

ARTIFICIAL INTELLIGENCE

Prospects of Artificial Intelligence in Teaching and Learning of Communication: A Decade Perspective

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Abstract

In education, Artificial Intelligence refers to intelligent digital systems used to support teaching and learning through personalized instruction, automated assessment, tutoring systems, and educational data analysis (Russell & Norvig, 2021). Artificial Intelligence in education is considered a driver of economic growth, future workforce development, and global competitiveness (Cetindamar et al., 2022; Sestino & De Mauro, 2022).

1 Introduction

In education, Artificial Intelligence refers to intelligent digital systems used to support teaching and learning through personalized instruction, automated assessment, tutoring systems, and educational data analysis (Russell & Norvig, 2021). Artificial Intelligence in education is considered a driver of economic growth, future workforce development, and global competitiveness (Cetindamar et al., 2022; Sestino & De Mauro, 2022).

Researchers' interest in equipping students with Artificial Intelligence knowledge, skills, and attitudes to thrive in an Artificial Intelligence-rich future (Miao et al., 2021; Rina et al., 2022; Wang & Cheng, 2021) has given rise to the term "AI literacy", which concerns the design and implementation of Artificial Intelligence learning activities, learning tools and applications, and pedagogical models. Some educators focus on demonstrating machine learning through activities for mastering coding skills and Artificial Intelligence concepts (Marques et al., 2020), while others suggest focusing on computational thinking and engagement in deductive and logical reasoning practices (Wong, 2020).

With artificial intelligence (AI) technologies developing at a fanatical pace in the last decade, there has been an exponential growth in studying AI integration into education, ranging from early childhood education to higher education (e.g., Gulz et al., 2020; Ma & Siau, 2018; Moreno-Esteva et al., 2018; Ocaña-Fernández et al., 2019; Tedre et al., 2021; Wu, 2021). Given the large volume of primary studies on AI, more research attention has been directed towards scrutinizing AI's effects on education via systematic reviews. For example, a Google Scholar search by using two strings of "systematic review" and "AIED" led to about 1,980,000 results, which includes many AIED studies conducted in systematic review methodology.

Although numerous systematic reviews exist, scarce tertiary reviews (e.g., Adadi et al., 2022; Bond et al., 2024), also known as reviews of systematic reviews, have synthesized the results of those secondary studies to offer a panoramic view of the field and identify limitations in existing literature to inform future research trajectory. Further, few tertiary reviews thoroughly examined AI's

multifaceted impact in diverse educational contexts, including both PreK-12 education and higher education.

Communication is fundamentally about encoding, transmitting, interpreting, and responding to meaning. Over the past decade, artificial intelligence has become increasingly effective at handling these processes, which means that in the next ten years AI is unlikely to replace communication teachers or learners. Instead, it will transform how communication is taught, practiced, assessed, and improved.

One of the biggest changes will come through personalized feedback and practice. In large classes, lecturers often struggle to provide detailed feedback on speeches, essays, presentations, and discussions for every student. AI systems can help by offering instant feedback on clarity, tone, logic, structure, persuasion, and delivery. Students will also be able to practice repeatedly with simulated audiences such as skeptical clients, hostile interviewers, journalists, or cross-cultural stakeholders. For Communication and Media Studies students, this means more opportunities to rehearse broadcast scripts, debates, PR pitches, and presentations with continuous feedback.

AI will also make real-world simulation and experimentation more accessible. Communication students often graduate without experiencing realistic crisis situations, negotiations, or high-pressure interviews. AI-powered simulations and virtual reality environments can recreate press conferences, PR crises, boardroom negotiations, and broadcasting studios where students practice communication strategies in safe, low-risk settings. Mistakes become opportunities for learning rather than professional damage.

Another major transformation is the rise of data-driven communication studies. Traditionally, communication theory has often remained abstract, but AI enables students to analyze large volumes of speeches, conversations, and social media interactions to understand what persuades audiences, what causes misunderstanding, and how language shifts across contexts. Tools such as sentiment analysis, discourse analysis, and rhetoric mapping will turn communication into a more measurable and research-oriented discipline.

AI will further strengthen multilingual and cross-cultural communication. Real-time translation and cultural adaptation tools will allow students to tailor messages for audiences across different countries and cultures while learning where direct translation fails and where cultural framing matters most. In multilingual societies such as Nigeria, AI could help bridge language gaps in communication teaching, media practice, and research.

Assessment methods will also evolve significantly. As AI-generated essays and assignments become common, traditional examinations may lose effectiveness. Communication education will increasingly focus on how students use AI strategically and ethically to solve communication problems. Lecturers will assess critical thinking, prompt design, ethical judgment, and the ability to evaluate AI-generated outputs rather than simply grading polished final submissions.

AI also has the potential to improve accessibility and inclusion in communication education. Students with speech difficulties, anxiety, or limited language proficiency can benefit from AI-powered speech coaching, captioning, adaptive learning systems, and personalized explanations. This lowers barriers to participation and allows more students to develop communication skills confidently.

As these changes unfold, the roles of students, teachers, and institutions will shift. Students will spend less time producing first drafts and more time refining ideas, strategy, and ethical decisions. Teachers will move from primarily delivering content to coaching, mentoring, and guiding critical

thinking. Curricula will increasingly include AI literacy, prompt design, data analysis, AI ethics, and AI-mediated communication alongside traditional media and communication theory.

