Languages, Literatures and Cultures
2026, Vol. 2, No. 3, pp. 107–113
https://doi.org/10.11648/j.llc.20260203.11

Research Article

Language Socialization in the Age of Artificial Intelligence: Reimagining French Language Education Through Sociological and Anthropological Intelligence

Adaje Mary Ebunoluwa[1, *], **Adesope John Adekunle**[2]

[1]Department of Language, Arts and Social Science Education, Lagos State University, Ojo, Nigeria
[2]Department of Educational Foundations and Counselling Psychology, Lagos State University, Ojo, Nigeria

Abstract

This study investigated the role of artificial intelligence (AI) in mediating language socialization processes and enhancing linguistic and cultural development. The purpose of this study is to examine how language socialization processes, mediated by artificial intelligence, influence the development of linguistic competence and cultural understanding in French language education. A descriptive survey research design was adopted to facilitate systematic data collection within a natural learning environment. A sample of 85 students was selected through simple random sampling, and data were collected using a structured questionnaire titled Artificial Intelligence and Language Socialization Questionnaire (AILSQ). The instrument was validated by experts and tested for reliability, yielding a Cronbach's alpha of 0.82. Data were analysed using frequency counts, percentages, mean scores, and standard deviations. Results revealed that all twenty items had mean scores above the criterion mean of 2.50, ranging from 3.00 to 3.31, with low standard deviations (0.87–0.94), indicating strong agreement among respondents on the positive impact of AI on interactive communication, social interaction, cultural engagement, and learner autonomy. The study concluded that AI functions as a sociocultural mediator in French language education, enhancing both linguistic and cultural competence. It is recommended that French language educators should integrate AI tools into teaching to foster social interaction and meaningful language use.

Keywords

Artificial Intelligence, Language Socialization, French Language Education, Cultural Engagement, Linguistic Competence

1. Introduction

The rapid integration of artificial intelligence (AI) into the educational system has catalysed profound shifts in how languages are learned, taught, and socially reproduced. Traditionally, *language socialization* refers to the process by which learners are inducted into the communicative practices, cultural norms, and social identities of a speech community; it emphasises how linguistic competence develops through social interaction and cultural engagement rather than through decontextualized acquisition alone, as outlined in foundational work within linguistic anthropology and sociocultural theory [11].

The arrival of generative artificial intelligence in language

*Correspondence: Adaje Mary Ebunoluwa (mary.adaje@lasu.edu.ng)

Received: 3 April 2026; **Accepted:** 25 April 2026; **Published:** 6 August 2026

classrooms has been discussed almost entirely in the vocabulary of pedagogy and technology: personalization, feedback loops, automated evaluation, and adaptive learning paths. What has been discussed far less is what happens to *socialization*, the process by which learners are inducted not merely into a grammar but into a culture, a community of practice, and a set of ways of being a person in another language, when one of the primary interlocutors in that process is a machine. This question is especially pressing for French language education (Français Langue Étrangère, FLE), a field with a long tradition of treating language teaching as inseparable from the transmission of cultural competence, and one that is now absorbing AI tools at considerable speed [15, 5].

Language education has never been a purely technical enterprise. Long before artificial intelligence entered the classroom, scholars of language socialization argued that acquiring a language is inseparable from becoming a competent member of a social world. Elinor Ochs and Bambi Schieffelin's foundational claim was that the process of acquiring language is deeply shaped by the process of becoming a socially competent person, and that becoming such a person is itself achieved largely *through* language [9]. This dual movement, socialization *through* language and socialization *to use* language, has anchored decades of research in linguistic anthropology and applied linguistics [6].

