IIAR JOURNALS

Innovating Knowledge. Advancing Research.

IIAR Journal of Communication, Media, and Digital Society

Vol 1, No 1, 2026

Communication Education for the Algorithmic Age: A Theoretical Framework of AI Literacy, Critical Media Competence and Professional Formation in Mass Communication Programmes

Nwogboji Emmanuel Usulor[1], Ogah Sunday Ogbo[2], Atolagbe Umar Kawu[3], Igwe Emmanuel Sunday[4], Paul Idowu Bamigbola[5]

[1,2,3,4,5] Veristzon Global Research Lab

ABSTRACT

Mass communication programmes prepare students for industries that artificial intelligence is remaking. Yet curricula in many African universities still centre on print, broadcast and public relations as they were practised before the platform era. This conceptual, non-empirical paper develops a framework for communication education under algorithmic conditions. It draws on the journalism-education and media-literacy literatures, on emerging scholarship on AI literacy, and on peer-reviewed research published between 2023 and 2026 on AI in communication curricula, on student learning with generative AI and on AI in the communication professions. Every source was checked against its Crossref record and screened for retractions and corrections. The paper distinguishes three competence domains that AI makes central. AI literacy is understanding what AI systems do and fail to do. Critical media competence is the ability to evaluate content that is produced and distributed by algorithms. Professional formation is the ethical identity that governs how communicators use the tools. The paper argues that AI literacy is being added to curricula as a technical module, while critical media competence and professional formation, which are harder to teach and more durable, are neglected. It derives six propositions. They concern the competences that keep their value as tools change, the relationship between AI use and the development of the writing, verification and judgement skills on which communication professions depend, the conditions under which media-literacy instruction is effective, and the institutional conditions for curriculum reform in resource-constrained universities. The paper concludes with a curriculum framework for Nigerian and African mass communication programmes that sequences foundational skills before AI augmentation, embeds critical competence across the programme, and builds professional formation through supervised practice.

Keywords: communication education; journalism education; AI literacy; media literacy; curriculum

Communication Education for the Algorithmic Age: A Theoretical Framework of AI Literacy, Critical Media Competence and Professional Formation in Mass Communication Programmes

1. INTRODUCTION

A final-year mass communication student in Nigeria may spend a semester learning how to set type for a newspaper page or how to cue a reel-to-reel tape, and then graduate into a labour market in which editors use generative tools to draft copy, public relations firms commission synthetic spokespersons, and audiences meet news through recommendation systems. The gap between what is taught and what the professions now require is not new; journalism and communication education has always lagged behind technological change. What is new is the speed of the change and its reach into the core of the work. Generative AI does not merely add a channel to master. It performs, or appears to perform, the writing, summarising, editing and even judging that communication degrees exist to develop.

Communication educators have begun to respond. Surveys of accredited programmes in the United States show that schools recognise the need for long-term investment and new expertise but struggle to predict which technologies will matter (Hossain & Wenger, 2024). Studies of educators in Bangladesh, Spain and southern Africa report divided views, unclear guidelines and calls to combine AI skills with humanistic values (Asadi & Sultana, 2026; Mayo-Cubero, 2026; Ncube et al., 2025). Students, for their part, see AI tools as inevitable in their careers but often misunderstand how they work (Veenstra et al., 2025). African journalism education is described as enthusiastic but constrained by infrastructure, guidelines and expertise (Hossain & Dowling, 2026b), and a continental review of excellence in journalism education identifies gaps in data journalism and media sustainability (Finlay et al., 2026).

Two problems run through this literature. The first is that responses tend to treat AI as a technical skill to be added to an existing curriculum, through a module on tools or prompting. The second is that research on student learning with generative AI, which raises concerns about reliance and the weakening of reasoning (Fan et al., 2025; Stadler et al., 2024), has hardly been connected to communication education, even though writing, verification and judgement are the core of the field.

This paper asks three questions. What competences does AI make central to communication education? How does AI use affect the formation of the skills that communication professions depend on? And under what institutional conditions can curricula in resource-constrained universities be reformed? It answers by developing an AI-literacy–critical-competence–professional-formation framework, six propositions and a curriculum framework for Nigerian and African mass communication programmes.

2. LITERATURE REVIEW

2.1 CONCEPTUAL REVIEW

AI literacy refers to the knowledge and abilities that allow people to understand, use and evaluate AI systems. Systematic reviews show that conceptualisations vary but commonly include knowing what AI is and how it works, using it, evaluating its outputs and engaging with its ethical implications (Almatrafi et al., 2024; Pinski & Benlian, 2024). Chiu et al. (2024) distinguish literacy, which concerns knowing, from competency, which concerns applying knowledge confidently and reflectively, and propose components of technology, impact, ethics, collaboration and self-reflection.