The ability of an AI system to clearly articulate and justify its actions and decisions enhances its credibility, allowing stakeholders to trust its reliability. This transparency can improve communication and collaboration between humans and AI, leading to more efficient use of AI in organizational contexts (Berente et al., 2021).

2 Why communication as a discipline matters in the artificial intelligence age

Over the past several decades, communication as an academic discipline has been deeply influenced by the rapid growth of various technologies. Information and communication technologies, such as the printing press, satellite, the Internet, mobile devices, and social media, have fundamentally transformed the communication and media due to their pivotal role as tools of human interaction. With the emergence of the Internet, smartphones, and social media, communication and media schools worldwide adapted their curricula to reflect the rapid growth of these cutting-edge technologies.

In the 2020s, artificial intelligence (AI) emerged as another innovative digital technology that is reshaping norms in communication and media. AI is now embedded in numerous areas of communication, including writing, editing, producing, and performance. While not entirely different from earlier technologies, AI diverges in both scope and influence. Many media scholars and students are paying close attention to the growth of AI, including generative AI tools, such as ChatGPT, developed in 2022, and DeepSeek, developed in China in 2025. These tools resemble previous digital technologies in that they alter the media ecology, but they differ in scale: the magnitude and impact of AI on post-secondary education are unparalleled and cannot be directly compared with earlier technologies. This does not mean that AI always offers positive outcomes, as it raises many risks in both post-secondary institutions and the professional world.

As AI use expands in global universities, particularly through ChatGPT, faculty members in the departments of communication and media are striving to develop new curricula that address students' needs. Communication, as a discipline, has been at the forefront of AI adoption, as this new technology affects the full spectrum of communication studies. Communication departments are beginning to design courses that include AI-embedded production, AI-assisted writing classes, and AI-driven cultural consumption. In production-focused classes, instructors must reconsider their pedagogical approaches as students increasingly incorporate AI into their work, whether in term papers, film, drama, advertising, and music. This shift highlights the need for new directions in media ethics, as practice-based courses must incorporate an emerging framework of media governance, namely, AI governance.

In fact, AI technologies present both opportunities and risks to post-secondary institutions, requiring educators and students to reevaluate their epistemologies and practical guidelines at this particular juncture. The aim of the paper is not to propose specific curricular models for communication in the AI era. Instead, it seeks to offer normative considerations that communication scholars and students must reflect on. By engaging with a handful of core areas—creativity, creative thinking, AI ethics, interdisciplinarity, and originality—this paper intends to highlight practices that should guide both research and teaching. These dimensions are not discrete but interdependent, working together to inform not only curricula development but also broader normative guidance in the age of AI.

It is required that creativity be reevaluated and reconsidered in academia. One of the most significant elements in communication and media studies has been the role of creativity in popular culture, journalism, and information technology. Creativity (Lee, 2022) has been a pillar that communication majors not only rely on but also advance, due to its unique quality in media and cultural production in contemporary society; therefore, improving creativity in the era of AI is one of the most significant educational goals.

While there are several elements comprising creativity, scholars in different disciplines argue that the core aspect of creativity lies in novelty. Boden (2004, 2009, 2010, 2014) defined creativity as involving novelty/surprise and value, although “the perceived value of artistic products is highly subjective, and even more so for those supported by technology” (Moura et al., 2023, 536). What Boden (2010, 29) emphasizes is that “creativity is the ability to come up with ideas or artefacts that are new, surprising, and valuable. ‘Ideas’ includes concepts, musical compositions, scientific theories, cooking recipes, and choreography, and ‘newness’ here “does not necessarily need to improve upon previous products,” although “creativity involves perceived newness (Wohl, 2022, 2).

The emergence and growth of AI, particularly generative AI, profoundly disrupt the human monopoly of creativity (H.K. Lee, 2024). AI aims to enable computers to perform a variety of tasks that humans can do. However, creativity driven by AI, known as artificial creativity, differs from human creativity, as it relies on data sets that have been accumulated. Artificial creativity also does not possess feelings and emotions that make human creativity unique. In addition, unlike humans, who are responsible for their actions and therefore emphasize ethical considerations, AI does not take any responsibility for its actions (Jin, 2025). Communication and media studies always emphasize not only creativity but also media ethics and emotional embeddedness. Creativity is also reflected in and associated with originality. “Originality was coded based on how rare an idea was” (Habib et al., 2024, 4). AI can develop originality, of course, but people don’t seem to want to see designed, even fake, originality based on accumulated data sets.

Communication studies as an academic discipline has emphasized how we can enhance our critical thinking. As part of this idea, lecturers in communication and media have developed new creative writing courses or components in the era of AI. It has been commonly believed that students can advance their critical thinking through creative writing practices. Until the emergence of generative AIs, such as ChatGPT and DeepSeek, students also thought that writing-intensive courses were some of the most valuable academic practices in post-secondary institutions. Since the introduction of ChatGPT in November 2022, the writing-intensive course environment has faced several challenges.

Students have easy access to all kinds of generative AI tools, and some students use them not only as supportive tools but also as primary actors in writing term papers and writing assignments. Some lecturers state that students have dropped out of their classes once they changed the component of syllabi from the final paper to the final exam to prevent students from using AI in writing the papers. Several factors also influence these students’ decisions; however, this anecdote clearly illustrates the shifting class environment in the age of AI. Whenever new technologies, particularly digital technologies, are introduced, many people are concerned about addiction to and overuse of new technologies. In several countries, therefore, teachers and professors don’t allow their students to use smartphones during regular class sessions. However, they did not worry about creative writing or creative thinking when these previous digital technologies emerged.

