

The Role of Online Education Forums in Promoting Chinese Learners' Intercultural Communication Competence

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Abstract—This paper explores the pivotal role of Intercultural Communication Competence (ICC) in fostering global perspectives among students. It delves into the increasing significance of online educational forums as a tool for promoting cross-cultural communication and language practice. The literature review highlights the multifaceted nature of ICC, the benefits of online education forums, and their contribution to language acquisition and intercultural awareness. Despite their potential, the paper also addresses the challenges and limitations associated with these platforms in the Chinese context. Drawing from the review, the study then proposes localized strategies for optimizing online forums to cultivate ICC among Chinese students, emphasizing the creation of culturally appropriate content, promoting intercultural collaboration, developing awareness of intercultural communication, fostering intercultural conversations and considerations, etc.

Keywords—Chinese learner, intercultural communicative competence, online education forum

I. INTRODUCTION

Intercultural communication competence has been acknowledged as a crucial component of education to provide a more global perspective to students' learning process as the world becomes more interconnected and increasingly electronic [1]. The term "Intercultural Communicative Competence (ICC)" refers to a theoretical framework with five basic elements: attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness [1, 2]. It goes beyond linguistic competence and encourages meaningful communication with individuals from multiple cultural backgrounds. Understanding one's own and other people's cultures, interpreting and managing cultural differences, and creating openness, curiosity, and respect for other cultures are all parts of ICC. Using digital platforms as tools, online educational forums provide students with opportunities to share information and communicate with people from different countries. By creating a place for cultural exchange, online education communities help to advance cross-cultural communication. By sharing their

distinctive experiences, traditions, and beliefs, students may deepen their understanding of and respect for variety. In addition to broadening students' perspectives, this discussion of ideas and experiences also challenges biases and preconceived beliefs, fostering a more open-minded and compassionate outlook [3]. Language practice is yet another crucial element made possible by online discussion forums for education. Through the use of these platforms, students may connect with classmates who are native speakers of other languages or language learners while improving their language abilities [4, 5].

II. LITERATURE REVIEW

A. Intercultural Communication Competence

According to Byram's model, Intercultural Communication Competence (ICC) includes five elements, attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness, which is considered the central component to the development of intercultural competence [2, 3].

In intercultural communication, attitudes are the primary and indispensable factors because they have an impact on people's opinions, beliefs, and perceptions of different cultures [2]. ICC emphasizes the necessity of cultivating positive attitudes including openness, curiosity, empathy, respect, etc. These attitudes allow individuals to approach cross-cultural interactions with a sincere desire to comprehend and absorb various cultural viewpoints. By enabling more effective and meaningful intercultural relationships, having positive attitudes toward other cultures can help lessen prejudice, stereotypes, and ethnocentrism.

The significance of acquiring knowledge about one's own culture and the cultures of others is obvious. Understanding traditions, values, beliefs, social customs, history, and other elements that contribute to the cultural identity of people and groups correspond to this category [6]. Knowledge provides fundamental understanding for individuals to recognize and value cultural diversity, identify cultural similarities and distinctions and comprehend how the environment affects conversations between cultures [7]. Understanding other cultures offers the foundation for efficient communication and enables

people to deal with cultural differences with sensitivity and empathy.

The skills of interpreting and relating as well as those of discovery and interaction respectively make up the third and fourth elements of the ICC model. These abilities serve as prerequisites for effective cross-cultural communication. On one hand, the capacities to accurately read verbal and nonverbal signs, comprehend the intended meanings of messages, and relate to the cultural settings in which communication occurs are all parts of the interpreting and relating skills [8, 9]. This also includes being able to adjust one's communication style, use appropriate language and nonverbal cues, and comprehend cultural differences in communication patterns. On the other hand, the ability to relate meaningfully and authentically with people from various cultures is referred to as having "discovery and interaction skills" [10, 11]. This means actively looking for opportunities to learn about other cultures, conversing with others, and being receptive to numerous viewpoints. Discovering and interacting skills also include negotiating cultural differences, developing relationships based on mutual respect and understanding, and managing intercultural issues productively.