Critical media competence is used here for the capacity to evaluate content that is produced, ranked and distributed by algorithmic systems: to judge its accuracy, provenance and purpose, to recognise synthetic material, and to understand how distribution shapes what is seen. It extends the traditions of media literacy and news literacy to an environment in which machines generate as well as distribute content.

Professional formation refers to the process through which students acquire the values, judgement and identity of a profession, so that they act as

© IIARJournal. All rights reserved.

communicators who take responsibility for what they publish. In journalism, ethics sits at the centre of this identity (Fierens et al., 2023). *Deskilling* is the loss, or failure to develop, of skills that a tool performs on the user's behalf.

2.2 THEORETICAL REVIEW

Three bodies of theory inform the framework. The first is disruptive-innovation theory as applied to journalism education. Hossain and Wenger (2024) use it to explain why programmes struggle to adapt: disruptive technologies change the skills that matter faster than institutions can invest and hire. Asadi and Sultana (2026) apply the same lens to schools in the Global South and recommend embedding AI across existing courses rather than adding stand-alone units, together with an ethical grounding treated as a living framework.

The second body of theory concerns the relationship between technology and learning. Research on self-regulated learning and cognitive load suggests that tools which reduce effort can also reduce the processing through which skills are formed. Fan et al. (2025) describe "metacognitive laziness", the tendency of learners supported by ChatGPT to depend on the tool and engage less in the monitoring and evaluation that drive learning. Darvishi et al. (2024) found that students tended to rely on rather than learn from AI assistance, and that self-regulation strategies only partly filled the gap when assistance was removed. Zhai et al. (2024) conclude from a systematic review that over-reliance on AI dialogue systems can affect decision-making, critical thinking and analytical reasoning, as users favour fast solutions over slow ones.

The third body of theory concerns professional identity and the epistemic authority of communicators. Ethics forms the backbone of young journalists' professional identity during their first professional experience (Fierens et al., 2023). Hossain and Dowling (2026a) describe a "deskilling dilemma" in journalism education: educators feel obliged to teach the use of ChatGPT because it is central to current practice, while recognising that it may erode the critical judgement journalism education exists to cultivate. Research on newsrooms shows that journalists define their authority partly against what AI does (Ashuri et al., 2026), and that responsible use of AI depends on how journalists understand AI ethics (Shin et al., 2025).

2.3 EMPIRICAL REVIEW

AI in communication curricula. In a survey of accredited programmes, Hossain and Wenger (2024) identified three challenges: the need for long-term investment, the difficulty of predicting future change and demand, and the difficulty of hiring faculty with relevant expertise. Interviews with Spanish journalism professors led Mayo-Cubero (2026) to propose a "techno-humanist" model that integrates AI and transmedia competences while reinforcing foundational journalistic skills and prioritising practical training, critical thinking and ethics. In Bangladesh, educators were divided, and educators and students disagreed about AI guidelines (Asadi & Sultana, 2026).

Students and AI. Veenstra et al. (2025) found that journalism students regard large language models as inevitable in their careers but often misunderstand how the tools generate content, partly because they lack more fundamental knowledge of digital tools. Vietnamese journalism students described benefits and challenges of using generative AI in their learning and skills development (Van Thieu, 2026).

Skill formation. Experimental studies point to a cost of convenience. In Stadler et al. (2024), students who used a large language model for a scientific inquiry task experienced lower cognitive load but produced lower-quality reasoning and argumentation than those who used a search engine. In Fan et al. (2025), learners using ChatGPT improved their essay scores more than others, but their knowledge gain and transfer were no different, and the authors warn of dependence. Darvishi et al. (2024), in an experiment with 1,625 students, found that students relied on AI prompts rather than learning from them.

Media literacy. Huang et al. (2026) meta-analysed 49 experiments with 81,155 participants and found that media literacy interventions improve resilience to misinformation, with an overall effect of $d = 0.60$, including better discernment between true and false information and reduced sharing of misinformation. Effects were stronger with multiple sessions than with a single session and among college students than among online crowd workers.

© IIARJournal. All rights reserved.