The situation has changed, as generative AI technologies have raised a fundamental question of the validity of critical thinking and creative writing. The problem is that teachers and lecturers have no

authority to ask their students not to use AI, and students often use generative AI tools out of class hours. AI certainly has the potential to support creative thinking; however, there are also some negative impacts on creativity and creative writing:

Being thoughtful about how AI is introduced and used in classrooms is essential. Educators should focus on nurturing a symbiotic relationship between human creativity and artificial intelligence, ensuring that one enhances, rather than overshadows, the other. A blended approach should be adopted by teachers, who should neither avoid the (inevitable) use of AI nor use it indiscriminately but aim to strike a balance that cultivates human creativity while leveraging AI's capabilities. It is important for teachers to remember that although the use of AI is helpful in the generation of ideas, it is not always beneficial (Habib et al., 2024, 6).

Third, it is essential to develop curricula that are relevant to AI governance. Again, AI has not only offered innovative tools but also caused various foreseeable risks to contemporary society. In the cultural industries, for example, AI presents several challenges to the cultural sector and our society, including the creation of harmful or inappropriate content, bias, misuse, and privacy issues (Nah et al., 2023). In the future, it is expected that AI will have discriminatory impacts on marginalized groups, such as those who may be technologically less literate (Whittlestone & Clarke, 2022), because only a limited number of cultural creators and cultural industries firms understand how to use AI as a tool (Jin, 2021, 2025).

The use of AI in journalism and cultural production raises diverse socio-cultural issues, including concerns over creativity and copyright; therefore, relevant courses in post-secondary institutions need to address these new challenges. Developing effective governance mechanisms to ensure socio-cultural and economic transparency in the AI era is crucial. AI developers and various mega-platforms that utilize AI have to develop “the pressure of the market on important public values, such as transparency and non-discrimination in service delivery, civility of public communication, and diversity of media content” (Helberger et al., 2018, 1). In the fields of media and communication, ethical guidelines for decision-making must be provided; therefore, “core public and individual values are still honored in the face of technological development” (Ireni-Saban & Sherman, 2021, 1-2).

In relation to AI governance, one of the most significant components is AI ethics. Unlike legal measures that the government must prepare, AI ethics can be addressed by the post-secondary educational system. In the 2020s, ethical considerations differed significantly from those of previous decades. Previously, some considerations focused on plagiarism, human subjects, and privacy; however, in the AI era, ethical considerations must focus on how to deal with the use of AI in enhancing academic performance. Many lecturers and students use a variety of AI tools to write term papers and dissertations, produce small documentary films and advertisements, and compose music as part of their efforts to make new materials. Due to the lack of ethical guidelines or unified ethical codes, both lecturers and students are confused about using and evaluating the outcomes supported by AI technology. Of course, the real issue is the extent of AI use, as AI-driven and AI-assisted cultural activities or writing practices are fundamentally different from those of previous decades.

AI carries several inherent risks, such as algorithmic biases—encompassing racial bias and the lack of diversity—security vulnerabilities, and ethical concerns related to privacy and data protection (Lee, 2018). Therefore, it is essential to mitigate potential harm, which can be achieved by offering proactive lessons to address biases in training data and algorithms (Hills et al., 2025). Students need to learn well-established ethical guidance during their school years, as these foundational beliefs, learned through various courses, will shape their mindsets. Offering ethics-related lessons in multiple

ways and at numerous times in post-secondary institutions, meaning “ethics across the curriculum, is a model for putting this into practice” (Borenstein & Howard, 2021, 64).

Striking a balance between realizing the transformative benefits of AI and managing its risks is crucial for a responsible integration of AI technologies into society. Incorporating AI ethics into curricula is one of the significant approaches to mitigating AI-related harms, which can be addressed across multiple disciplines in academia (Borenstein & Howard, 2021; Hills et al., 2025). By integrating ethics into AI education across various disciplines, students who will become future AI practitioners can develop inherent fairness and transparency in their AI guidance.

Fourth, despite the widespread adoption of AI in numerous fields, academic disciplines must develop new courses and curricula related to AI technology to strike a balance with existing programs. Historically, post-secondary institutions have introduced new courses whenever emerging technologies appeared. One example was the metaverse, which gained widespread attention in the late 2010s and early 2020s. The term metaverse combines “universe,” meaning the real world, and “meta,” meaning “processing” or “abstract.” It refers to a three-dimensional virtual world.

As untact culture gained popularity during the COVID-19 pandemic, the metaverse attracted considerable attention because it allowed large numbers of people to gather in a virtual space and interact without the limitations of time or place (The Korea Herald, 2022). Due to its popularity, many universities incorporated the metaverse into their curricula, and in 2021, Facebook even rebranded itself as Meta (Isaac, 2021). However, the hype surrounding the metaverse quickly faded, and interest in it has significantly declined. Universities that once introduced the metaverse into their curricula have either had to remove it or reduce its importance.

This example clearly demonstrates the need for academia to develop curricula systematically, reflecting long-term trends rather than short-lived popularity. Unlike the real world, educational systems cannot change daily; therefore, engagement with new technologies must be carefully prepared and thoughtfully arranged. At the same time, universities must maintain a balanced educational system. Most post-secondary institutions exist to cultivate students’ creative thinking rather than focusing solely on hands-on technical skills.

