Untangling the Nuances and Networks of Mobile-GenAI English Learning: A study of Arab Immigrant and Refugee Women in Canada

Nosaiba Badarneh, Department of Interdisciplinary Studies, University of Saskatchewan, npb523@mail.usask.ca
Marguerite Koole, Department of Curriculum Studies (Educational Technology & Design), University of Saskatchewan, m.koole@usask.ca

Abstract
Networked learning is defined as learning supported by purposeful connections between people, resources, and technologies (NLEC, 2020). The preliminary results of the research described in this paper focuses on Arab immigrant and refugee women (AIRW) who live in the Canadian province of Saskatchewan and their experiences using mAIL technology to learn English. Kearney et al.'s (2012) sociocultural pedagogical framework guided this study. As the research progressed, it became apparent that it is not possible to simply layer GenAI upon mobile learning; rather, the use of AI changed the nature and networking patterns of the learners. This phenomenological study illustrates how mobile GenAI (mAIL) technology alters the admixture of networked learning in both general and subtle ways. In a general sense, the very nature of the large language models (LLMs) is inherently networked as it connects a vast collection of human-produced artefacts/resources (mostly text based) to human learners who access these artefacts via prompts. We suggest that current models of mobile learning can be shifted to better reflect the nuanced interactions.

Keywords
English language acquisition, Arab immigrant and refugee women, phenomenology, mobile learning, generative artificial intelligence (GenAI)

Introduction

North America is the destination for millions of political and economic immigrants (Reitz and Banerjee, 2007). In Canada for example, the Arab population constitutes the second largest group of new arrivals (Lyne, 2016). In 2021, the number of Arab immigrants reached more than 508,410 citizens, and of these, 48% were women (243,060). Syrian immigrants ranked highest accounting for 97,590, followed by Iraqi (84,130), Moroccans (81,775), Algerians (79,660), and Egyptians (73,710), respectively (Statistics Canada, 2021). In Saskatchewan, Arab immigrants accounting for 4,610, and of which 48.4% (2,235) are females (Statistics Canada, 2021).

Language proficiency is a key element for successful settlement and integration (Huot et al., 2018). Wright and Tropp (2005) argued that language ability significantly contributes to increased contact with local peers, friends, and people in general. Derwing and Waugh (2012) studied the relationship between official language learning and the social integration of immigrants in Canada. Researchers have concluded that many immigrants, even those who have high language skills, "struggle because they do not have a grasp of the soft skills that help with the establishment of social bonds" (p.26). Previous research has indicated that the improvement of English is slower, that the rate of unemployment is higher (Hudon, 2015), and that the social integration of female immigrants is slower than for males (i.e., immigrant and refugee women are likely to have fewer contacts and jobs outside the home).

Although the Canadian federal and provincial governments offer English language training sessions to assist new settlers in more comfortably integrating and communicating (Welcome to Canada, 2013), programs and organizations do not always meet immigrant and refugee women's everyday needs (Demmans Epp, 2017). Although it might seem minor on the surface, the lack of childcare associated with language programs can make attendance untenable for

Proceedings of the Fifteenth International Conference on Networked Learning 2026,

Edited by: Declercq, L., Loeckx, J., De Laat, M., Dohn, N. B., Ryberg, T.

female immigrants (Bragg, 2018). Furthermore, home responsibilities, taking care of children, and other settlement issues might limit their participation in integration services (Sedin, 2017). Mixed-gender programs may also limit the participation of AIRW who come from Muslim societies in which males and females must maintain culturally appropriate distancing (Banulescu-Bogdan, 2020). For these reasons, women need more flexible language learning opportunities. Innovations such as mobile-assisted language learning (MALL) and mAIL may better support their needs in learning English (Grassini, 2023).

Mobile technology and AI may offer opportunities for personalized and informal/non-formal learning (Traxler, 2011; Shidiq, 2023) which may be more attractive to immigrant women because such technology may reduce time and space constraints (Ahmed, et al., 2013). Mobile learning may also assist AIRW to grow and maintain social networks while learning. Mobile devices such as smartphones offer communication tools which AIRWs can use to speak and/or write to tutors and classmates (Kukulska-Hulme et al., 2019). Furthermore, as Canadian society extends its use of mobile devices—for everything from parking to grocery shopping, booking flights, purchasing movie tickets—the use of these devices and mAI can offer a plethora of possible vocabulary and language training of high social and cultural relevance. At the current time, however, studies with a focus on AIRW in Canada are lacking in the literature, particularly regarding learning English. Several topics concerning AIRW and learning English are largely absent in Canadian academic research, such as how AIRW learn English, why they learn English, what language skills they need to learn, and what challenges they face when they learn English.

