Review Article

Tandem language exchange application: A telecollaborative experience of linguistic and cultural exchange

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ARTICLE INFO	ABSTRACT
	Limited opportunities for language practice, especially productive skills, have constantly been a concern voiced by language learners. Recent technological advancements have addressed this need through mobile applications. One such application is *Tandem: Language Exchange*, bringing together language learners with similar goals worldwide to practice their language of interest. To this end, this review evaluated the app in focus: An introduction, utilizing the technology for language teaching and challenges in using the technology for language teaching, and a conclusion. Following this framework, the evaluation revealed that the app provided customized learning preferences and fostered productive skills practice, multimodal feedback, and intercultural awareness. However, the misuse of the app, the participants' linguistic expertise, the potential emergence of cultural issues, and data security raised concerns over its use. Ultimately, the review recommended the app as an educational opportunity and an entertaining digital learning environment.

INTRODUCTION

Interlingual and intercultural communication has become valuable in an increasingly interconnected world. This considerable asset has manifested itself diversely across several fields, including education. In this context, language learning has expanded beyond the traditional classroom setting, adopting novel approaches that harness technology and global networks (Haleem et al., 2022). Tandem has emerged as a potentially significant mobile app in this new paradigm shift, providing language learning opportunities through telecollaboration, mobile communities of practice (MCoP), and a learning environment reflected by tandem language learning (**Appendix A**). With language enthusiasts interacting with others with similar interests, Tandem creates a mobile learning environment, where language learners can practice their language of interest. Also, the language clubs and festivals available on the app encourage such communal practice.

Rooted in computer-mediated communication, telecollaboration is a communication form transcending geographical and temporal limitations (Barbosa & Ferreira-Lopes, 2023). It helps facilitate meaningful communication between language learners (Ebadi & Azizimajd, 2023; Eren, 2023), and Tandem leverages this by connecting users with native and non-native speakers of the target language. The

virtual language exchange partnerships established by the app enable learners to engage in authentic conversations, allowing them to practice language skills in real-world environments. After checking the profile bios of other users, language learners can identify those with similar interests and thus text them and start conversing about any topic by which they have the opportunity to enhance language skills, such as writing and speaking (in case they choose the audio messages or audio and video calls).

Central to telecollaboration, MCoP emphasizes social interactions and mutual learning engagement (Britt & Britt, 2021; Ji & He, 2020). With the proliferation of smartphones, language learners have gained access to a worldwide community devoted to linguistic and cultural exchanges (Godwin-Jones, 2021, 2023). Tandem acts as a collaborative environment, wherein users become actively involved in their learning journey. It also enables the development of inclusive learning communities, facilitating intellectual exchanges and knowledge co-constructions across boundaries.

The learning environment on Tandem might be framed under tandem language learning methodology, which mimics natural language acquisition by introducing users to real-world language scenarios (Elo & Pörn, 2021). Users participate in mutual language learning and practice, resulting in a mutually beneficial exchange that boosts both parties. Tandem combines this methodology with telecommunication

and MCoP concepts to help create dynamic, multicultural, and collaborative language learning. Mobile interactions occur through the app among users with similar language learning goals. Users interact with each other through texts, audio, and video allowed by mobile devices. Additionally, users may start a conversation about diverse daily topics explicitly stated in user bios or learned through interactions. This way, they are exposed to real-world language usage scenarios.

The review accordingly evaluated Tandem using Kohnke and Moorhouse's (2022) four-step framework. In this context, a general introduction to the topic was made first. The app was then generally described. Its pedagogical advantages and drawbacks were discussed next. Finally, conclusions and recommendations were made.

GENERAL DESCRIPTION OF TANDEM APP

Launched in 2015 by three like-minded friends aspiring to connect people worldwide through languages, Tandem is a language exchange app that unites international people yearning to learn and practice languages. Institutionalized and headquartered in Berlin, Tandem is available on iOS and Android. It offers learning opportunities in 300 languages, including indigenous (e.g., Laz), sign (e.g., Australian sign language), and fictional (e.g., emoji) ones. The only thing that users should do is download the app, sign up for free, and explore the interlingual and intercultural world on the app.