Fifth, post-secondary institutions must consider the power dynamics between universities, particularly those located in the Global South, and AI technology companies based in the Global North. In media and communication, the primary actors are mainly located in the Global North, and particularly in the U.S. As a result, asymmetrical power imbalances have been some of the most significant socio-cultural and economic issues in contemporary society. AI has further exacerbated these imbalances, since only a few Western countries possess the skills, talent, and financial resources necessary to drive innovation. Because AI development relies heavily on big data, only a few tools, such as ChatGPT and Sora, have access to data from both the Global South and the Global North. This enables U.S.-based AI firms to continue collecting essential data and enhancing the capabilities of their tools. More importantly, college students and faculty are among the most frequent users of generative AIs. Therefore, it is essential to recognize that post-secondary institutions have the right to share in the benefits generated by AI companies.

Last but not least, interdisciplinarity is a particularly important element in the age of AI. Interdisciplinary approaches are not a new concept in academia, and compartmentalization is increasingly viewed as outdated. The rapid growth and use of AI in post-secondary institutions require many academic units to create shareable and collaborative strategies. For example, AI ethics in academia cannot be designed and implemented by a single department alone, but must be integ-

rated across all disciplines. Therefore, it is desirable to develop various academic plans through interdisciplinary approaches. As Borenstein and Howard (2021, 4) point out;

A related point is the importance of having interdisciplinary teams who create AI ethics content and potentially teach it. The challenges emerging in relation to AI cross over disciplinary lines and are too complex for any single type of expertise to handle. Insights from lawyers, sociologists, policy scholars, philosophers, and others along with scientists and engineers can be especially valuable when determining how to educate students about AI ethics. This hopefully will attune students to AI's ethical challenges and encourage them to have the willingness to engage with those challenges seriously.

Overall, people cannot deny the increasing role of generative AI in our educational systems. As post-secondary institutions not only adopt this new trend but also prepare for forthcoming changes, both lecturers and students must adapt to the shift that AI has introduced. However, they also need to establish reliable and/or ethical foundations for using AI technology in post-secondary education. AI and academia must develop mutually beneficial structures, allowing universities to leverage AI to support the mission of higher education, thereby fostering creativity and innovative thinking. Instead of replacing the current system, AI should be used as an assistant to enhance and advance creativity. AI has become one of the most significant digital technologies in the field of communication. It is closely tied to students' preparation for their future careers, from newspaper reporters to television producers.

Therefore, it is essential to build relevant, future-oriented educational systems. At the same time, communication as an academic discipline must promote AI ethics that students need to learn before entering the professional world. The rise of AI can be seen as one of the most innovative developments in digital technology; however, communication majors must also strengthen their ethical codes when using AI in their academic work.

3 Evolution of artificial intelligence in communication education: 2016–2026

Artificial intelligence significantly transformed communication education between 2016 and 2026. Journalism, broadcasting, public relations, advertising, and media studies increasingly integrated AI-powered technologies into teaching, research, writing, transcription, and multimedia production. Tools such as Grammarly, ChatGPT, Otter.ai, Canva AI, and speech coaching applications reshaped educational communication practices globally. The COVID-19 pandemic accelerated this transition as universities shifted from physical classrooms and newsroom laboratories to digitally mediated learning environments. Communication educators adopted online platforms, AI-assisted collaboration tools, and virtual newsroom practices to sustain teaching and learning activities during institutional lockdowns.

3.1 Theoretical framework

Rogers' Diffusion of Innovations theory explains how technological innovations spread through social systems over time (Rogers, 2003). Institutions with stronger technological infrastructure typically adopt innovations more rapidly than resource constrained institutions. The Unified Theory of Acceptance and Use of Technology developed by Venkatesh et al. (2003) identifies performance expectancy, effort expectancy, social influence, and facilitating conditions as major predictors of technology adoption. Vygotsky's theory of the Zone of Proximal Development further explains how AI

tools function as scaffolding mechanisms that support learners in achieving communication competencies beyond their unaided capabilities (Vygotsky, 1978).

3.2 Grammarly and AI writing assistance

Grammarly became one of the most widely adopted AI writing support systems in higher education. Initially developed as a grammar checking platform, it evolved into a sophisticated writing assistant capable of analysing clarity, tone, punctuation, engagement, and style. O'Neill and Russell (2019) found that students valued Grammarly because it provided immediate and accessible writing feedback. Ghufon and Rosyida (2018) also established that Grammarly improved grammatical accuracy in student writing. These capabilities made the platform highly relevant within journalism and communication education where effective writing remains a foundational professional skill.

3.3 ChatGPT and generative artificial intelligence

The release of ChatGPT by OpenAI in November 2022 represented a major turning point in higher education. The platform rapidly became integrated into brainstorming, writing assistance, summarisation, and research support activities. Pavlik (2023) argued that ChatGPT possesses transformative potential for journalism and media education while simultaneously creating concerns relating to misinformation, plagiarism, and academic integrity. Research also demonstrates that students frequently use ChatGPT for idea generation, summarising texts, and academic support activities (Arum et al., 2025).

3.4 Otter.ai and automated transcription

Otter.ai emerged as a major AI transcription platform during the COVID-19 era. Communication students and lecturers increasingly used the platform to transcribe interviews, lectures, newsroom meetings, and collaborative discussions. The platform became especially relevant in journalism education because transcription is a core component of interview processing and media production. However, scholars note that automated transcription systems may perform less effectively with strong accents, multilingual environments, and background noise.