This study examines the experiences of Arab immigrant and refugee women living in Saskatchewan, Canada, as they used mobile artificial intelligence–assisted language learning (mAIL) technologies to support English language learning. The literature review will briefly discuss the Canadian context, mobile-assisted language learning (MALL), GenAI and how it can support language learning, and informal learning. The paper then introduces Kearney et al.'s (2012) sociocultural pedagogical framework for mobile learning followed by a description of the phenomenological methodology use and preliminary results. The discussion of the results leads to an explanation of how and why the authors modified Kearney et al.'s model to reflect the influence of artificial intelligence in the language learning process. The study argues that existing models of mobile learning require conceptual revision to better account for the distinctive sociotechnical dynamics introduced by mobile generative AI. The authors conclude with implications for language teaching practitioners.

Literature Review

According to Traxler (2010), mobile learning refers to the use of mobile devices in learning, where learning takes place across settings, time, individuals, and technologies. Mobile learning can occur anytime and anywhere, both independently and in interaction with other human and non-human actors, including AI. Previous research identified the main advantages of using mobile devices such as flexibility of time and place, portability, connectivity, and continued language learning even while working on everyday activities (Dias and Victor, 2022; Kukulska-Hulme, 2021).

Previous MALL research has highlighted the importance and usefulness of mobile learning in language acquisition (Kukulska-Hulme, 2020). This research highlights the potential of mobile devices and apps to facilitate language learning through everyday practices, social media, and interactive activities, with positive effects reported in vocabulary acquisition, pronunciation, learner motivation, and engagement (Ahmed et al., 2017; Imamyartha et al., 2022). Studies have shown that mobile technologies—including language apps, social media platforms, and immersive reality tools (VR and AR)—support the acquisition of vocabulary, improvement in reading skills, increased motivation, and authentic communication (Kukulska-Hulme, 2020). While many learners express positive attitudes toward these tools (Dias & Victor, 2022; Alsabbagh et al., 2019), some scholars also emphasize the need for clearer guidelines on how best to integrate them into practice (Dashtestani, 2016).

Within the Canadian context, mobile learning initiatives have been applied to Indigenous language revitalization—through community-driven app development, culturally relevant frameworks, and collaborative design—as well as to second language classrooms (particularly English and French), where they support task-based learning and pronunciation practice (Koole & Lewis, 2018). Despite these promising efforts, research in Canada remains limited, though emerging frameworks have emphasized personalization, authenticity, and contextual relevance in mobile language learning (Palalas & Wark, 2020). Despite evidence across multiple languages and learner groups around the world—including refugees, immigrants, and women—studies are still relatively scarce for AIRWs in Canada, leaving gaps in understanding how MALL can best support their unique language-learning needs (Abu-Khalil, 2019; Al Sabbagh, Bradley & Bartram, 2019; Kukulska-Hulme, 2021).

Artificial intelligence (AI), generally, refers to a system or systems that is/are designed to mimic human cognitive processes such as learning, adapting, solving problems, making decisions, and understanding human language (Shidiq, 2023). Vallor (2024) describes AI as "a mathematical tool for extracting statistical patterns from past human-generated data and projecting these patterns forward into optimized predictions, selections, and classifications"- (p. 38). GenAI is a sub-category of AI that is basically, a "probability machine where the object of prediction is the next word in a sequence" (Warner, 2025, p. 16). ChatGPT is GenAI system a to produce text in various formats and generate content (Shidiq, 2023). It is a natural language processing tool based on large language models (LLMs) that allows users to have 'human-like' conversations (Shidiq, 2023). Since ChatGPT was released in November 2022 (Grassini, 2023), literature on its use in the world of teaching and learning has been expanding constantly.

GenAI, particularly LLM–based systems such as ChatGPT, is increasingly studied for its role in education (AIED) to support personalized learning, adaptive pacing, intelligent tutoring, smart content, and more efficient educational management (Shidiq, 2023). Studies on ChatGPT and related AI chatbots in language learning highlight their potential to support English acquisition through conversation, writing, grammar, and vocabulary practice, while also noting serious concerns about accuracy, originality, and privacy (Shaikh et al., 2023; Shidiq, 2023). While AI offers significant opportunities to enhance teaching and learning, studies also underscore concerns around misunderstandings, equity, ethical implications, and the potential for reduced learner independence (Grassini, 2023).

mAIL refers to the integration of AI technologies and capabilities such as ChatGPT into mobile devices, supporting learners in performing intelligent tasks, solving problems, making decisions, and learning languages (Shidiq, 2023). Studies of mAIL are emerging covering topics such as recommendation systems, intelligent tutoring systems, adaptive assessments, speech recognition for pronunciation, smart content generation, augmented and mixed reality, predictive analytics, multimodal learning support, and accessibility (Shidiq, 2023; Zhu, Dai & Kang, 2025).