Once downloaded, users are asked to sign up and respond to some questions, such as what they would like to talk about, what their perfect Tandem partner is like, and what their language learning objectives are. They are then waitlisted, which varies regionally to help keep a balanced language learning community (https://www.tandem.net/pages/faq) and join the community once their application is approved. Users under 16, those who use a fake profile photo, and those who disobey the Tandem community principles are banned from the app.

The app comes in two versions: free and paid (based on monthly or yearly subscription). Free version provides all the basic needs for language practice. Paid version (also known as Tandem Pro) ($6.99/monthly and $34.99/yearly), on the other hand, enables users to discover the users nearby, connect with members all over the word through a map selection, see who has visited their profiles, unlimited translations, hold private language parties, and remove ads.

The app has a user-friendly interface, welcoming users with four main tabs: Community, chats, parties, and filters. The community page (**Figure 1**) lists people to connect with based on the user's filters. Tandem users on the community page are seen with a photo, name, bio, the icons for their native language and the language they are learning. Additionally, the small profile screen on this page shows new users and the number of references users have. Tandem Pro users might also access users who have visited their profile and see the distinguished users (i.e., those with an outstanding performance). Users of both versions might search for specific users and themes in the search box at the top of the page.
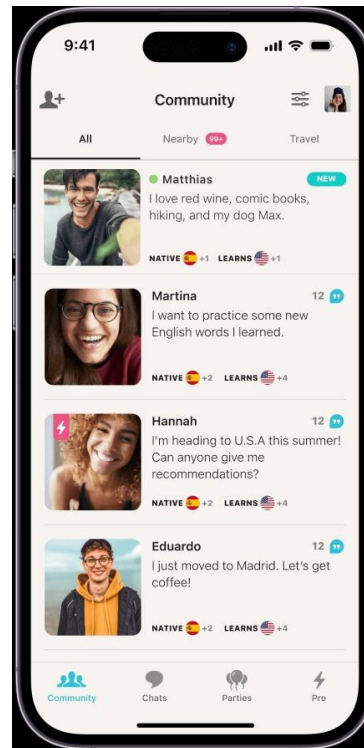

Figure 1. Community page (https://www.tandem.net)

Figure 2. Chat page (https://www.tandem.net)

The chat page (**Figure 2**) displays the messages users have with other community members and the groups they belong to. Users can see the profile, follow, leave a reference, video call, audio call, report, and block other users on this page. In addition, they can send photos and voice texts and translate a specific message. Once a particular message is clicked on, users can copy, correct, comment, read out, and translate. The corrected parts of a message are crossed out in red, and the corrections are displayed in green.

Figure 3. Parties page (https://www.tandem.net)

Figure 4. Filters page (https://www.tandem.net)

The parties page (**Figure 3**) allows users to see the whole list of language parties available at the time. The top page shows some reminders about the party rules. The parties are seen in small screens, with their titles, languages, descriptions, party holders, and the number of speakers and listeners. The app allows pro users to organize private language parties to which only the invited user might attend.

On the filters page (**Figure 4**), users can select what languages they would like to practice, show the members worldwide, specific cities or regions, and cities (only pro users), choose who they would like to practice today (only members with references, only new members, and only members with the same gender), and the age of users (18-99) they would like to chat with.