3.5 Canva AI and visual communication

Canva AI transformed multimedia communication and visual storytelling education. AI-powered features such as Magic Design and Magic Write simplified graphic production, presentation design, and social media content creation. The platform enabled communication students to produce visual campaigns, infographics, and multimedia content without extensive professional design expertise. Canva for Education also expanded institutional access to educational resources globally.

3.6 Speech coaching applications

Speech coaching applications such as Orai and Yoodli introduced automated speech analysis into communication training. These applications evaluate speech pace, filler words, clarity, and presentation confidence. Maknun (2020) found that Orai improved students' oral communication performance through repeated practice and AI generated feedback. Such technologies became increasingly relevant in broadcasting, public speaking, and strategic communication education.

3.7 COVID-19 and AI assisted learning

The COVID-19 pandemic accelerated the adoption of AI-assisted learning technologies worldwide. Communication education experienced major disruption because journalism training traditionally depended on physical newsrooms, studios, and collaborative interaction. Universities adopted online learning systems including Zoom, Microsoft Teams, Google Classroom, and AI transcription tools to maintain academic continuity. The pandemic also normalised remote journalism practices including virtual interviews and collaborative digital newsroom production.

3.8 AI adoption in Nigerian and African universities

Studies indicate growing awareness and adoption of AI tools among Nigerian university students and lecturers. Grammarly, ChatGPT, and related AI technologies are increasingly used for writing support, paraphrasing, grammar correction, and academic research. However, African universities continue to face substantial barriers including poor internet connectivity, inconsistent electricity supply, inadequate institutional funding, and limited faculty digital literacy. These challenges contribute to unequal AI adoption across institutions.

3.9 Challenges and ethical concerns

The integration of AI into communication education has generated concerns regarding plagiarism, misinformation, academic dishonesty, and overdependence on generative technologies. Educators increasingly emphasise the importance of critical thinking, ethical awareness, and responsible AI use. Algorithmic bias and unequal technological access also remain major concerns, particularly within developing educational systems.

Conclusively, artificial intelligence fundamentally transformed communication education between 2016 and 2026. Grammarly, ChatGPT, Otter.ai, Canva AI, and speech coaching technologies reshaped writing instruction, multimedia production, oral communication training, and digital learning practices. Although global universities have advanced further in AI integration, Nigerian and African institutions continue to face infrastructural and policy related constraints. Future communication education will depend on ethical AI integration, institutional investment, digital literacy development, and responsible pedagogical adaptation.

4 Outlook for 2026–2036

Looking ahead to 2026–2036, communication education is expected to become more immersive and technology-driven. Virtual reality and AI-powered classrooms may simulate crisis communication scenarios, live interviews, political debates, and public speaking events. Real-time AI co-pilots could provide feedback during presentations by analyzing pacing, audience engagement, clarity, and persuasion. Universities and regulatory bodies will likely need to update curricula, accreditation standards, and infrastructure to prepare students for AI-integrated workplaces.

At the same time, the broader AI landscape will continue evolving. AI systems are moving from simple assistants to autonomous agents capable of planning and executing tasks. Specialized AI models tailored to fields such as law, medicine, journalism, and public relations will become more common. Questions of governance, transparency, ethics, and trust will become central as AI plays a larger role in education, research, and professional communication.

Despite these advances, AI remains a tool rather than a replacement for human connection. AI can assist with drafting, analysis, simulations, and scalability, but it cannot fully replace empathy, ethical judgment, trust, cultural sensitivity, or genuine human understanding. Communication ultimately depends on people connecting with people. The danger lies in relying so heavily on AI that communication becomes polished but emotionally empty. The opportunity, however, is to use AI to automate repetitive tasks so humans can focus more deeply on listening, relationship-building, and meaningful interaction.

The future of communication education therefore lies not in resisting AI, but in learning how to direct it responsibly. Students and educators who combine AI literacy with strong human-centered communication skills such as empathy, ethics, negotiation, and cultural awareness will be best prepared for the future.

From 2026 to 2036, artificial intelligence is expected to move from being primarily a supportive tool to becoming a deeply integrated part of everyday life, work, education, governance, and communication. The decade will likely be defined not just by AI's ability to generate content, but by its ability to act autonomously, collaborate with humans, and influence major social and economic systems.

One of the most significant developments will be the transition from AI assistants to AI agents. Current AI systems mostly respond to prompts, but the next decade will see AI handling complex, multi-step tasks with minimal supervision. These systems will conduct research, manage schedules, analyze data, draft reports, automate workflows, and coordinate digital operations almost like virtual employees. Human roles will increasingly shift toward supervision, decision-making, and strategic direction rather than repetitive execution.

Education will experience major transformation during this period. AI-powered learning systems will provide personalized tutoring, instant feedback, adaptive assessments, and immersive simulations tailored to individual learners. Virtual reality combined with AI will create interactive classrooms where students practice real-world scenarios such as negotiations, crisis communication, medical procedures, engineering design, and public speaking. Teachers will increasingly function as mentors, facilitators, and critical-thinking coaches while AI handles routine instruction and administrative tasks.