Lastly, a notion that has been the central part of ICC is critical cultural awareness. Cultural awareness is a continuum that ranges from basic knowledge and understanding of one's own culture to advanced awareness of other cultures [12]. Intercultural awareness, a higher level of competency, underline the capacity to engage in and negotiate cultures that differ from one's own, enabling effective communication, and building bridges to understanding. It relates to the capacity to understand and evaluate how cultural dynamics, power relations, and social injustices affect cross-cultural encounters [13]. Meanwhile, it entails challenging cultural assumptions, biases, and stereotypes as well as being conscious of the wider social, political, and historical contexts in which cultural identities are formed [14].

Critical cultural awareness exceeds an in-depth understanding of variations in culture. It promotes reflective exploration of one's own cultural viewpoints and prejudices as well as the structural factors that influence cross-cultural interactions. This involves looking into factors like privilege, oppression, discrimination, and social injustice that may affect intercultural communication. People can dispute and challenge common misunderstandings and stereotypes connected with various cultures by cultivating critical cultural awareness, and they may develop a greater awareness of the disparities in power and unfairness that might arise in cross-cultural relationships and endeavor to advance social justice and inclusivity. Acknowledging the complexity and diversity within cultures is another aspect of critical cultural awareness [7]. Moving beyond simplistic generalizations or preconceptions, it allows people to comprehend the nuanced distinctions and the intrinsic variety among cultures. Furthermore, critical cultural awareness involves actively seeking alternative points of view and interacting with people from other

cultural backgrounds [15]. It requires that individuals pay close attention, connect with others, and validate their experiences and opinions. By accepting and valuing other points of view, people may create an intercultural environment that is more inclusive and collaborative. Continuous self-reflection, education, and exposure to various cultural experiences are all necessary factors to develop critical cultural awareness. By being willing to question one's presumptions, biases, and conceptions; calling for a readiness to absorb new information, and educating oneself on the barriers, struggles, and history of marginalized or underrepresented groups, individuals can go beyond surface-level encounters and forge deeper bonds with those from various cultural backgrounds by incorporating critical cultural awareness into intercultural communication. Thus, they may gain the skills necessary to navigate cultural differences, resolve issues, and advance respect and understanding between individuals.

B. Online Education Forum

The online education forum is a virtual platform or website that facilitates discussions, interactions, and information sharing among learners, educators, or experts in an educational context [16]. It serves as a digital platform where participants can actively engage in conversations, ask questions, seek scaffolding, broaden their eyesight, and learn new knowledge. The forum provides a means for individuals to interact with one another, exchange ideas, and collectively enhance the learning experience through the use of online communication tools, such as social media like Instagram and Twitter, video conference platforms like Zoom and Teams, or messaging systems. It aims to create a community for learners who can connect, support each other, and access educational resources and guidance from peers and instructors.

Previous studies have highlighted that online education has priorities on language acquisition by the following four main advantages. 1. The removal of time and place restrictions, enabling students to access learning resources at any time and from any location [17]. 2. Increasing interaction, teamwork, and contact in real-world situations for language acquisition across educational contexts [18]. 3. Possibilities for language learning to take place in a variety of contexts and offer a platform for practice in interpersonal learning, thanks to the advantages of mobile devices with multimedia capabilities [19]. 4. Giving language learners the ability to manage their own learning according to their own preferences and real-world requirements [20]. The portability and flexibility of mobile devices can be customized to meet learners' needs to develop the language level at their own pace both in the classroom and in outdoor informal learning [21], which furthermore leads to the development of self-awareness and Self-Regulated Learning (SRL) skills [22]. During the SRL process, these skills are crucial components of academic success and have influences on sustainable learning [23, 24]. In addition, users with mobile devices can easily collaborate, share information, and meaningfully interact with others [25]. Numerous studies indicate that participant interaction, whether it be between

participants or between participants and the teacher, is one of the best indications of good outcomes in online learning environments [26]. Furthermore, researchers have also discovered how effectively mobile devices are used in diverse contexts for language learning and development and have come to the conclusion that, when used appropriately, mobile technology will advance linguistic development [20, 27]. In other words, mobile devices with multimedia capabilities make it possible for language learning to take place in a variety of contexts and offer a platform for practice in interpersonal learning [22]. As a way of implementing technology in language learning, by breaking down barriers of time, distance, and language, online education forums play a significant role in facilitating intercultural communication skills.