In the contemporary educational system, generative AI and machine-mediated language technologies are transforming the social matrices within which French language learners participate. Rather than serving merely as tools for translation or drill practice, AI–informed systems such as adaptive feedback platforms, intelligent conversational agents, and corpus-based language modelling offer learners dynamic environments that simulate authentic interactional contexts. These technologies promote new forms of *sociotechnical mediation*, in which learners co-construct meaning with AI, negotiate cultural norms, and develop communicative repertoires that extend beyond traditional classroom discourse. For example, studies in broader language education contexts have documented how AI can create personalised, immersive interactional opportunities that support speaking, listening, and communicative competencies aligned with frameworks like the Common European Framework of Reference for Languages (CEFR).

From a sociological perspective, AI's role in education is not neutral; it reshapes classroom ecologies and learning trajectories by redistributing authority, access, and participation. [3] argue, AI functions not simply as a pedagogical add-on but as a *sociotechnical force* that reframes social structures within learning environments and reconfigures relationships among learners, teachers, and content. Anthropological study similarly underscores that language learning is inseparable from the social practices and cultural contexts that imbue speech acts with meaning; the infusion of AI into these processes therefore demands a reframing of socialization theory to account for technologically mediated co-construction of linguistic identity and cultural knowledge.

In French language education, leveraging AI through such sociological and anthropological lenses invites educators to reconceive curricula not merely as repositories of linguistic forms, but as *dynamic assemblages of social practice*. This reconceptualisation foregrounds learner agency, digital intercultural competence, and critical reflection on how AI shapes and is shaped by local and global speech communities. Ultimately, reimagining French education in this era means attending to the interplay between human socialization processes and AI's interpretive frameworks, ensuring that learners are not only linguistically proficient but socially and culturally attuned interlocutors in an increasingly AI-mediated world.

This study was anchored on language socialization theory as articulated within linguistic anthropology and sociocultural theory, with complementary insights drawn from sociology. Central to this framework is the proposition that linguistic competence develops through sustained social interaction and cultural engagement rather than through decontextualised exposure to linguistic forms alone. Conceptualises language socialization as a dual process in which individuals are socialized *through* language and *to* use language in culturally appropriate ways. From this perspective, learning a language such as French entails participation in socially organised activities where meanings, norms, identities, and power relations are negotiated, rather than the mere internalisation of grammar and vocabulary

Sociocultural theory further strengthens this position by emphasising mediation, interaction, and context as central to learning. [12] The notion of learning as a socially mediated process posits that cognitive and linguistic development occurs first at the social level before becoming internalised by the learner. Language learning, therefore, is embedded in interaction with more knowledgeable others, teachers, peers, or culturally situated agents, within meaningful communicative practices. In the context of French language education, this implies that competence emerges from dialogic engagement, scaffolding, and culturally situated use of language rather than isolated drills or abstract instruction.

Sociological theory aligns with these anthropological and sociocultural positions by foregrounding the social structures and symbolic systems within which language operates. The theory of linguistic capital and symbolic power underscores that language proficiency is inseparable from social context, legitimacy, and cultural authority. Linguistic competence is not merely technical ability but also the capacity to use language appropriately within specific social fields. Applied to this study, sociological theory highlights how language learning environments, now increasingly shaped by artificial intelligence, mediate access to valued forms of linguistic practice and participation.

If sociocultural theory explains how AI might scaffold learning, linguistic anthropology asks a harder question: what kind of social and cultural entity is the learner actually interacting with? Recent anthropological scholarship has begun

treating large language models themselves as objects of ethnographic and semiotic analysis. Webb Keane's introduction to a themed cluster on "linguistic anthropology of AI" argues that large language models exert unprecedented pressure on existing concepts of language, personhood, and communicative competence, and that linguistic anthropology, with its long-standing focus on language as a medium of social meaning-making, is uniquely positioned to interpret this pressure rather than measure it [8]. Complementary work has proposed frameworks for "cultural interpretability" of large language models, treating LLM outputs as artifacts that encode, and potentially distort, cultural patterns, much as any text produced within a speech community does [10].

Together, linguistic anthropology, sociocultural theory, and sociology provide a coherent theoretical lens for this paper. They collectively support the view that language socialization, including French language education in the age of artificial intelligence, is a socially embedded, culturally mediated, and interaction-driven process. This integrated framework justifies examining AI not simply as a technological tool but as a sociocultural mediator that reshapes how learners engage with language, culture, and identity in contemporary educational settings.