Equally important for this study is informal learning. Informal learning refers to "any activity involving the pursuit of understanding knowledge or skill which occurs without the presence of externally imposed curricular criteria" (Livingstone, 2001, p. 4). Informal learning is not intentionally planned or structured in terms of learning objectives, learning time, and learning support. In self-directed learning, learners exercise personal autonomy, management, control (Candy, 1991), and networking. Self-regulated learning is seen in learners' purposeful and conscious behaviours systematically oriented toward the attainment of their learning goals (Zimmerman, 1986). This research focuses on informal learning in which the AIRW are self-directed, self-regulated, use their own mobile devices to learn English independently and as needed.

Networked learning is defined as learning supported by purposeful connections between people, resources, and technologies (NLEC, 2020). From a networked learning perspective, GenAI is envisioned as a potential mechanism that can perform the role of a peer or collaborator by generating ideas, providing suggestions and feedback, enhancing problem-solving, validating solutions, and mediating between people through conversation summarization and conflict resolution (Bozkurt et al. 2024). Harari (2025) suggests that AI systems are not merely mediators but agents within our networks. In actor-network theory (ANT) terms, AI systems may indeed be thought of as *mediators* by transforming what passes through them—for example, language inputs/patterns are transformed into different patterned outputs (LaTour, 2005, p. 39). Yet they also function as *agents* insofar as their effects emerge from the relational patterns encoded in their training data. Even when an individual learner is interacting with GenAI, they are—in a sense—networking with all the human and non-human artefacts that have been curated into the underlying

LLM as well as the algorithms that transform the original language patterns into the resulting output. Warner (2025) refers to this as the "averaging of intelligence" (p. 59).

While GenAI can simulate conversations, it has limitations. Language learners can practice dialogues across a wide variety of topics and scenarios, and they can easily access information, explanations, clarifications, translations, and connections between ideas. Such conversations can feel eerily human-like. However, GenAI cannot feel emotion, form genuine relationships, interpret facial expressions or nuances within a social context, nor can it understand lived, embodied experience as humans do; "it has no point of reference" (Warner, 2025, p. 19). Human-to-human interactions are inherently unpredictable and may deviate from standard patterns depending upon physical, temporal, and social contexts. Although learners can rehearse with GenAI agents, they are not guaranteed that real-world interactions will unfold in the same way.

It is interesting to consider how LLM bias can affect language learners. Because most large language models are trained primarily on internet data produced in a few dominant linguistic and cultural contexts—especially English-speaking regions—GenAI often reflects the norms, values, and communication styles of those contexts. This may create gaps and distortions for users from the Global South or for immigrants attempting to learn the language and social norms of their new country. For those immigrating to an English-speaking country in the Global South, the bias *might* support their learning; for those immigrating to non-English speaking and/or non-Western countries, the bias might introduce inappropriate cultural norms, or conversational patterns that do not reflect local usage or values of the host country.

Theoretical Framework

The researchers approach this study from a realist ontological perspective; in other words, there is a discoverable, underlying reality that can be explored thorough the individual's lived experiences in natural settings. At the same time, mobile learning is seen as a socio-technical phenomenon shaped by the realities of human action, sociocultural context, mobile technology, and mAIL. The role of human action, non-human action, and sociocultural context may vary within the different settings in which mobile learning might occur. Such variations rely on learners' skills, capabilities, technology, and applications used. This stance is commensurate with the phenomenological methodology used in this study: the realist ontology supports the ideas of determining the essence of experience; the sociotechnical acknowledges the role and interaction of real systems, cultural structures, and technologies that affect people's experiences. The idea of variation across contexts supports the phenomenological processes of reduction and imaginative variation. Through phenomenology, the study attempts to capture descriptions of experience and describe the multilayered and complex socio-technical experiences of AIRWs learning English.

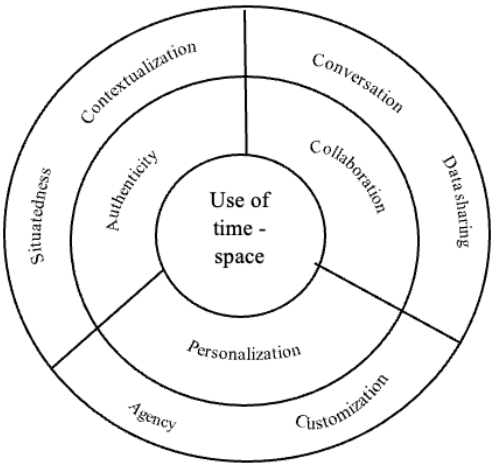

Figure 1: Sociocultural pedagogical framework for mobile learning (Kearny et al., 2012, p. 8).

