails." On the other hand, Kenan Bölükbaşı remarks that "Automation offers speed and cost advantages in crisis management and reputation control."

4. The Impact of Artificial Intelligence Applications Specifically on Professions

The scope and pace of artificial intelligence's impact differ significantly from one profession to another. Most participants emphasize that AI applications make their professions faster, more systematic and practical. Television technical director Abdullah Altun says, "AI is used in almost all stages of television broadcasting and supports many processes from content analysis to audience tracking." Ertugan highlights that AI has accelerated him in text writing, translation and getting ideas. Yusuf Ziya Açıkel emphasized that it prevents word repetitions and corrects linguistic errors while writing news, and Cabir Turgut remarks that he receives support from AI in stages such as spot, headline and deciphering of written content in journalism. Alp Eren Alpay says, "Access to information has become easier. As a faculty member, this transforms me into an educator who not only provides information but also produces projects with information." Tolkun Soldan expresses her view that "The way to be a good communicator is to be able to use these

technologies personally." Özboyacı points out the effect of technology on paradigm shift by saying, "Every new tool is not only technical, but also brings a new approach."

Some participants, such as Musa Kesler, see artificial intelligence as a helpful tool and emphasize that it will be a professional necessity in the future. While Barstugan states that artificial intelligence makes his work easier and saves him time, Alp Eren Erbay notes that artificial intelligence enables him to prepare for classes more efficiently. Despite these and similar conveniences, Fatih Selek states that artificial intelligence imposes learned reality, while Kenan Bölükbaşı emphasizes that artificial intelligence has the risk of weakening creativity.

5. Conclusion

This study contributes to the understanding of how AI-driven change is reshaping communication education both pedagogically and professionally. Participants' views reveal that the impact of artificial intelligence on professions will continue to increase. This impact will reshape professional roles, creativity, employment structure and ethical codes. Artificial intelligence applications not only provide technical support to different disciplines but also transform professions.

Artificial intelligence applications are causing radical changes in the working styles of communication education and media professionals. As can be understood from the views obtained, artificial intelligence is considered as an important supporting tool in both the education process and sectoral production. In the applied dimension of communication education, it has become possible for students to produce content individually, make analysis and gain practice at low cost. In addition, a transformation is observed in pedagogical relations as faculty members move from knowledge transfer to guidance role.

The impact of AI on communication professions spans a wide spectrum, from content production to media monitoring, from personalized advertising to public opinion analysis. However, in addition to the advantages offered by AI applications, important concerns about ethics, originality, and cultural representation also come to the fore. Risks such as textual monotony, plagiarism, inability to replace human intuition, weakening of social skills, and suppression of creative thinking require careful academic and professional attention. In addition, the insufficient maturity of AI technologies causes the functions attributed to AI to be exaggerated in some sectors.

In this context, it is recommended that artificial intelligence tools be systematically integrated into theoretical and practical course content in communication faculties. It is important to equip students not only with the ability to use tools, but also with ethical sensitivity, media literacy and

critical thinking. In a period when artificial intelligence-supported content production is becoming widespread, originality, cultural diversity, and the preservation of human-centered approaches should be included in education policies as basic principles. On a sectoral scale, the development of institutional artificial intelligence strategies will contribute to a transformation that observes the balance between artificial intelligence and human labor.

References

Devran, Y., & Özcan, Ö. F. (2020). Siyasal iletişimde "araç" öncelliğinden "mikro hedefe" uzanan yaklaşımlar: Yapay zekâ teknolojisinin mikro hedef kitlenin belirlenmesinde ve iletişiminde kullanımı. Atatürk Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 24(4), 1977-1992.

Erdem, B. K. (2021). Yapay zekânın medya ve yayıncılık alanına etkisi. TRT Akademi, 6(13), 896-903.

Köse, E., Adıgüzel, Y., & Aynacı, C. (2024). Yapay zekânın gazetecilik öğrencileri üzerindeki etkileri: Sakarya Üniversitesi Gazetecilik Bölümü öğrencilerinin yapay zekâ kaygı düzeylerinin incelenmesi. Sakarya İletişim, 4(2), 150-164.

Sangwan, A. (2024). Exploring the impact of artificial intelligence on media education: A study. Darpan International Research Analysis, 12(2), 88-101.

Soldan, T., & Soldan, U. (2024). Yeni medya araçlarının eğitim süreçlerine etkisi. TAM Akademi Dergisi, 3(2), 180-204.

Annex: Participant List

Açıkel, YZ (May 5, 2025). Personal conversation.
Altun, A. (May 1, 2025). Personal conversation.
Barstugan, A. (May 2, 2025). Personal conversation.
Bilge, AT (May 3, 2025). Personal conversation.
Bölükbaşı, B. (May 7, 2025). Personal conversation.
Erbay, AE (May 3, 2025). Personal conversation.
Ertugan, MF (May 10, 2025). Personal conversation.
Kesler, M. (May 6, 2025). Personal conversation.
Oyar, M. (May 8, 2025). Personal conversation.
Ozboyacı, C. (May 9, 2025). Personal conversation.
Piraz, E. (May 4, 2025). Personal conversation.
Selek, F. (May 4, 2025). Personal conversation.
Soldan, T. (May 7, 2025). Personal conversation.
Turgut, C. (May 6, 2025). Personal conversation.