African communication education and professions. Finlay et al. (2026) report on a UNESCO initiative in which 53 African journalism schools defined criteria for excellence, with selected projects focusing on data journalism, gender and media sustainability. Muringa and Adjin-Tettey (2025) systematically reviewed 46 studies on South African journalism curricula and found gaps in multimedia storytelling, data journalism, media entrepreneurship and AI tools, along with limited work-integrated learning. Ncube et al. (2025) find Southern African journalism schools only beginning to respond to AI, and Hossain and Dowling (2026b) report enthusiasm among African journalism educators alongside barriers of infrastructure, unclear guidelines and limited expertise. In the professions, Nigerian journalists view AI as double-edged and worry that it may encourage intellectual dormancy and produce content lacking journalistic values (Onebunne, 2026). Zimbabwean journalists adopt generative AI pragmatically but criticise its Western-centric content and weak handling of African languages (Chiridza & Mare, 2026). In Nigeria, a survey of 462 lecturers found strong commitment to implementing the National Universities Commission's Core Curriculum and Minimum Academic Standards, but also frequent policy changes, large classes, limited funding, weak coordination with the Commission and limited professional development (Ogunjimi et al., 2026).

2.4 GAPS IN THE LITERATURE

Three gaps follow. First, curriculum studies describe adoption and barriers but lack a framework that distinguishes the kinds of competence AI makes central and their relative durability. Second, evidence on AI and skill formation from education research has not been brought to bear on communication programmes, whose core skills are those most exposed to substitution. Third, research on African communication education documents constraints but rarely proposes curriculum designs that fit them. This paper addresses these gaps.

3. MATERIALS AND METHODS

Research design. This is a theoretical, non-empirical article. It uses integrative conceptual synthesis to build a framework and to derive propositions for later empirical testing. No human participants were involved and no primary data were collected, so population, sampling and instrument validation in the empirical sense do not apply.

Source identification. Literature was identified through structured searches of EBSCOhost databases accessed through the University of South Africa (Unisa) Library (Academic Search Ultimate, ERIC, Education Source and Library, Information Science and Technology Abstracts), the Crossref metadata service and the OpenAlex scholarly index. Search terms combined "journalism education", "communication education", "mass communication", "AI literacy", "media literacy", "algorithmic literacy" and "professional identity" with "artificial intelligence", "generative AI", "ChatGPT", "curriculum", "Africa" and "Nigeria". Searches were run on 21 October 2026.

Inclusion and exclusion criteria. Peer-reviewed journal articles published between 2023 and 2026 were included if they addressed AI in communication or journalism education, AI literacy, media literacy, student learning with generative AI, professional formation, or communication education and the communication professions in Africa. Preprints, conference papers, book reviews, editorials, grey literature, items without a resolvable digital object identifier (DOI), and outlets whose peer-review practices could not be confirmed were excluded.

Verification. Each candidate was checked against its Crossref record for DOI, authors, title, journal, volume, issue and pagination, and was screened for retractions, corrections and expressions of concern through Crossref update metadata. Two otherwise relevant studies on generative AI, learning and critical thinking were excluded because correction notices are attached to them. Where an article is indexed in the EBSCOhost databases, its peer-reviewed status and abstract were also confirmed there. Publication year follows the issue year where one exists. Twenty-four articles met all criteria and are cited. Nigerian curriculum policy is named in the text for context but is not treated as a source of evidence.

Analytic procedure. Sources were coded for the competence domain they bear on (AI literacy, critical media competence or professional formation), the learning mechanism involved, the institutional

© IIARJournal. All rights reserved.

condition described and the setting. Mechanisms that recurred were stated as propositions, and African studies were used to judge how each mechanism is likely to operate in Nigerian and other African programmes.

Bases of judgement and trustworthiness. Conceptual work is judged by clarity, parsimony, explanatory reach and falsifiability. Each proposition is stated so that it could prove wrong, and the discussion identifies evidence that would weaken it.

AI usage disclosure. Generative AI tools were used to assist with literature retrieval, metadata checking and language editing. The arguments, interpretations and conclusions were developed and reviewed by the author(s), who take full responsibility for the content. No AI tool is listed as an author, and no source was cited without verification against its publisher record.

Limitations. The synthesis is restricted to English-language journal articles from a four-year window. Experimental evidence on AI and learning comes mainly from outside communication programmes and outside Africa, and peer-reviewed research on AI in Nigerian mass communication curricula is still scarce.

4. RESULTS AND DISCUSSION

4.1 RESULTS: THE AI-LITERACY–CRITICAL-COMPETENCE–PROFESSIONAL-FORMATION FRAMEWORK

The synthesis identifies three competence domains that AI makes central to communication education. They differ in what they cover, in how long they keep their value and in how they are best taught. Table 1 summarises the framework.