EDUCATIONAL OPPORTUNITIES & PITFALLS

In the first place, Tandem might be viewed as advantageous for its customization feature that allows users to adjust the mode of communication (text and audio messages, video and audio calls, and meetings in person) with Tandem partners, the time committed to learning languages (1-100 hour(s) per week), the learning schedule (morning, afternoon, and evening on weekdays or weekends), the preferred way of correction (every single time a mistake is made, only when the same one is repeatedly made, and general feedback once in a while but not at every single mistake), and the conversation topics. Based on this feature, it is plausible to assert that Tandem provides users with a personalized learning environment, wherein they might tailor specific features to their interests and needs. In this respect, it might be claimed that Tandem leverages personalized learning theory, a
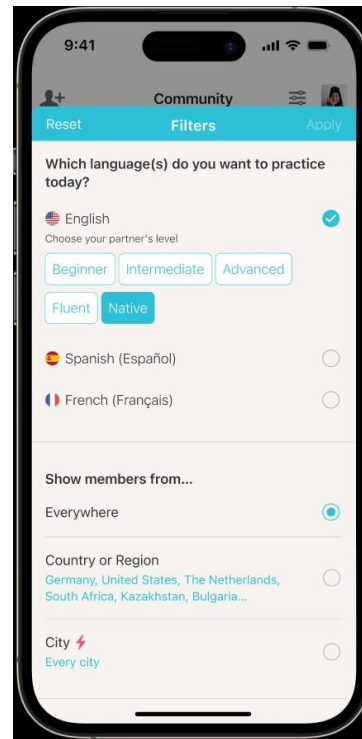
significant factor in mobile-assisted language learning environments (Chen, 2022). Given that today's learners have different needs, interests, and goals (Tomlinson, 2014), the personalized learning environment provided to Tandem users might address this issue.

A second opportunity, probably the most interactive, offered by Tandem is to practice language skills, such as speaking, pronunciation, spelling, vocabulary, grammar, and listening. As for speaking, users can make audio and video calls, whereby they have the chance to further their speaking skills. A study by Carluccio and Rubakova (2019) found the app's effectiveness in contributing to the productive skills of Russian-speaking learners of Italian. They can also send and receive voice texts that allow them to listen to be exposed to authentic language input. The use of voice texts was found to have a more significant impact on written texts (Minalla, 2018). Audio/video calls and voice texts also enable users to practice pronunciation in the target language. This claim was supported in a recent study by Menggo et al. (2023). Users can further inquire about the correct pronunciation of words while conversing with native speakers. This feature received divergent support from previous studies. For instance, Kinoshita (2008) suggested the great potential of video chat for learning Japan with Japanese native speakers. In another study, Ko (2012) revealed the usefulness of three learning environments (i.e., audio, audio/video, and face-to-face) in developing oral skills, albeit drawing attention to the predominant effectiveness of task- and strategy-related factors. On the other hand, Aubrey (2022) reported the prevalence of video chat over text chat regarding higher concentration and interest in computer-mediated environments.

Users might also send and receive text messages by which they can learn and practice grammar, vocabulary, and spelling.

The error correction feature allows them to see accurate spelling or grammatical points. If not content with the corrections, users might ask for further explanations from the native speakers they converse with. Previous research on the relationship between text messages and grammar revealed diverging results. Some cautioned against the transgressions of grammatical patterns in texting (Wood et al., 2014), while others advocated grammatical advancement through texting (Moghari & Marandi, 2017; Ruge, 2012). However, texting was found to improve vocabulary in previous studies (Baleghizadeh & Oladrostam, 2010; Moore & Cuevas, 2021). Regarding the second educational opportunity (i.e., practicing language skills), Pilla Masaquiza (2023) found in her thesis that Tandem contributed to the overall communicative competence of learners through a better command of grammar, pronunciation, and vocabulary. Ultimately, it must be noted that the learning gains might vary according to users' learning objectives. Since the app allows users to customize their correction preferences, not all might receive feedback on the accurate grammatical, orthographic, or lexical forms.

A third educational benefit of Tandem is the multimodal feedback platform available in chats. Users might receive feedback on their linguistic performance through written (written texts), auditory (voice texts and audio calls), and visual (video calls and pictures) means. Although these three forms the three modes of communication, they also constitute the three ways of feedback reception from native speakers of the target language. A previous study by Rasi and Vuojärvi (2018) demonstrated that formative audio feedback fostered personal and emotional connectivity between learners and teachers. In another study, Yorganci (2022) found the effectiveness of video feedback, asserting that it helped increase intrinsic motivation and decrease cognitive load. As for written feedback, Tseng and Yeh (2019) suggested its usefulness in addition to visual feedback. In sum, it is reasonable to claim that feedback received through all modes of communication (i.e., textual, audio, and visual) yield pedagogical gains. Also, such error correction opportunities might be "instrumental in helping learners notice, monitor, and improve their L2 output" (Kartchava & Nassaji, 2021, p. 520).