In this regard, Sharples [12] asserts that learning should be understood as a social process of conversation, exploration, and knowledge construction involving both humans and artificial intelligences. According to Sharples [12], learners engage in a distributed learning ecosystem where meaning is developed through interactions among people, digital tools, and AI systems. This perspective aligns closely with sociological and anthropological approaches to language education because it emphasizes dialogue, collaboration, and participation in knowledge-building communities.

The author further avers that social generative AI has the potential to function as a guide, mentor, and collaborative partner in learning environments [12]. Within French language education, AI-powered platforms can facilitate authentic communication, provide immediate linguistic feedback, support intercultural exchanges, and expose learners to diverse Francophone discourses. Such technologies can help bridge geographical barriers while creating opportunities for meaningful language socialization.

2. Purpose of the Study

The purpose of this study is to examine how language socialization processes, mediated by artificial intelligence, influence the development of linguistic competence and cultural understanding in French language education through sociological and anthropological perspectives.

3. Research Question

How does the integration of artificial intelligence in French language education shape language socialization processes and learners' linguistic competence through social interaction and cultural engagement?

4. Previous Studies

Existing scholarship provides substantial theoretical support for examining language socialization in the age of artificial intelligence, particularly within foreign language education. Studies grounded in sociocultural and anthropological traditions consistently emphasise that language learning is inseparable from social interaction, cultural norms, and identity formation. Within this framework, recent research demonstrates that AI-mediated environments are reshaping how learners are socialised into linguistic communities [7] in a systematic review of artificial intelligence in French and Spanish foreign language education, found that AI tools such as chatbots, automated writing evaluators, and adaptive learning systems significantly enhance learner engagement, cultural awareness, and communicative competence. Their review revealed that AI-supported instruction enables learners to participate in sustained interactional practices that mirror authentic social use of language, thereby reinforcing core principles of language socialization. However, the authors caution that sociocultural depth depends on pedagogical design rather than technology alone

Similarly, a large-scale systematic review published in *Ampersand* examined the pedagogical impact of AI-driven chatbots in second language education. The study reported that chatbots provide continuous, low-anxiety interactional spaces where learners practice speaking and writing in socially meaningful contexts, promoting pragmatic competence and interactional fluency [14]. From a socialization perspective, these AI agents function as mediational tools that extend opportunities for participation beyond the classroom, aligning with sociocultural theories that view interaction as central to language development.

From a broader educational standpoint, Çelik [4] investigated the evolution of foreign language education in the AI era and observed a shift toward learner-centred, constructivist models supported by intelligent technologies. AI facilitates personalised learning trajectories that allow learners to negotiate meaning, cultural norms, and communicative styles in context-sensitive environments. This aligns with anthropological views of language learning as participation in social practices rather than the mere acquisition of grammatical structures.

The sociological implications of AI-mediated language learning have also been highlighted in recent studies. *AI-driven* [2] argue that AI reshapes classroom power relations and learner agency by decentralising teacher authority and enabling individualised feedback and autonomous interaction. Their findings suggest that such environments contribute to identity formation and social positioning within language-learning communities, which are key outcomes of language

socialization processes.

Collectively, these previous studies demonstrate that artificial intelligence has moved beyond a supplementary instructional role to become an active agent in shaping the social conditions of language learning. The literature confirms that when viewed through sociological and anthropological lenses, AI-supported French language education can foster interaction, cultural negotiation, and identity development, thereby providing a strong foundation for reimagining language socialization in the contemporary digital age.