Table. 1. Three competence domains for communication education under AI

Domain	Core question	Durability	How best taught
AI literacy	What do the systems do, and where do they fail?	Short for tool skills; longer for concepts	Concepts and hands-on use within other courses (P1)
Critical media competence	Is this content accurate, authentic and fairly framed?	Long	Repeated, practice-based instruction across the programme (P3, P6)
Professional formation	Will I take responsibility for what I publish?	Longest	Supervised practice with reflection on AI decisions (P4)

Note. Compiled by the author(s) from the synthesis in Sections 2 and 4.1.

AI literacy: knowing what the systems do and fail to do. AI literacy covers how generative and recommendation systems work, what they are good and bad at, how to use them and how to recognise their characteristic failures, such as fabricated facts and sources. Students need it; Veenstra et al. (2025) show that journalism students use tools whose workings they misunderstand. Yet AI literacy has a short half-life where it concerns particular tools. Interfaces, models and techniques change from year to year, which is part of why programmes find it hard to predict what to teach (Hossain & Wenger, 2024). The durable core of AI literacy is conceptual: an understanding of how statistical generation differs from knowledge, and why outputs need checking. Reviews of AI literacy that include evaluation and ethics alongside use support this reading (Almatrafi et al., 2024; Chiu et al., 2024; Pinski & Benlian, 2024).

Critical media competence: evaluating algorithmically produced and distributed content. Communication professionals increasingly work with material they did not gather: generated drafts, synthetic images, user content and content surfaced by algorithms. Critical media competence is the ability to evaluate such material for accuracy, provenance and purpose, and to understand how distribution shapes visibility. It is teachable, and the evidence shows that it works. Media literacy interventions improve discernment and reduce sharing of misinformation, especially when delivered in multiple sessions and to college students (Huang et al., 2026). For future professionals, this competence is not only defensive. It underpins verification, which is the core of journalistic authority and of credible public communication.

Professional formation: the identity that governs use. The third domain concerns who students become. Professional formation develops values, judgement and a sense of responsibility for what one publishes. It is formed through practice, mentoring and socialisation; Belgian journalism interns describe

© IIARJournal. All rights reserved.

ethics as central to the professional identity they built during their first experience of work (Fierens et al., 2023). AI raises the stakes of this domain. When tools can produce plausible copy in seconds, the difference between a communicator and an operator lies in the willingness and ability to take responsibility for accuracy, fairness and disclosure. Nigerian journalists' fear of intellectual dormancy (Onebunne, 2026) and educators' deskilling dilemma (Hossain & Dowling, 2026a) both point to formation as the domain at risk.