In communication and media, AI will revolutionize content creation, audience analysis, and public engagement. Journalists, broadcasters, marketers, and public relations professionals will use AI for research, scripting, translation, sentiment analysis, and audience targeting. Real-time AI co-pilots may assist presenters during live broadcasts or speeches by suggesting adjustments based on audience reactions. Communication itself will become more data-driven, measurable, and globally adaptable. AI likewise assumes a significant job in self-driving autos. Profound learning neural systems are utilized to distinguish obstacles and decide ideal activities for securely controlling a vehicle on the road. (Rouse, 2019)

To ensure that employees grasp a message during communication, managers should consider the following (Wrench, 2013): finding ways to enhance responses, recognizing the impact on the company's actions and stakeholders; ensuring that regulations are clearly visible to inform all organization members; ensuring that procedures are ethical and established to resolve emerging problems; involving employees in identifying, understanding, and resolving problems; determining the connection between departments and issues affecting companies and bringing these to employees' attention; and aligning decision-making with the performance evaluation process and publishing

in communication media used by the organization and other forums, establishing essential priorities and efforts related to various emerging issues.

The workplace will also undergo profound restructuring. Many routine tasks in administration, customer service, writing, coding, and data analysis will become heavily automated. As a result, the most valuable human skills will shift toward creativity, ethical reasoning, leadership, emotional intelligence, negotiation, and critical evaluation of AI outputs. Rather than replacing all jobs, AI is more likely to redefine them, creating demand for professionals who can effectively direct and collaborate with intelligent systems.

Scientific research and innovation are expected to accelerate dramatically. AI will assist in drug discovery, climate modeling, materials science, engineering, and medical diagnostics. Researchers supported by AI agents may accomplish work that previously required entire teams, reducing the time needed for experimentation and discovery. This could lead to faster breakthroughs in healthcare, renewable energy, agriculture, and biotechnology.

Economically, AI will become a major driver of global competition. Countries and corporations will invest heavily in data centers, semiconductor technology, energy infrastructure, and AI research. Access to computing power and quality data may become as strategically important as oil and industrial resources were in previous eras. This competition could reshape global alliances, trade, and technological leadership.

At the same time, ethical and governance concerns will become more urgent. Questions surrounding privacy, misinformation, surveillance, algorithmic bias, intellectual property, and accountability will intensify as AI systems become more powerful and autonomous. Governments and international organizations will likely introduce stricter regulations focused on transparency, explainability, and responsible AI deployment. Societies that establish trusted and ethical AI systems may gain significant economic and political advantages.

Another important impact will be the rise of immersive and intelligent digital environments. AI integrated with augmented reality and virtual reality could transform entertainment, training, remote work, and social interaction. Meetings, classrooms, and workplaces may increasingly operate in virtual spaces supported by intelligent AI assistants capable of real-time translation, collaboration, and problem-solving.

Despite these advances, the decade will also highlight the continued importance of human qualities that AI cannot fully replicate. Trust, empathy, cultural understanding, ethical judgment, and authentic human connection will remain central in leadership, communication, education, and governance. The societies and institutions that succeed during this period will likely be those that balance technological advancement with strong human-centered values.

Ultimately, the years 2026–2036 may represent the transition from AI as a productivity tool to AI as a foundational layer of society. The central challenge will not simply be building more powerful systems, but ensuring that these systems are aligned with human needs, ethical principles, and long-term societal well-being.

5 Prospects for teaching communication with AI

Artificial Intelligence's aim is simple, to simplify otherwise herculean tasks within minimal timeline and its impacts range across various fields of human endeavours such as health, education, communication etc

5.1 Personalized instructions

In teaching communication, AI helps educators create personalized lessons tailored to meet the needs of each individual learner, thus, making education more effective and helping educators work smarter and achieve much more within short time frames while helping them track learners progress with the aid of teacher-facing applications used to automate tasks such as evaluation, feedback and plagiarism check. AI is used in communication education to create virtual/simulated environments where students can practice and sharpen their public speaking, interviewing and broadcasting presentation skills with the aid of personalized virtual assistance

5.2 Content creation and simulation

Content creation has become an effective media education method, AI tools such as ChatGPT, Canva, Renderforest help students generate graphics, animations and text, tools such as Grok are used to generate podcasts, voiceovers, broadcasts contents etc while tools such as CapCut, Inshot are used for editing and modification of audio, visual or audiovisual contents. (Adamczyk, 2025)

5.3 Virtual reality

Virtual Reality contents are enhanced or automated through the use of AI to create narratives based on user engagement (Ahmed, 2024).

AI aids lecturers and students alike in generating professional media-teaching materials effectively.

Students often use AI to do assignments and practice essay writing, creative writing, news and feature writing etc.

5.4 Feedback and assessment

AI tools help media educators automate feedback and assessment, thus saving time (Okpor et al., 2026).

AI tools like Grammarly, Turnitin, Kahoot, Moodle etc can help media educators assess students' grammar, spelling, tone and style of writing, sentence structure, etc, some can also be used to mark multiple choice questions and grade students

5.5 Breaking barriers

AI tools such as Duolingo and Google Translate break language barriers and enable students and educators from different linguistic backgrounds communicate clearly and effectively.

Other tools include speech-to-text and text-to-speech technologies, automatic subtitles and caption generation etc.

AI tools are also used for transcription, transforming hand written notes to word document / Portable Document Format (PDF).

Technologies such as voice assistants, text-to-speech systems for reading support, automated captioning for video lectures for physically challenged students help foster equal learning chances for all learners.

Tools such as Google Classroom, Zoom, Google Meet etc break physical barriers by enabling educators to connect with learners from different locations around the world in real time.