Kearney et al.'s (2012) sociocultural pedagogical framework for mobile learning (Figure 1) suggests that mobile learning is a process of social interaction, interpretation, and understanding. Having selected Kearney et al.'s (2012) framework, the researchers then examined it for phenomenological meaning. Time and space at the center of the framework emphasizes that mobile learning transcends traditional boundaries, allowing activities to occur anytime and anywhere. In phenomenology, *lived time* and *lived space* determine how events are experienced, remembered, and anticipated: "I can *experience* the present only by *being* present, which means I must *be* some *where* and some *when*: I must be *in* the world, determinately situated. A body is spatially and temporally situated" (Russon, 2004, p. 18). For Kearney et al. (2012), the concept of space includes diverse options, such as virtual or non-geographical environments specifically designed for mobile devices like websites, apps, and platforms.

Moving outward from the center, the framework conceptualizes mobile learning through the main three categories:

1. *Personalization* acknowledges the primacy of the individual's lived experience; each person has unique agency. Phenomenologically, *agency* refers to the capacity to act intentionally within the lifeworld. *Customization* mirrors the way each person adapts tools, environments, or practices to fit their spatial-temporal way of being.
2. *Authenticity* refers to acting in a way commensurate with one's situated existence. "Understanding is woven together with our perceptual life in our day-to-day experience in various local contexts" (Russon, 2004, p. 41). Husserl (1970a) would suggest that authenticity reflects awareness of how meaning is constituted in one's lived experience rather than naively accepted at uncritically at face value. Within this category, *situatedness* indicates how experience is embedded and/or constituted in the lifeworld (pre-reflective; already being in the lifeworld; meaning arises from within the situation) while *contextualization* refers to how meaning arises through intentional acts that disclose experiences of the lifeworld (reflective); the act/potential of placing something in the lifeworld).
3. *Collaboration* recognizes that understanding of the lifeworld arises through the interweaving of intentional acts among embodied subjects. In a Husserlian sense, *conversation* involves intentional encounters in which each subject discloses their horizon of meaning understood as their pre-reflective, taken-for-granted background through which meaning is constituted; it influences what we attend to (Husserl, 1970b). The horizon can change and as it does, it can change how the surrounding world is understood. *Data sharing* involves a non-neutral exchange of already constituted information; that is, the data has already been interpreted and situated when exchanged.

Methodology

This study used a qualitative, transcendental phenomenological approach (Husserl, 1970a, 1970b; Smith & Woodruff, 2007) to explore Arab immigrant and refugee women's (AIRW) experiences, perceptions, and challenges when using ChatGPT to learn English. Phenomenology, with its focus on describing lived experience and identifying essences, guided the analysis through bracketing and imaginative variation to uncover the underlying structures of the phenomenon (Moustakas, 1994). Husserl's (1970) transcendental phenomenology was selected because of its highly descriptive nature that hypothetically would allow the exploration of how the phenomenon appeared in consciousness to give meaning to lived experiences or lifeworld (Osborne, 1994). In other words, this approach permitted focusing on a mAI learning experience among women from their perspectives and to work toward uncovering the essence of the phenomenon. As such, the research questions were:

- How do AIRWs' experience mAI (ChatGPT) in learning English?
    - What are AIRWs' perceptions of using mAI (ChatGPT) in learning English?
    - What challenges do AIRWs' perceive when they use mAI (ChatGPT) to learn English?

Participants were recruited through purposive sampling at community centers in Saskatoon, with 11 women selected who met the inclusion criteria (i.e., identified as an Arab immigrant or refugee woman (AIRW), had basic knowledge

of using mobile devices, and were not attending any formal English training session at the time of the study). Data collection consisted of two semi-structured interviews conducted in Arabic: the first was used to gathered demographic information, find out about the participants' technological knowledge and English ability, and introduce ChatGPT. The participants then had a four-week trial of ChatGPT along with weekly email reminders. The second interview explored participants' reflections on their use of ChatGPT. The interview protocol was guided by Kearney et al.'s (2012) framework. The Interview recordings were transcribed, coded, and analyzed using Moustakas's (1994) modified Stevick-Colaizzi-Keen method, which involved phenomenological reduction, horizontalization, imaginative variation, and synthesis. NVivo 14-supported coding and theme development, while reflective memos and journals were used to bracket researcher assumptions. Through iterative analysis, individual and composite textural and structural descriptions were developed to articulate what participants experienced and how they experienced it.

Results

Having examined the Kearney's framework from a Husserlian phenomenological approach *and* having examined the participants' transcripts, (Husserl, 1970a; Smith & Woodruff, 2007). Table 1 provides an outline of each theme with a phenomenological definition and a corresponding example of experiences of the participants. (Note that the women's names are pseudonyms.)