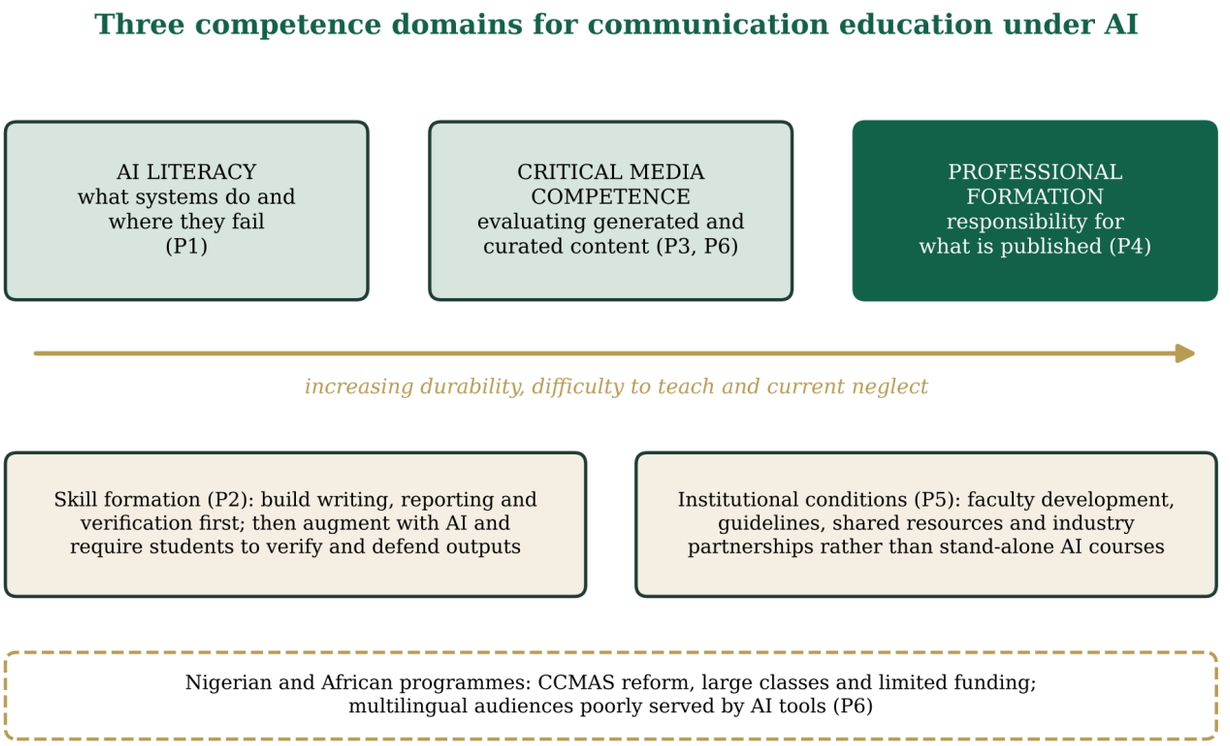


Figure. 1. The AI-literacy–critical-competence–professional-formation framework: three competence domains, their relative durability, and the sequencing that protects skill formation. Source: developed by the author(s).

The synthesis also shows an imbalance. Curricular responses tend to emphasise AI literacy, often as tool training, because it is the most visible gap and the easiest to fill with a module. Critical media competence and professional formation are harder to teach, need sustained practice and supervision, and cannot be bought as software. They are also the most durable. From this, six propositions follow.

Proposition 1: The competences that keep their value as AI tools change are critical evaluation and professional judgement, not tool operation; curricula that equate AI education with tool training will date fastest. Tool-specific skills change with each product cycle, while the need to evaluate outputs and take responsibility for them persists. Frameworks that place evaluation, ethics and self-reflection within AI literacy (Almatrafi et al., 2024; Chiu et al., 2024) and educators' calls for a techno-humanist model (Mayo-Cubero, 2026) support this proposition. It would be weakened by evidence that graduates trained mainly in specific tools perform as well over time as those trained in evaluation and judgement.

Proposition 2: Unstructured use of AI during the formation of writing, verification and judgement skills tends to substitute for those skills rather than develop them. Students using AI show lower depth of reasoning despite lower effort (Stadler et al., 2024), equal knowledge gain despite better essays (Fan et al., 2025), and reliance rather than learning (Darvishi et al., 2024). Over-reliance is associated with weaker critical thinking and analytical reasoning (Zhai et al., 2024). For communication students, whose core skills are writing and verifying, this risk is acute. The proposition would be weakened by evidence that students who use AI from the start of

© IIARJournal. All rights reserved.

their training develop writing and verification skills equal to those who learn them first without AI.

Proposition 3: Critical media competence is most effectively developed through repeated, practice-based instruction embedded across a programme, not through a single course. The meta-analytic finding that multiple sessions outperform single sessions (Huang et al., 2026) and the recommendation to embed AI across existing courses (Asadi & Sultana, 2026) support this. The proposition would be weakened by evidence that a single dedicated course produces discernment as durable as instruction distributed across the programme.

Proposition 4: Professional formation for AI-mediated work depends on supervised practice in which students make and defend decisions about AI use under real constraints. Ethics becomes part of professional identity in practice settings (Fierens et al., 2023), and responsible AI use depends on how practitioners understand AI ethics (Shin et al., 2025). Work-integrated learning is limited in African curricula (Muringa & Adjin-Tettey, 2025). The proposition would be weakened by evidence that classroom ethics instruction alone produces the same responsible AI practices as supervised professional experience.

Proposition 5: In resource-constrained universities, curriculum reform succeeds less through new courses than through faculty development, shared resources and institutional guidelines. The barriers most often reported are expertise, investment, unclear guidelines and coordination (Asadi & Sultana, 2026; Hossain & Dowling, 2026b; Hossain & Wenger, 2024; Ncube et al., 2025). In Nigeria, frequent policy change, large classes, limited funding and limited professional development constrain curriculum implementation (Ogunjimi et al., 2026). The proposition would be weakened by evidence that adding AI courses without faculty development improves graduate competence.

Proposition 6: In African programmes, critical media competence must include the evaluation of AI tools' cultural and linguistic fit. Tools trained mainly on Western and English-language data handle African languages and contexts poorly (Chiridza & Mare, 2026), so evaluating outputs includes judging what the tool does not know about the audience and context. The proposition would be weakened by evidence that AI tools perform as reliably in African languages and contexts as in English and Western ones.