A fourth potential advantage that Tandem offers might be intercultural awareness and understanding. Currently, Tandem enjoys 18 million users from over 180 countries worldwide (https://www.tandem.net/pages/about-us) and offers about 300 languages. In this context, it might be viewed as a global mobile community, wherein users from diverse linguistic and cultural backgrounds interact for language learning and practice. This argument received massive support from previous scholarly work (Gholami Pasand & Hassaskhah, 2023; Godwin-Jones, 2021; Koroglu & Kimsesiz, 2023). A study by Chen and Yang (2016) demonstrated that an internet-mediated research project assisted in promoting intercultural awareness and foreign language learning. In another study, Dugartsyrenova and Sardegna (2019) found that an online video-based telecollaboration tool assisted in improving intercultural knowledge and skills.

Similarly, Freiermuth and Huang (2021) reported the beneficial impact of telecollaborative video activities on improving intercultural competence. In a more recent study,

Eren (2023) maintained that telecollaboration considerably impacted critical intercultural development. Similarly, Gholami Pasand and Hassaskhah (2023) reported a relative increase in learners' intercultural awareness through an online community of practice. All these findings suggest that Tandem's telecollaborative environment might create ample opportunities for cross-cultural awareness and understanding.

All the educational potentials notwithstanding, Tandem should also consider some issues. First, there is a heightened concern over user expertise. First, there is a growing concern over users' linguistic expertise. However, this should not be a matter of concern because Tandem does not warrant expert members in its community. Also, an MCoP does pertain more to an uninstructed language learning context than an instructed one. More clearly, Tandem users are exposed to authentic and conversational language input rather than instructional. The expertise of users depends on their self-reports, except in the English language, which can be certified by taking the four-level Tandem test (A2-C1). The tests comprise items about listening comprehension, reading comprehension, and grammar and aim to assess passive conversational skills. In this respect, users with an English certificate might seem more reliable concerning linguistic expertise. However, it must be reminded that Tandem is not an educational institution, and accordingly, users do not have to provide certificates of proficiency. To eliminate any suspicions about user competencies, Tandem might consider a way to confirm users' native speaker status. Nevertheless, there might still be concerns over the reliability, validity, and representativeness of proficiency tests in general regarding linguistic competence (Siordia & Kim, 2022).

A second issue regarding Tandem is the potential arousal of cultural arguments. Since users come from different cultural backgrounds, cultural conflicts that include political, religious, racial, physical, and psychological beliefs and values might arise during conversations, turning into hot debates. However, such issues might arise on any social media platform. Users might therefore ignore, tolerate, or block others if necessary. A third downside to the app might be the limited presence of users who are eager to learn minority languages. This might be excluded from the list of concerns because Tandem does not endorse teaching or learning any languages, let alone those of minorities. It solely intends to promote language exchange worldwide through a MCoP provided on the platform. Another issue, maybe one of the most concerning, is using Tandem as a dating app. There have been many recounts of such instances from an emic perspective. A similar concern was reported in an earlier research, explaining that HelloTalk was viewed as a dating app by some users (Gajić & Maenza, 2022). Concerning Tandem's misuse, it might be established that Tandem follows strict principles to maintain a goal-oriented community, and accordingly, users might report or block suspicious accounts. An equally serious concern regarding Tandem is using fake photos or misusing the photos shared on public profiles.

As on any social media platform (Krombholz et al., 2012), Tandem users face the risk of photo fraud, which can be overcome by reporting dubious profiles. Being waitlisted until human moderators process submissions to maintain a

balanced community is the final downside to Tandem. This might sometimes take a week or more, which might be discouraging for some users.

CONCLUSIONS & RECOMMENDATIONS

Emerging computer and mobile technologies have continued to address learners' needs and interests in the field of language education. Tandem, a perceivably novel app for language exchange, is one such mobile technology. The app is grounded on telecollaboration, MCoP, and tandem language learning methodology and offers an invaluable linguistic and cultural exchange.