Table 1: AIRWs' Experiences of mAIL from a Husserlian Approach

Framework Category	***Phenomenological Definition***	***mAIL Examples from the Data***
Time and Space = structures of experience.	*Objective: 'out there'; worldly space-time; activity is bound by clock time and schedules and physical locations. The focus is on structures imposed upon the activity.*	*Objective: When Walaa described using ChatGPT to ask questions about English vocabulary during her work breaks, this reflects the objective aspect. ChatGPT appears to her as a real, external tool she can turn to anytime in her daily life. It exists "out there" in her phone and becomes part of her physical environment. Something she interacts with in a specific time and place (during work breaks, in the daycare).*
	Subjective: the embodied stream of inner time and lived body/ spatial orientation. The focus is not on the boundaries of time or location; it is about the meaningful activity; time is flexible and self-determined, personal and comfortable. Her learning is qualitatively continuous rather than fragmented. The focus is on the activity.	*Subjective: Salma said she used ChatGPT outside work "during work breaks or in the living room in my free time." This comment highlights lived time (subjective time): she is <u>not</u> bound to formal schedules or locations; she learns in moments that feel available and natural in her day. It also shows lived space: her learning space shifts from workplace to home yet feels personally meaningful and comfortable. This reflects how she experiences learning as woven into daily life, not separated into classroom time and strict schedules.*
	Intersubjective: the shared, situated lifeworld ("the same object for everyone").	*Intersubjective: Haya mentioned that she recommended ChatGPT to other Arabic women after finding it useful and easy to use.*

Framework Category	*Phenomenological Definition*	*mAIL Examples from the Data*
		This demonstrates a shared lifeworld among immigrant women.
Conversation = horizons of meaning.	*Conversation is the dialogic spatio-temporal environment for interpretation; the lived experience where learners interact with ChatGPT to co-create understanding. The primary horizon of meaning belongs to Asma; ChatGPT functions as a horizon-shaping artefact within the conversation. The conversation is co-constructed with Asma and ChatGPT following conversational norms.*	*Asma role-plays with ChatGPT through dialogue and conversations to learn new English skills. Taking turns and expectations for the next steps what utterances mean.*
Personalization = acknowledges the primacy of the individual's lived experience; each person has unique agency.	*Agency (noesis): the learner's capacity to act intentionally (direct actions) within their lifeworld.*	*Samaya uses ChatGPT to practice conversation before going to a doctor or her kids' school (agency).*
	*Customization (operative habitual intentionality): adapting tools and practices to one's temporal-spatial way of being. Pre-reflective **habits** that guide prompt-crafting. At first, interaction with ChatGPT may require overt attention and reflection. As a learner becomes 'used to' interaction, prompt forms become taken-for-granted; focus is on what is needed rather than how to prompt.*	*She adjusts the prompts to provide the exact words and responses she needs for use in repeated situations.*
Authenticity = acting commensurate with one's situated existence.	*Contextualization: meaning arises through intentional acts disclosing the lifeworld. Fulfilment of anticipated sense expectations (testing in experience). Meaning is clarified and confirmed.*	*Asma asks ChatGPT to explain the difference between some words and synonyms and reflects on when each is appropriate in daily life (contextualization). She asks what the appropriate word is to write in an email to school. She continues until something seems to 'fit'.*
Collaboration= interweaving of intentional acts among embodied subjects.	*Situatedness (intersubjective constitution/validation): experience embedded in the lifeworld. Arriving at communal meaning.*	*Kamelia practices new vocabulary on ChatGPT during her work breaks (not situated); then she tries them with customers where her knowledge becomes situated. Feedback from interaction with people confirms or corrects her usage (situated).*

Framework Category	*Phenomenological Definition*	*mAIL Examples from the Data*
	Indirect Data sharing: non-neutral exchange of already constituted information.	*Asma asks ChatGPT to provide helpful vocabulary; ChatGPT searches and transforms patterns from its LLM to provide output. Asma uses the new words that she learns from ChatGPT at her work, school, shopping, and medical centers.*

Discussion

During the preliminary examination of the transcripts, it appeared that time and space is not necessarily the centre of mAIL experiences. This necessitated a re-examination of Kearney's model, which will soon be tested against all of the data collected for this study. Rather, conversation occurs within time and space (Figure 2). Conversation was positioned in the centre because every interaction is realized through dialog with ChatGPT. The whole process unfolds within time and space, which form the background (horizon?)—users can engage "anytime, anywhere."