5.6 Research support

Research is facilitated by AI tools such as ResearchPal, CiteDash, ChatGPT that are employed in the current age to write well structured literature reviews, tools like smallseotools, Quillbot are used to rewrite texts, check grammar and plagiarism checks while Turnitin is used to ensure originality in research

Tools such as Google Scholar and Semantic Scholar help researchers find relevant, current, influential and well cited papers for their literature reviews.

Python, R are excellent data analysis tools used for analysing large volume of data in academic research. Other tools such as Brandwatch and Hootsuite are used to monitor social media engagements and trends and analyse public opinion.

6 Prospects for learning communication with AI

AI cultivates students' participation and attention retention (Nwaokugha & Abiakwu, 2024).

6.1 Skills practice

A Chatbot is a computer program developed to simulate conversation with human users mostly powered by artificial intelligence (Singh & Thakur, 2020) cited by (Alam & Hasan, 2024), learners use chatbots such as voice assistants, virtual assistants, conversational agents etc to facilitate learning (Chaka, 2023) and to rehearse interviews, debates, public speaking, voiceover delivery, news presentation, pitching etc

6.2 Instant drafting help

Students use AI tools like ChatGPT to generate, draft and refine writings such as term papers, editorials, news and feature articles, advert copies, social media contents, campaign messages, press releases, broadcast scripts etc in real time

6.3 Access to mentorship

The deployment of intelligent tutoring systems and automated feedback mechanism is used to simulate the role of a human educator such as a journalist, public relations expert, broadcaster, editor etc through the provision of guidance, explanations and corrections while automated feedback fast tracks response to learners' efforts as against the traditional tutor-learners scenario where there might be delay in feedback as a result of volume of work (Okpor et al., 2026)

6.4 Data-driven learning

AI presents opportunities for data-driven learning and a life long, self-guided learning to students, allowing them to continually increase in knowledge even after a teacher is no longer there (Okpor et al., 2026)

7 Challenges and ethical concerns of artificial intelligence in communication

Despite the numerous opportunities provided by Artificial Intelligence (AI) in communication, its growing adoption has also raised important ethical and professional concerns. Scholars and communication experts argue that while AI improves efficiency and automation, it may also create challenges relating to authenticity, misinformation, inequality, academic misconduct, and employment insecurity. These concerns have become increasingly significant in journalism, public relations, advertising, broadcasting, and communication education (Adeyemi & Okoro, 2023; Ibrahim & Salawu, 2024).

7.1 Authenticity and skill atrophy

One of the major concerns surrounding the use of AI in communication is the issue of authenticity and the gradual decline of human communication skills. AI tools such as chatbots, automated writing assistants, and speech generators can produce articles, speeches, advertisements, and public relations materials within seconds. While this improves efficiency, it raises concerns about whether students and professionals will continue to develop essential communication skills such as writing, critical thinking, creativity, public speaking, and storytelling (Ogunleye, 2023).

In academic environments, students may increasingly rely on AI systems to generate assignments, essays, or presentations rather than developing their own intellectual and communication abilities. This overdependence may weaken originality, analytical reasoning, and language proficiency. Communication as a discipline requires creativity, emotional intelligence, persuasion, and contextual understanding, qualities that are best developed through human practice and interaction (Eze & Bello, 2024).

Furthermore, authenticity becomes questionable when audiences cannot distinguish between human-generated and AI-generated communication. In journalism and public relations, authenticity is critical because credibility and trust are central to audience relationships. Excessive automation may reduce the emotional and human elements that make communication relatable and trustworthy (Akinola & Yusuf, 2023).

7.2 Bias and misinformation

Another significant ethical concern is the issue of bias and misinformation in AI-generated content. AI systems are trained on existing datasets, most of which are dominated by Western perspectives, languages, and cultural assumptions. As a result, AI tools may misrepresent African realities, Nigerian cultural contexts, indigenous languages, and local communication practices (Okafor & Mensah, 2024).

For example, AI-generated news or communication materials may fail to accurately reflect local traditions, political sensitivities, or socio-cultural nuances. This can lead to stereotyping, cultural misrepresentation, or the spread of inaccurate information. In some cases, AI systems may unintentionally reinforce racial, gender, or social biases embedded within their training data (Olatunji, 2023).

The challenge becomes even more serious when misinformation spreads rapidly through AI-powered platforms. Deepfake videos, manipulated audio recordings, and AI-generated fake news can deceive audiences and undermine public trust in the media. During elections or political campaigns, such technologies may be used to spread propaganda, discredit opponents, or manipulate public opinion (Ibrahim & Salawu, 2024).

7.3 Digital divide

The adoption of AI technologies in communication also highlights the growing problem of the digital divide. Although AI tools offer numerous opportunities, access to these technologies is uneven, especially in developing countries like Nigeria. Many students, journalists, public relations practitioners, and small media organizations face barriers such as high subscription costs, unstable electricity supply, poor internet connectivity, and inadequate digital infrastructure (Adebayo & Chukwu, 2023).

As a result, only individuals and institutions with sufficient financial and technological resources can fully benefit from AI innovations. Rural communities and economically disadvantaged populations may be excluded from participating in the digital communication revolution. This creates inequality in education, employment opportunities, and access to information (Ojo & Kareem, 2024).

The digital divide also affects the quality of communication education. Students in well-equipped universities may have access to advanced AI tools and digital training, while those in underfunded institutions remain disadvantaged. Consequently, unequal access to AI technologies may widen social and educational inequalities instead of reducing them.