First, online education forums provide Chinese students with an exclusive chance to connect with people from various cultural backgrounds [21]. Students can interact with peers from other nations, cultures, and belief systems through discussions, forums, and shared learning activities. Their exposure to various viewpoints has a crucial role in deepening their understanding of various cultures and fostering cross-cultural interaction. Chinese students can develop a more nuanced understanding of the world through chatting with others and exchanging ideas. This allows them to comprehend the world from multiple perspectives and dare to challenge their own cognitive structure. They will acquire an appreciation for the existing cultural diversity and an understanding of the relevance of many points of view. This exposure promotes cultural curiosity, eliminates misunderstandings, and cultivates an inclusive and open-minded context, all of which are essential for successful cross-cultural communication.

Second, students may gain language proficiency in online forums. The traditional teaching strategy in China gives students very little opportunity to participate in class, focusing instead on the grammatical competence and the explicit understanding of language norms, despite the fact that participation is an important component of evaluating students' learning results and their application potential [7, 25]. In this way, students pay much attention to getting high exam scores while ignoring the practical application of the target language. As a result, many students find it difficult to use the language in a communicative way, such as exchanging information, sharing thoughts and sentiments, etc. Chinese students can use these forums as a practice platform and an environment for improving their language abilities. Effective communication in the common language is necessary for participating in discussions, expressing ideas, and comprehending the perspectives of others. Under this situation, online education forums function as language laboratories, helping Chinese students to improve their language skills in real-world contexts. Students who take an active role will get access to improve their vocabulary, grammar, and communication abilities as well as their self-confidence in speaking up for themselves. They will learn to modify their language use as they interact with peers who may have diverse linguistic backgrounds, which helps

guarantee successful and clear communication. Furthermore, language practice goes beyond linguistic proficiency in online educational forums. Additionally, students gain awareness of idiomatic terms, cultural references, and cross-cultural communication standards. Due to students' ability to overcome language obstacles and communicate with better sensitivity to cultural nuances, this linguistic and cultural understanding promotes smoother interactions across cultures.

In addition, students can deepen their awareness of cultural norms, traditions, and customs by active participation in online debates and collaboration, and exposure to various cultural perspectives [23]. Engaging with peers from other backgrounds allows students to be exposed to a diversity of cultural customs and beliefs. In this way, misconceptions are revealed and a deeper understanding of the diversity and complexity of cultures is established. It promotes a more sensitive and open-minded perspective by challenging learners to consider their own presumptions and biases. Additionally, online discussion boards for learning provide a secure environment where students can deliver questions, obtain answers, and engage in intercultural communication. This free flow of ideas shows respect and fosters intercultural understanding. Through active listening, empathy, and curiosity, Chinese students can develop a deeper appreciation for the perspectives and experiences of individuals from different cultures, laying the foundation for meaningful intercultural communication.

Third, the role of scaffolding implies that learning is not merely an individual process but also highly influenced by social and cultural influences [24], this idea is crucial for education. Therefore, transferring the responsibility from the teacher to the students, peer scaffolding is an essential strategy to help students cross the zone of proximal development and gradually decrease the support as the student becomes more competent and independent since assistance among peers in a collaborative learning environment and interaction between peers helps re-construct knowledge [24]. Online education forums are appropriate platforms to achieve effective peer scaffolding as they often contain collaborative activities, such as group discussions and problem-solving tasks. Engaging in such collaborative tasks with students from different cultural backgrounds enhances Chinese students' teamwork and collaboration skills. When participating in multicultural teams, students are exposed to various communication, decision-making, and problem-solving methods. They develop the skills to work around these cultural variations, modify their communication approaches, and discover points of agreement to accomplish common objectives.

III. CHALLENGES OF ONLINE EDUCATION FORUMS IN CHINA

Although online education forums reveal great benefits to intercultural communicative skills, there still exist several challenges and limitations in applying this method in the Chinese context.

First of all, there is a problem with the inconsistent quality of the content in online education forums [28, 29].

Everyone is free to voice their thoughts in these forums, but that does not imply that these opinions are true or trustworthy. Incorrect information and low-quality material have made their way into the forums as a result of the absence of an authorized review mechanism and rigorous academic requirements, leading to users' disorientation and confusion. Additionally, some irresponsible speakers may release incorrect educational views, misleading educational facts, or even propagate bad information owing to the forum's openness and anonymity, which will have a detrimental impact on educational and teaching activities.