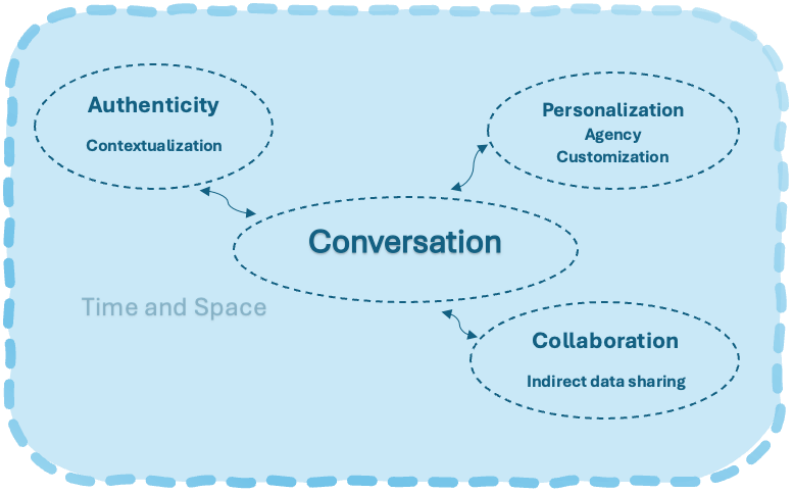

Figure 2: A Contextualized Empowerment model of ChatGPT

Learners exercise agency by deciding what, when, and how to learn (informal learning); they enact personalization by shaping the system to their goals, and practice customization by revising prompts and outputs until the response seems appropriate to the intended context or needs. Conversation also supports collaboration with the tool: users and ChatGPT iteratively co-create workable texts. Each time the learner takes a turn, a *noema* (the meant sense) is accompanied by a *noesis* (the intending act) (Smith & Woodruff, 2007).

In Kearney's model of mobile learning, collaboration suggested that learners would interact with their peers or a teacher. In mAIL, however, the peer shifts to interaction between the learner and GenAI. While the ChatGPT does not directly connect users to each other, there is indirect data sharing: people enact previously formed understandings in school, work, clinics, or shops, and the system, in turn, uses its compendium of data within the LLM to generate helpful replies (i.e., new patterns). Alongside indirect data sharing, personalization can also occur in which the learner adapts their prompts to elicit outputs relevant to their horizon of meaning while agency refers to the direction of intentionality (what the learner hopes to accomplish). The conversation is situated—that is, learners converse in ways

that match their language level, cultural expectations, schedules, and routines; ChatGPT responds according to its algorithms and LLM contents. Learner-GenAI conversations can seem authentic when tasks mirror real life (e.g., drafting messages to teachers or doctors). But, in mAIL, the learner must determine 'fit' of the outputs. In other words, contextualization is tied to concrete settings—school emails, workplace requests, appointments, and shopping; outputs are validated by feedback in use (fulfillment).

Conclusions

Kearney et al.'s (2012) framework proved valuable for this study and, as an analytic lens, revealed nuanced differences between mlearning and mAIL. By centering conversation and unpacking personalization, collaboration, and authenticity into clear subscales, the contextualized empowerment model better captures the lived experiences of learners who use ChatGPT as both a flexible tool and a conversational partner for integration into Canadian society. As mediators, AI systems transform what passes through them, for example, language inputs are re-patterned into new, patterned outputs (Latour, 2005, p. 39). At the same time, these systems can be treated as agents within sociotechnical networks because the effects they generate (what responses become likely, what forms of language are foregrounded, and what options appear "natural") emerge from the relational patterns encoded in their training data. In using GenAI tools to learn language in a new culture, learners need to be aware of the biases inherent within the LLMs, they also need to recognize that practice dialogues and actual, lived-experiences may be quite different. By clarifying how mAIL reshapes conversational practice, agency, and meaning-making in everyday contexts, this study provides a basis for considering its implications beyond the immediate learning encounter. These insights are particularly salient in the context of increasing global displacement and the need for scalable, flexible language-learning supports.

With the proliferation of wars, climate change, and economic strife, it is likely that there will be more displacement of peoples around the world. This study may inform policymakers, educators, and immigrant services programs in Canada about the potential of mAIL technologies, such as ChatGPT, to support immigrant and refugee women in acquiring language skills, enhancing social integration, and exercising greater autonomy in their learning. For example, educators can design modules (or share prompts) that use GenAI to reveal learners' situatedness, and embed agency, personalization, and customization—plus fit/fulfilment checks—into modules or freely available prompts. These preliminary findings suggest that mAIL can provide flexible opportunities for language development, particularly for learners facing time, cultural, and mobility constraints. Tools such as ChatGPT can support learning that fits with learners' daily routines and needs.