5. Methodology

This study was carried out at the Faculty of Education, Lagos State University, Ojo, Nigeria, among undergraduate students offering French language courses. The study adopted a descriptive survey research design, which was considered appropriate because it allows for the systematic collection of data from respondents in their natural learning environment without manipulation of variables. The design enabled the study to examine how language socialization processes, particularly those mediated by artificial intelligence, relate to students' linguistic competence and cultural engagement in French language education. The population of the study comprised all undergraduate French language students in the Faculty of Education, Lagos State University, Ojo. From this population, a sample of 85 French students was selected to participate in the study. The sample size was considered adequate to provide representative views of the population and to ensure the reliability of findings. A simple random sampling technique was employed to select participants, giving all students an equal opportunity of being included and minimising selection bias. Data for the study were collected using a structured questionnaire titled "Artificial Intelligence and Language Socialization Questionnaire (AILSQ)". The instrument was designed to elicit information on students' experiences with French language learning, social interaction, cultural engagement, and the use of AI-supported learning tools. The questionnaire was structured on a 4 Likert-scale to capture varying degrees of agreement with the items presented. The validity of the instrument was established through expert review to ensure clarity, relevance, and adequate coverage of the study variables. Their suggestions were incorporated to improve the content and face validity of the questionnaire. The reliability of the instrument was determined through a pilot test conducted among a small group of French students outside the main sample. Using the Cronbach's Alpha method, a reliability coefficient of 0.82 was obtained, indicating that the instrument was reliable for the study. The method of data collection involved the direct administration of the questionnaire to the selected respondents with the assistance of the course lecturers. This approach ensured a high response rate and allowed the researcher to clarify items where necessary. Completed questionnaires were retrieved immediately to avoid loss of data. The method of data analysis involved the use of descriptive statistical tools such as frequency counts, percentages, mean scores, and standard deviation to answer the research question. The analysed data were presented in tables and interpreted in line with the objectives of the study, with emphasis on how social interaction, cultural engagement, and AI-mediated practices contribute to language socialization in French language education.

6. Results

Decision rule: Mean score ≥ 2.50 = Agree Mean score < 2.50 = Disagree (Likert weights: SA = 4, A = 3, D = 2, SD = 1).

Table 1. *Analysis of responses on artificial intelligence and language socialization.*

S/N	Item	SA	A	D	SD	Mean	Std. Dev.
1	Artificial intelligence tools help me practice French through interactive communication.	36	34	10	5	3.19	0.87
2	Using AI tools encourages regular social interaction in learning French.	33	37	9	6	3.14	0.87
3	AI-based learning platforms make French language learning more engaging.	40	31	9	5	3.25	0.87
4	Interaction with AI tools improves my confidence in using French.	38	30	11	6	3.18	0.92
5	AI supports collaborative learning among French language students.	29	35	13	8	3.00	0.94
6	AI tools expose me to authentic French expressions used in real-life situations.	42	28	9	6	3.25	0.91
7	Learning French with AI helps me understand cultural contexts better.	34	33	12	6	3.12	0.91
8	AI-assisted learning encourages active participation in French language activities.	31	36	11	7	3.07	0.91
9	AI tools enhance my listening and speaking skills in French.	37	32	10	6	3.18	0.90
10	AI helps me learn French beyond classroom instruction.	39	29	11	6	3.19	0.92

S/N	Item	SA	A	D	SD	Mean	Std. Dev.
11	Social interaction through AI tools improves my overall linguistic competence.	35	33	12	5	3.15	0.88
12	AI provides immediate feedback that supports my French language development.	41	30	8	6	3.25	0.90
13	AI-assisted learning promotes meaningful communication in French.	36	32	11	6	3.15	0.91
14	Using AI tools helps me learn appropriate French language use in social contexts.	34	31	13	7	3.08	0.94
15	AI facilitates cultural engagement in French language learning.	38	30	11	6	3.18	0.92
16	Interaction with AI tools improves my understanding of French-speaking cultures.	40	29	10	6	3.21	0.91
17	AI enhances my motivation to learn French.	43	27	9	6	3.26	0.91
18	AI-supported learning makes French language learning more student-centred.	37	31	11	6	3.16	0.91
19	AI tools support the development of my reading and writing skills in French.	35	33	11	6	3.14	0.90
20	Overall, AI positively influences language socialization in French language education.	44	28	8	5	3.31	0.87