The review adopted Kohnke and Moorhouse's (2022) framework for evaluating mobile apps. The framework consists of four steps: an introduction, utilizing the technology for language teaching, challenges in using the technology for language teaching, and a conclusion. The second and third steps were combined in this review. This framework allowed for a thorough and critical evaluation of the mobile app. The introduction provided a theoretical background to mobile learning and an easy transition to the app's evaluation. In line with the second and third steps, the app's potential advantages and disadvantages were critically discussed. Finally, the review ended with a conclusion and recommendations.

This review indicated that Tandem provides a personalized learning environment, allowing users to customize their learning goals, the languages they would like to learn, their preferences for communication, and error correction. Users might also select user age and locations and adjust who they want to practice with. This way the app might fulfill learner needs and interests. It was also found that productive skills, such as speaking and writing, and individual language subskills, such as pronunciation, vocabulary, grammar, and spelling, might be improved at varying degrees. The different modes of communication (text messages, voice texts, and audio/video calls) might also encourage insecure learners to speak and write by offering them various means of communication. This feature also allows users to receive multimodal feedback on their performance and thus support users through textual, auditory, and visual cues. The introduction of 300 languages and the availability of users from diverse linguistic and cultural backgrounds make Tandem a global platform to promote cross-cultural awareness and understanding, albeit with the risk of potential cultural clashes.

On the other hand, there might be concerns over users' linguistic competence or expertise since the status of native-speakerism relies solely on self-reports, except for the English language, which can be certified by the proficiency tests offered by Tandem. Besides, as aforementioned, there is also a potential risk of having cultural arguments (e.g., politics, religion, etc.). However, such intellectual conflicts might occur on any social media platform. One of the most concerning downsides to the app is its use as a platform for dating. This can be overcome by blocking or reporting ill-intentioned users. There is also a growing concern about fraud and catfishing, which creates the risk of users with fake profile photos or who pretend someone that they are not. A final issue to raise about

Tandem might be user disinterest in minority languages. However, the app does not warrant the promotion or degradation of any languages.

Given the potential benefits and drawbacks, Tandem might be a worthwhile platform for linguistic and cultural exchanges, especially for language learners with limited opportunities for conversational practice of the target language. However, qualitative and quantitative studies are strongly encouraged to corroborate the findings of this review. One prospective study might focus on the effectiveness of Tandem in fostering language skills (e.g., speaking, pronunciation, vocabulary, etc.). More specifically, future researchers might explore what specific language areas and subskills (e.g., turn-taking, colloquial expressions, idioms, segmental pronunciation features, etc.) could be improved through mobile interactions on the app. Another study might investigate user perceptions about Tandem. Such a study might examine the potential benefits and drawbacks of the app and pedagogical and technological constraints from user perspectives. A further study might explore the extent Tandem promotes cultural awareness and understanding. It was asserted that Tandem might promote intercultural awareness since users from diverse linguistic and cultural backgrounds could interact on the app. Prospective researchers might address this issue through phenomenological studies. Overall, this review intended to guide learners and teachers about the app and serve as a foundation for experimental studies.

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APPENDIX A

Table A1. Product at a glance

Characteristic	Definition
Product type & title	Tandem: Language Exchange
Producer details	Tripod technology GmbH, Bölschestr 21 D-30173 Hannover, & Germany support@tandem.net
Language(s)	300 languages, including sign, indigenous, & fictional languages
Level	Beginner (A1) to advanced (C1)
Activities	Speaking, pronunciation, grammar, vocabulary, & culture
Media format	Downloadable mobile (iOS, Android, Huawei AppGallery, Baidu, Tencent, Xiaomi, Oppo, Vivo, & 360) & web (https://app.tandem.net/login) application
Operating system(s)	Requires iOS 15.0 or later, iPadOS 15.0 or later, Android 8.0, & up
Hardware requirements	Suitable for most smartphones & tablets
Documentation	Certificates of proficiency (A2 to C1)
Price	Free, Tandem Pro (monthly, trimonthly, & annual subscriptions), & in-app purchases starting from $6.99 (monthly) to $34.99 (yearly)