Table 2 turns the framework into a curriculum design for Nigerian and African mass communication programmes.

Table. 2. A sequenced curriculum framework for Nigerian mass communication programmes

Stage	AI literacy	Critical media competence	Professional formation
100 level	How generative and recommend-ation systems work; limits and failures	Source evalu-ation and news literacy	Codes of ethics; writing and re-porting without AI
200 level	Guided use for research, tran-scription and translation	Verifying claims, images and audio; de-tecting synthetic media	Disclosure norms; reflect-ive logs on AI use
300 level	AI-assisted pro-duction with documented process	Evaluating AI outputs in Nigerian lan-guages and contexts	Supervised placement with an AI-use policy
400 level	Specialised tools for the chosen pro-gramme	Algorithmic dis-tribution and platform analysis	Capstone project defend-ing AI decisions
Institution	Faculty devel-opment; shared tools	Common veri-fication re-sources	Industry part-nerships; depart-mental AI guidelines

Note. Developed by the author(s) from the propositions in Section 4.1 and the discussion in Section 4.2.

4.2 DISCUSSION

The framework reframes the question that dominates curriculum debates. The usual question is whether, and how much, to teach AI. The framework suggests a different question: in what order, and to what end. AI literacy is necessary but is the least durable domain. Critical media competence and professional formation are what make a graduate valuable when tools can do much of the routine work, and they are also what tool-centred reforms are most likely to neglect. Read this way, the deskilling dilemma described by Hossain and Dowling (2026a) is partly a problem of sequence. Teaching students to use AI

© IIARJournal. All rights reserved.

before they can write, verify and judge invites substitution. Teaching them to use AI after those skills are in place, and in ways that require them to check and defend AI outputs, can turn the tool into an object of critical practice.

The learning evidence supports such sequencing without implying that AI should be banned. AI improved essay scores in Fan et al. (2025), and the problem was the gap between performance and learning. Assessment design is therefore central. Assessments that reward polished outputs will reward reliance; assessments that require students to show their process, document how they verified claims and explain their decisions about AI use make learning visible. The same logic applies to professional formation. A student who must disclose and justify AI use in a supervised newsroom or agency placement learns the ethic of responsibility that the professions need.

The Nigerian case. Nigeria's National Universities Commission introduced the Core Curriculum and Minimum Academic Standards (CCMAS) in the early 2020s, unbundling the former mass communication degree into several specialised programmes. The reform creates an opening: programmes are being redesigned, and the framework can inform how AI enters them. It also creates risk, because reform under constraint tends to favour what is easiest to add. Lecturers' commitment to the new curriculum is high, but frequent policy change, large classes, limited funding and weak professional development hold implementation back (Ogunjimi et al., 2026). Nigerian newsrooms already use AI, and journalists worry about dormancy and the loss of journalistic values (Onebunne, 2026). If graduates enter these newsrooms with tool skills but without critical competence and professional formation, they will reinforce the very risks the profession fears.

The framework also has implications for language. Nigerian communication operates in English, Nigerian Pidgin, Hausa, Yoruba, Igbo and many other languages, and AI tools handle most of them poorly (Chiridza & Mare, 2026). Teaching students to evaluate AI outputs in local languages, and to recognise when a tool's framing does not fit a Nigerian audience, is part of critical media competence in this setting. It is also an opportunity: graduates able to work critically across languages will be scarce and valuable.

Educators as learners. The framework also has consequences for faculty. Lecturers cannot teach critical evaluation of AI outputs, or model responsible disclosure, if they themselves lack AI literacy, and the literature repeatedly identifies faculty expertise as the scarcest resource (Hossain & Wenger, 2024; Ncube et al., 2025). Divisions among educators, and between educators and students, over what counts as acceptable AI use (Asadi & Sultana, 2026) send mixed signals that undermine professional formation, because students learn norms from the consistency of what their teachers require. Departmental AI guidelines, agreed among staff and explained to students, are therefore not an administrative detail but part of the curriculum. In Nigeria, where large classes and limited professional development already constrain teaching (Ogunjimi et al., 2026), shared guidelines and short, practice-oriented faculty workshops are likely to yield more than ambitious new courses that few staff are prepared to teach.

Implications for theory. The paper links three literatures, on journalism education, on AI literacy and on learning with AI, through the concept of competence durability. It extends AI literacy beyond use to evaluation and formation, and it treats skill formation under AI as a problem of sequence and assessment rather than of access. It also positions professional formation as a curricular outcome in its own right, not a by-product of technical training.