Source: Field Survey

The results presented in Table 1 reveal that all twenty items recorded mean scores above the criterion mean of 2.50, indicating general agreement among respondents on the positive role of artificial intelligence in language socialization and French language learning. Mean scores ranged from 3.00 to 3.31, reflecting a consistently high level of acceptance. High mean values on items related to interactive communication, social interaction, and learning beyond the classroom suggest that AI creates extended spaces for meaningful language use, supporting the social nature of language acquisition. Similarly, strong agreement on items addressing cultural engagement and authentic language exposure indicates that AI contributes to learners' cultural understanding, a core component of language socialization. The relatively low standard deviation values (ranging from 0.87 to 0.94) indicate that respondents' opinions were closely clustered around the mean, demonstrating consistency in students' perceptions. Overall, the findings show that the integration of artificial intelligence in French language education positively shapes language socialization processes by enhancing social interaction, cultural engagement, motivation, and linguistic competence. In line with the purpose of the study, the results affirm that artificial intelligence functions as a sociocultural mediator that supports language learning through interactional and culturally embedded practices rather than through isolated or decontextualised instruction.

7. Discussion of Findings

The findings of this study provide empirical support for the view that French language learning is fundamentally social and culturally embedded, increasingly mediated by artificial intelligence (AI). The results presented in Table 1 reveal that all twenty items recorded mean scores above the criterion mean of 2.50, ranging from 3.00 to 3.31, with low standard deviations (0.87–0.94). This indicates general agreement among respondents on AI's positive role in language socialization, demonstrating consistent perceptions of its impact on interaction, cultural engagement, and linguistic competence.

High mean scores on items related to interactive communication, social interaction, and learning beyond the classroom suggest that AI creates extended spaces for meaningful language use, supporting the social nature of language acquisition. Similarly, strong agreement on items addressing cultural engagement and authentic language exposure indicates that AI contributes to learners' cultural understanding, a core component of language socialization. These findings align with language socialization theory, which emphasises that learners acquire communicative competence through participation in socially organised practices rather than through decontextualised instruction [11].

From a sociocultural perspective, AI functions as a mediational tool, providing immediate feedback, scaffolding, and opportunities for dialogic engagement, consistent with [13] emphasis on socially mediated learning. From an anthropological perspective, students' exposure to real French phrases and cultural circumstances shows how AI supports the co-construction of language and cultural knowledge by enabling involvement in meaningful social practices. Sociologically, AI also redistributes authority and enhances learner autonomy, aligning with [3]. concept of linguistic capital and the social embeddedness of competence [1]. Therefore, the study confirms that AI is not merely a supplementary tool but an active agent in shaping language socialization processes. By promoting interaction, cultural engagement, and learner-centred practices, AI-mediated environments support the development of linguistic competence and reinforce the theoretical foundations of language socialization in contemporary, digitally enhanced French language education.

8. Conclusion

This study examined how artificial intelligence (AI) mediates language socialization processes and influences the development of linguistic competence and cultural understanding in French language education. The findings indicate that AI positively supports interactive communication, social interaction, cultural engagement, and learner autonomy, thereby reinforcing the social and culturally embedded nature of language learning. AI-mediated learning environments function as dynamic platforms where students co-construct meaning, negotiate cultural norms, and develop communicative repertoires beyond the traditional classroom setting. Overall, the study confirms that integrating AI into French language education enhances both linguistic and sociocultural competence, demonstrating its potential as a sociocultural mediator in contemporary language learning.