7.4 Academic integrity and ethical misconduct

AI has also created serious concerns regarding academic integrity and ethical conduct. Many students now use AI tools to generate assignments, research papers, and communication projects with minimal personal input. This raises questions about plagiarism, originality, and intellectual honesty (Nwosu & Adekunle, 2023).

Unlike traditional plagiarism, AI-generated content may appear original because it is newly generated rather than copied directly from existing texts. However, the ethical concern lies in presenting AI-produced work as one's personal effort. This challenges the credibility of academic assessment systems and undermines the purpose of education, which is to develop independent knowledge and critical thinking skills (Ekanem & Idris, 2024).

Additionally, the emergence of deepfake technology has intensified ethical concerns in communication studies. AI can now create realistic fake videos, images, and voice recordings that may be difficult to distinguish from authentic content. In communication assignments, media productions, or political campaigns, such technologies can easily be misused for deception, manipulation, blackmail, or misinformation (Akinola & Yusuf, 2023).

7.5 Fear of job displacement and the human element

The increasing automation of communication tasks has generated fears that AI may replace professionals such as journalists, public relations officers, broadcasters, copywriters, social media managers, and content creators. AI systems can already write news reports, generate advertising copies, schedule social media posts, and analyze audience behavior faster than humans (Ogunleye, 2023).

This has created anxiety among communication professionals who fear that organizations may prioritize cost-saving automation over human labor. Media houses and public relations firms may reduce staffing needs by adopting AI-powered content production systems.

However, despite these concerns, many scholars argue that AI is more likely to transform communication jobs rather than completely eliminate them. Human communication involves emotional intelli-

gence, empathy, ethical judgment, cultural understanding, creativity, and interpersonal relationships, qualities that AI cannot fully replicate (Okafor & Mensah, 2024).

The human element remains central to effective communication because audiences often value authenticity, emotional depth, and ethical responsibility. AI may assist professionals by improving efficiency and productivity, but human oversight and creativity remain indispensable in ensuring meaningful and responsible communication. Therefore, communication professionals and students must focus on developing complementary skills such as critical thinking, digital literacy, ethical reasoning, creativity, and strategic communication in the evolving digital age (Ojo & Kareem, 2024).

8 Recommendations

To maximize the prospects of Artificial Intelligence (AI) in the teaching and learning of Communication, stakeholders must adopt strategies that encourage innovation while preserving human creativity, ethics, and critical thinking. The following recommendations are therefore essential for lecturers, students, institutions, and policy makers.

8.1 Recommendations for lecturers and educators

1. Lecturers should use AI tools to support teaching activities such as lesson preparation, grading assistance, speech analysis, and content generation, while still emphasizing original thinking and human creativity. Communication education is human-centered; therefore, students must continue to develop authentic speaking, writing, interviewing, and interpersonal skills.
2. Students should be trained to question, verify, and critically evaluate AI-generated information. Since AI systems may produce inaccurate or biased content, lecturers must teach fact-checking, media literacy, and ethical communication practices.
3. Communication departments should incorporate AI-driven activities such as virtual interviews, automated speech coaching, media analytics, podcast editing, and simulated PR crisis management into classroom exercises. This will help students gain industry-relevant experience.
4. Educators must establish clear guidelines on plagiarism, authorship, and responsible AI use in assignments and research. Students should understand the difference between using AI for assistance and using it for academic dishonesty.
5. Lecturers should undergo regular training on emerging AI technologies to remain relevant in modern communication education. Workshops, seminars, and certification programs on AI literacy should become part of academic development.

8.2 Recommendations for students

1. Students should use AI tools for brainstorming, editing, practicing speeches, and improving communication skills rather than depending entirely on them to complete assignments.
2. Despite technological advancements, students must continue developing emotional intelligence, creativity, cultural understanding, persuasion, storytelling, and public speaking abilities, which AI cannot fully replicate.
3. Students should avoid plagiarism, misinformation, and overdependence on AI-generated content. Proper referencing and originality must remain central to academic work.

4. To remain competitive in the future workplace, communication students should learn how to use AI tools such as transcription software, media analytics platforms, content generation tools, and audience engagement systems effectively.

8.3 Recommendations for universities and institutions

1. Universities should provide reliable internet access, stable electricity, smart classrooms, and licensed AI tools to support effective teaching and learning.
2. Communication studies curricula should be updated to include courses on AI in media, digital communication analytics, data storytelling, AI ethics, and emerging media technologies.
3. Institutions should develop policies regulating AI usage in teaching, learning, and research to prevent misuse, plagiarism, and misinformation.
4. Universities should encourage research on how AI affects journalism, public relations, advertising, broadcasting, and interpersonal communication, especially within African and Nigerian contexts.
5. Institutions and governments should ensure that students from disadvantaged backgrounds are not excluded from AI-driven education due to lack of access to devices, internet connectivity, or technical skills.

8.4 Recommendations for government and policy makers

1. Educational regulatory bodies such as the National Universities Commission should develop frameworks that guide the responsible integration of AI into higher education curricula.
2. Governments should invest in ICT infrastructure, digital literacy programs, and AI research centers in universities.
3. There should be support for the development of African and Nigerian AI systems that reflect local languages, cultures, and communication realities rather than relying solely on Western-trained models.
4. Policies should protect students' data, intellectual property, and digital rights while encouraging innovation in AI-driven education.

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