References

Abou-Khalil, V., Helou, S., Flanagan, B., & Pinkwart, N., Ogata, H. (2019). Language learning tool for refugees: Identifying the language learning needs of Syrian refugees through participatory design. *Languages*, 4(3), 71. https://doi.org/10.3390/languages4030071

Al-Sabbagh, K., W., Bradley, L., & Bartram, L. (2019). Mobile language learning applications for Arabic speaking migrants – a usability perspective. *De Gyuter Mouton 9*(1), 71–95. https://doi.org/10.1515/cercles-2019-0004

Banulescu-Bogdan, N. (2020). Beyond work: Reducing social isolation for refugee women and other marginalized newcomers. Washington, DC: Migration Policy Institute.

Bozkurt, A., Xiao, J., Farrow, R., Bai, J. Y. H., Nerantzi, C., Moore, S., Dron, J., Stracke, C. M., Singh, L., Crompton, H., Koutropoulos, A., Terentev, E., Pazurek, A., Nichols, M., Sidorkin, A. M., Costello, E., Watson, S., Mulligan, D., Honeychurch, S., … & Asino, T. I. (2024). The manifesto for teaching and learning in a time of Generative AI: A critical collective stance to better navigate the future. *Open Praxis*, *16*(4), 487–513. https://doi.org/10.55982/openpraxis.16.4.777

Candy, P., C. (1991). Self-direction for lifelong learning: A comprehensive guide to theory and practice. San Francisco: Jossey-Bass.

Dashtestani, R. (2016). Moving bravely towards mobile learning: Iranian students' use of mobile devices for learning English as a foreign language. *Computer Assisted Language Learning, 29*(4), 2-18. https://doi.org/10.1080/09588221.2015.1069360
Demmans Epp, C. (2017). Migrants and mobile technology use: Gaps in the support provided by current tools. *Journal of Interactive Media in Education*, *1*(2), 1–13. DOI: 10.5334/jime.432
Derwing, T. M., & Waugh, E. 2012. Language Skills and the Social Integration of Canada's Adult Immigrants. *IRPP Study, 31*,1-32. https://irpp.org/wp-content/uploads/assets/research/diversity-immigration-and-integration/language-skills-and-the-social-integration-of-canadas-adult-immigrants/IRPP-Study-no31.pdf
Grassini, S. (2023). Shaping the Future of Education: Exploring the Potential and Consequences of AI and ChatGPT in Educational Settings. *Education Sciences, 13*(7),13-692. https://doi.org/10.3390/educsci13070692
Harari, Y. (2025). Nexus: A brief history of information networks from the stone age to AI. Penguin Random House Canada.
Hudon, T. (2015). Immigrant women. Ottawa, Ontario. Statistics Canada. https://publications.gc.ca/collections/collection_2015/statcan/89-503-x/89-503-x14217-eng.pdf
Huot, S., Cao, A., Kim, J., Shajari, M., Zimonjic, T. (2018). The power of language: Exploring the relationship between linguistic capital and occupation for immigrants to Canada. Journal of Occupational Science, 27(1), 95–106. https://doi.org/10.1080/14427591.2018.1534136
Husserl E. (1970a). *The idea of phenomenology.* The Hague, The Netherlands: Nijhoff.
Husserl, E. (1970b). *The crisis of European sciences and transcendental phenomenology; An introduction to phenomenological philosophy*. Translated, with an introduction, by David Carr.
Imamyartha, D., Wahjuningsih, E., A'yunin, A., Santihastuti, A., Mitasari, Fauzie, D., & Andika, E. (2022). EFL learners' engagement and learning motivation in team-based mobile language learning through WhatsApp. *The central European journal of social sciences and humanities*, 22(1), 82-103. http://www.tewtjournal.org/
Kearney, M., Shuck, S., Burden, K., & Aubusson, P. (2012). Viewing mobile learning from a pedagogical perspective. *Research in Educational Technology, 20*, 1-17. https://doi.org/10.3402/rlt.v20i0.14406
Koole, M., & Lewis, K. (2018). Mobile Learning as a Tool for Indigenous Language Revitalization and Sustainability in Canada: Framing the Challenge. *International Journal of Mobile and Blended Learning, 10*(4), 1-12. https://doi.org/10.4018/IJMBL.2018100101
Kukulska-Hulme, A. (2019). Mobile language learning innovation inspired by migrants. *Journal of Learning for Development*, 6(2), 116–129. https://doi.org/10.56059/jl4d.v6i2.349
Kukulska-Hulme, A. (2020). Mobile-assisted language learning. In *The Encyclopedia of Applied Linguistics*, C.A. Chapelle (Ed.). https://doi.org/10.1002/9781405198431.wbeal0768.pub2
Kukulska-Hulme, A. (2021). Conclusions: A lifelong perspective on mobile language learning. In V. Morgana, & A. Kukulska-Hulme (Eds.), *Mobile assisted language learning across educational contexts*. Routledge focus on applied linguistics (pp. 122–133). Abingdon: Routledge. https://doi.org/10.4324/9781003087984-7
Kukulska-Hulme, A. (2021). Reflections on research questions in mobile assisted language learning. *Journal of China Computer-Assisted Language Learning, 1*(1), 28–46, https://doi.org/10.1515/jccall-2021-2002
Livingstone, D. (2006). Informal learning: Conceptual distinctions and preliminary findings. *Counterpoints*, *249*, 203–227. https://www.jstor.org/stable/42979596
LaTour, B. (2005). Reassembling the social: An introduction to Actor-Network Theory. Oxford, UK: Oxford University Press.
Lyne, J. (2016). Exploring the experiences of infertile Arab Immigrant Women: A qualitative study. Unpublished Thesis. University of Ottawa. http://dx.doi.org/10.20381/ruor-298
Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA: Sage Publications.
NLEC. (2020). Networked learning: Inviting redefinition. *Postdigital Science and Education*. https://doi.org/10.1007/s42438-020-00167-8
Osborne J. (1994). Some similarities and differences among phenomenological and other methods of psychological qualitative research. *Canadian Psychology*, *35*(2), 167–189. https://doi.org/10.1037/0708-5591.35.2.167