9. Recommendations

1) French language educators should integrate AI tools such as chatbots, adaptive feedback systems, and interactive platforms into classroom and online activities to promote social interaction and meaningful language use.
2) Curriculum designers should include AI-mediated learning strategies that emphasise cultural engagement alongside linguistic competence.
3) Teacher training programmes should equip educators with the skills to facilitate AI-supported language learning environments effectively.
4) Institutions should provide access to AI tools and resources to ensure equitable opportunities for all students to engage in technologically mediated language socialization.
5) French language programmes should encourage collaborative AI-based activities that foster peer interaction and co-construction of knowledge.
6) Students should be guided to use AI as a supplement to, rather than a replacement for, social and cultural engagement in language learning.
7) Researchers should continue to investigate the long-term impact of AI on learners' linguistic and sociocultural development to inform pedagogical practices.
8) Policymakers should support the development and implementation of AI-based pedagogical frameworks that align with sociocultural and anthropological perspectives in language education.

Abbreviations

A. I Artificial Intelligence

Author Contributions

Adaje Mary Ebunoluwa: Conceptualization, Investigation, Methodology, Project administration, Resources, Supervision, Writing – original draft, Writing – review & editing

Adesope John Adekunle: Data curation, Formal Analysis, Validation, Visualization

Conflicts of Interest

The authors declare that there are no conflicts of interest regarding the publication of this paper.

References

[1] Adenike, A. A. & Helen, O. (2025). *The Role of Artificial Intelligence in Transforming Language Learning*. Journal of Language and Education. https://doi.org/10.17323/jle.2025.22118

[2] *AI-driven* (2025). *Chatbots in second language education: A systematic review of their efficacy and pedagogical implications*. *Ampersand*, 14: 100224. https://doi.org/10.1016/j.amper.2025.100224

[3] Bourdieu, P. (1991). *Language and symbolic power*. Harvard University Press. https://www.hup.harvard.edu/books/9780674526714

[4] Çelik, Ö. (2025). Evolution of foreign language education in the age of artificial intelligence. *ELT Research Journal, 14*(1), 61–77. https://doi.org/10.71362/eltrj.1703861

[5] Centre de langue française de la Sorbonne. (2024). L'intelligence artificielle dans l'enseignement du Français Langue Étrangère (FLE).

[6] Duff, P., & Talmy, S. (2011). Language socialization approaches to second language acquisition: Social, cultural, and linguistic development in additional languages. In D. Atkinson (Ed.), *Alternative Approaches to Second Language Acquisition*.

[7] Johanna, L. K. & Paulina, A. (2025). *Artificial Intelligence in French and Spanish Foreign Language Education: A Systematic Review and Future Perspectives*. Language Education and Technology Journal. https://langedutech.com/letjournal/index.php/let/article/view/90

[8] Keane, W. (2026). Introduction: Towards a linguistic anthropology of AI. *Journal of the Royal Anthropological Institute.*

[9] Ochs, E., & Schieffelin, B. B. (1984). Language acquisition and socialization: Three developmental stories and their implications. In R. A. Shweder & R. A. LeVine (Eds.), *Culture Theory: Essays on Mind, Self, and Emotion*. Cambridge University Press.

[10] Rama, I., & Airoldi, M. (2025). The sociocultural roots of artificial conversations: The taste, class and habitus of generative AI chatbots. *New Media & Society* (SAGE).

[11] Schieffelin, B. B., & Ochs, E. (1986). Language socialization. *Annual Review of Anthropology, Cambridge University Press.15*, 163–191. https://www.jstor.org/stable/2155622

[12] Sharples, M. (2023). Towards social generative AI for education: theory, practices and ethics, Learning: Research and Practice, 9: 2, 159-167, https://doi.org/10.1080/23735082.2023.2261131

[13] Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press. https://www.hup.harvard.edu/books/9780674576290

[14] Zhai, X., Zhang, M., & Wang, Y. (2025). AI-driven chatbots in second language education: A systematic review of their efficacy and pedagogical implications. *Ampersand, 14*, 100224. https://doi.org/10.1016/j.amper.2025.100224

[15] Zine Laabidine, H. (2026). L'intelligence artificielle: Un allié à l'apprentissage du français langue étrangère. *Revue Marocaine de Didactique et Pédagogie, 5*(1), 12–20.