Counterarguments. One objection is that the professions demand AI skills now, and that sequencing will produce graduates who are behind. The framework does not delay AI literacy; it places tool use within critical practice from the start and expands it as foundational skills develop. A second objection is that resource-constrained programmes cannot afford the supervision and faculty development the framework requires. Proposition 5 accepts the constraint and argues that shared resources, guidelines and partnerships with industry and regional bodies are more efficient than new stand-alone courses, a direction supported by African initiatives such as the UNESCO-supported excellence projects (Finlay et al., 2026).

© IIARJournal. All rights reserved.

5. CONCLUSION AND RECOMMENDATIONS

AI is changing what communication graduates need to know and be. This paper has argued that communication education must develop three competence domains: AI literacy, critical media competence and professional formation. Current reforms tend to add AI literacy as a technical module while neglecting the other two, which are harder to teach but more durable. Evidence from learning research suggests that unstructured AI use can substitute for the skills communication degrees exist to build, and evidence from media-literacy research shows that critical competence can be taught effectively when instruction is repeated and practical. In resource-constrained settings, reform depends on faculty development, guidelines and shared resources more than on new courses.

Several recommendations follow. The National Universities Commission and professional bodies should issue guidance that treats AI across all three domains, rather than as a single technical requirement, and should support programmes with model syllabi and shared resources. Departments should sequence instruction so that students build writing, reporting and verification skills before using AI to augment them, and should then require students to verify, edit and justify AI outputs. Assessment should reward documented process, verification and reasoned decisions about AI use, not only finished products. Critical media competence, including the detection of synthetic media and the evaluation of AI outputs in Nigerian languages, should be embedded in multiple courses across all years. Programmes should expand supervised work-integrated learning with newsrooms, agencies and broadcasters, including explicit AI-use policies and reflective assignments. Universities should invest in faculty development on AI and partner across institutions and with regional and international initiatives to share expertise. Researchers should test the effects of sequenced and embedded AI instruction on Nigerian and African students' skills.

6. CONTRIBUTION TO EXISTING KNOWLEDGE

The paper contributes in four ways. Conceptually, it offers a framework of AI literacy, critical media competence and professional formation that distinguishes the competences AI makes central and their relative durability. Theoretically, it connects research on learning with generative AI to communication education and states six falsifiable propositions on durable competences, skill formation, critical-competence instruction, professional formation and institutional conditions. Practically, it proposes a sequenced curriculum framework for Nigerian and African mass communication programmes. Contextually, it brings the reform of Nigerian communication curricula and the linguistic realities of African communication into the international debate on AI in communication education.

7. REFERENCES

Almatrafi, O., Johri, A., & Lee, H. (2024). A systematic review of AI literacy conceptualization, constructs, and implementation and assessment efforts (2019–2023). *Computers and Education Open*, *6*, 100173. https://doi.org/10.1016/j.caeo.2024.100173

Asadi, S., & Sultana, T. (2026). Caught in the AI current: J-school educators' disruption, adaptation and future readiness in the Global South—Insights from Bangladesh. *Journalism & Mass Communication Educator*, *81*(3), 247–268. https://doi.org/10.1177/10776958251407392

Ashuri, T., Zalmanson, L., & Goldstein, D. (2026). Journalistic epistemic authority in the age of AI: The incorporation of generative AI in newsrooms. *Digital Journalism*, *14*(5), 830–849. https://doi.org/10.1080/21670811.2026.2640421

Chiridza, P., & Mare, A. (2026). Newswork in the age of generative artificial intelligence: Insights from Zimbabwean newsrooms. *Journalism & Mass Communication Quarterly*. Advance online publication. https://doi.org/10.1177/10776990261433908

Chiu, T. K. F., Ahmad, Z., Ismailov, M., & Sanusi, I. T. (2024). What are artificial intelligence literacy and competency? A comprehensive framework to support them. *Computers and Education Open*, *6*, 100171. https://doi.org/10.1016/j.caeo.2024.100171

Darvishi, A., Khosravi, H., Sadiq, S., Gašević, D., & Siemens, G. (2024). Impact of AI assistance on student agency. *Computers & Education*, *210*,

© IIARJournal. All rights reserved.