Palalas, A., & Wark, N. (2020). A framework for enhancing mobile learner-determined language learning in authentic situational contexts. *International Journal of Computer-Assisted Language Learning and Teaching,10*(4), 83-97. https://doi.org/10.4018/IJCALLT.2020100106

Reitz, J., & Banerjee, R. (2007). Racial inequality, social cohesion, and policy issues in Canada. In *Belonging? Diversity, Recognition and Shared Citizenship in Canada* edited by Banting, Thomas J. Courchene, & F. Leslie Seidle. Montreal: Institute for research on Public Policy, 489-545.

Russon, J. (2004). *Reading Hegel's phenomenology*. Indiana University Press.

Sedin, M. (2017). *Immigrant women, English learning, and social interactions: – a qualitative study in Vancouver, Canada*. Master's dissertation. Linköping University |Department of Behavioural Sciences and Learning. https://www.diva-portal.org/smash/get/diva2:1073241/FULLTEXT01.pdf

Shaikh, S., Yayilgan, S., Klimova, B., & Pikhart, M. (2023). Assessing the usability of ChatGPT for formal English language learning. *Investig. Health Psycho. Educ, 13*, 1937–1960. https://doi.org/10.3390/ejihpe13090140

Shidiq, A. (2023). The use of ChatGPT in education: Opportunities and challenges. *Proceeding of International Conference on Education, Society and Humanity, 1*(1), 353-357. https://ejournal.unuja.ac.id/index.php/icesh/article/view/5614/2065

Smith, D., & Woodruff. (2007). *Husserl {Routledge philosophers}*. Taylor and Francis Routledge.

Statistics Canada. (2021). Census Profile, 2021 Census of population. Retrieved from Census of Population https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E

Traxler, J. (2010). Will student devices deliver innovation, inclusions, and transformation? *Journal of the Research Center for Educational Technologies*, 6(1), 3–15. https://scispace.com/papers/will-student-devices-deliver-innovation-inclusion-and-479tzrjx4i

Traxler, J. 2011. Mobile learning: Starting in the right place, going in the right dDirection? In D. Parsons (Ed.), *Innovations in Mobile Educational Technologies and Applications* (pp. 1-13). IGI Global Scientific Publishing. https://doi.org/10.4018/978-1-4666-2139-8.ch001

Vallor, S. (2024). *The AI mirror: How to reclaim our humanity in an age of machine thinking*. Oxford University Press.

Warner, John. (2025). *More than words: How to think about writing in the age of AI*. Basic Books.

Welcome to Canada, what you should know. (2013). Citizen and Immigration Canada. Retrieved from: https://www.canada.ca/content/dam/ircc/migration/ircc/english/pdf/pub/welcome.pdf

Wright, S., & Tropp, L. (2005). Language and intergroup contact: Investigating the impact of bilingual instruction on children's intergroup attitudes. *Group Processes & Intergroup Relations,* 8, 309–328. https://doi.org/10.1177/1368430205053945

Zhu, Y., Dai, W. & Kang, Q. (2025). The analysis of artificial intelligence-based mobile learning in students' open teaching recommendation system based on deep learning. *Sci* Rep 15, 21927. https://doi.org/10.1038/s41598-025-08147-3

Zimmerman, B., J. (1986). Becoming a self-regulated learner: Which are the key subprocesses. *Contemporary Educational Psychology,* 11, 307-31. https://doi.org/10.1016/0361-476X(86)90027-5