104967. https://doi.org/10.1016/j.compedu.2023.104967

Fan, Y., Tang, L., Le, H., Shen, K., Tan, S., Zhao, Y., Shen, Y., Li, X., & Gašević, D. (2025). Beware of metacognitive laziness: Effects of generative artificial intelligence on learning motivation, processes, and performance. *British Journal of Educational Technology*, *56*(2), 489–530. https://doi.org/10.1111/bjet.13544

Fierens, M., de Smaele, H., Domingo, D., Le Cam, F., Raeymaeckers, K., Temmerman, M., & Tixier, F. (2023). Ethics as the backbone of the professional identity of Belgian journalism interns. *Media Practice and Education*, *24*(4), 333–350. https://doi.org/10.1080/25741136.2023.2192575

Finlay, A., Garman, A., & Sethusa, P. (2026). Journalism education in Africa: A review of excellence in practice in 10 countries. *Journalism & Mass Communication Educator*, *81*(3), 314–328. https://doi.org/10.1177/10776958261416574

Hossain, M. S., & Dowling, D. O. (2026a). The deskilling dilemma: ChatGPT, pedagogical obligation, and the paradox of journalism education. *AI & Society*, *41*(9), 8461–8479. https://doi.org/10.1007/s00146-026-03139-x

Hossain, M. S., & Dowling, D. O. (2026b). Promise and paradox: The uneven rise of AI in African journalism education. *Media Practice and Education*. Advance online publication. https://doi.org/10.1080/25741136.2026.2644205

Hossain, M. S., & Wenger, D. (2024). Has journalism education kept up with digital transformation? *Journalism & Mass Communication Educator*, *79*(2), 129–146. https://doi.org/10.1177/10776958231224038

Huang, G., Jia, W., & Yu, W. (2026). Media literacy interventions improve resilience to misinformation: A meta-analytic investigation of overall effect and moderating factors. *Communication Research*, *53*(7), 899–926. https://doi.org/10.1177/00936502241288103

Mayo-Cubero, M. (2026). Exploring journalism education in the AI era: A mixed analysis of university training in Spain. *Journalism & Mass Communication Educator*, *81*(1), 19–36. https://doi.org/10.1177/10776958251369096

Muringa, T., & Adjin-Tettey, T. D. (2025). Assessing the responsiveness of journalism curricula to the labor market needs in South Africa: A systematic review. *Journalism & Mass Communication Educator*, *80*(4), 331–354. https://doi.org/10.1177/10776958251356372

Ncube, L., Mofokeng, R. W., Chibuwe, A., Munoriyarwa, A., & Kakujaha-Murangi, A. (2025). 'Mind the gap': Artificial intelligence and journalism training in Southern African journalism schools. *Media Practice and Education*. Advance online publication. https://doi.org/10.1080/25741136.2025.2464483

Ogunjimi, M. O., Lawal, S., & Ifinju, I. O. (2026). Lecturers' commitment and perceived challenges of implementing core curriculum and minimum academic standards in Kwara State, Nigeria. *Frontiers in Education*, *11*, 1813377. https://doi.org/10.3389/feduc.2026.1813377

Onebunne, A. P. (2026). Journalists' perception of artificial intelligence: The case of Nigerian newsrooms. *Digital Journalism*, *14*(5), 751–770. https://doi.org/10.1080/21670811.2025.2577127

Pinski, M., & Benlian, A. (2024). AI literacy for users – A comprehensive review and future research directions of learning methods, components, and effects. *Computers in Human Behavior: Artificial Humans*, *2*(1), 100062. https://doi.org/10.1016/j.chbah.2024.100062

Shin, D., Zhou, S., & Rasul, A. (2025). Towards responsible AI journalism: Mapping journalists' perceptions of AI ethics. *Journalism*. Advance online publication. https://doi.org/10.1177/14648849251363045

Stadler, M., Bannert, M., & Sailer, M. (2024). Cognitive ease at a cost: LLMs reduce mental effort but compromise depth in student scientific inquiry. *Computers in Human Behavior*, *160*, 108386. https://doi.org/10.1016/j.chb.2024.108386

Van Thieu, N. (2026). Generative AI in journalism education: Journalism students' perspectives from Vietnam. *Media Practice and Education*. Advance online publication. https://doi.org/10.1080/25741136.2026.2733555

Veenstra, A. S., Wilder, M., Shimu, F., Schlauder, L., & Dousdebés, F. (2025). Journalism students' use, expectations, and understanding of generative AI tools. *Journalism & Mass Communication Educator*, *80*(1), 115–128. https://doi.org/10.1177/10776958241296474

Zhai, C., Wibowo, S., & Li, L. D. (2024). The effects of over-reliance on AI dialogue systems on students' cognitive abilities: A systematic review. *Smart*

© IIARJournal. All rights reserved.

Learning Environments, *11*(1), 28.
https://doi.org/10.1186/s40561-024-00316-7

© IIARJournal. All rights reserved.