Second, the protection of intellectual property causes difficulties for online education forums. Teachers and students frequently exchange educational resources and learning outcomes in online educational forums. These resources and accomplishments are, however, easily manipulated or illegally transmitted due to the lack of the efficient Intellectual Property Rights (IPR) framework, resulting in losses and unfairness to knowledge providers. Strengthening the protection of intellectual property rights, establishing a suitable copyright and an intellectual property management mechanism, and encouraging the creation and sharing of knowledge are all important to support the healthy development of online education forums.

Third, online education forums also have certain difficulties with engagement and communication [30]. Although online platforms can help instructors and students communicate across regions and institutions, the depth and effectiveness of the communication may be constrained by the absence of face-to-face engagement and conversation. Instead of using their actual voices and body language, people tend to communicate in online education forums mostly using words and photos. Due to the fact that they require greater practical demonstration and direct observation, this may limit the presentation of some educational issues and teaching strategies. Additionally, despite the fact that online education forums offer a variety of contact opportunities, the majority of users frequently just act as passive acceptors of information. As a result, there is an issue with silent groups' voices not being adequately expressed and heard. Due to technology use obstacles, language communication challenges, and other factors, some students, educators, and parents may decide to remain mute in online educational forums, which prevents their questions and needs from being addressed and solved in time. Additionally, while online education forums frequently provide a wide platform for the exchange of educational materials, they do not offer targeted instruction to meet each student's unique needs. While each student has a unique learning style and personal needs, it can be challenging to fulfill those needs when using the extensive and generally applicable teaching resources available on online discussion boards.

IV. IMPLICATIONS

Although facing some challenges, there are numerous ways to localize online English forums to better suit the

Chinese context for promoting students' intercultural communication skills.

Create comprehensive and culturally adequate content: It is crucial to create inclusive and culturally appropriate content in online educational forums to promote cross-cultural dialogue [31, 32]. There are various ways to achieve this, firstly integrate diverse cultural experiences and opinions in courses and conversations for students to develop a more thorough understanding of cultural diversity, case studies, examples, and materials representing various cultural origins are provided. Secondly, pick subjects that address intercultural interaction and cultural diversity, such as the obstacles of intercultural communication, cultural values, stereotypes, or adjustment. The sharing of one's own cultural experiences and perspectives should be encouraged among learners. Thirdly, offer multilingual support in online discussion forums for education. Provide subtitles or translations for key points, while motivating students to express themselves in their native language to help them participate in the conversation with greater confidence and feel more at ease.

Encourage intercultural cooperation: One efficient strategy to improve intercultural communication skills is to encourage collaboration among students from various cultural backgrounds. Assign group assignments or projects that require students from various cultural backgrounds to work together. Establish precise standards and goals, emphasizing the value of understanding cultural differences and effective communication. During the collaborative process, promote regular contact, reflection, and the exchange of cultural perspectives. Arrange online educational forums for virtual cultural exchange. Pairs of students from other cultures can participate in discussions, interviews, or cultural performances. This interaction promotes learners to ask questions and share insights about one another's cultures while also facilitating direct exposure to various societies. Moreover, encourage students to provide their other students constructive criticism. Learners can develop their international communication skills and obtain a greater awareness of various cultural views by actively participating in the review of others' work.

Develop awareness of intercultural communication: Fostering intercultural communication awareness involves providing learners with opportunities to gain and apply specific skills to enhance their intercultural communication abilities [33]. It is important to emphasize the significance of empathy and active listening in cross-cultural communication. Students should be encouraged to ask clarifying questions, attentively listen to other's perspectives, and demonstrate genuine understanding and empathy. Practical illustrations and exercises should be incorporated to strengthen these skills. In online learning environments, it is beneficial to include cultural sensitivity training courses in the discussion boards. These courses can cover topics such as cultural taboos, values, and non-verbal communication. To help students navigate cultural differences respectfully, learning materials, films, or simulations can be provided.

Techniques for resolving conflicts arising from cultural misinterpretations should also be introduced, focusing on communication and understanding across cultural boundaries. Role-playing exercises and case studies can serve as practical examples and facilitate the development of these skills.

Encourage intercultural conversation and consideration: Creating an environment that values conversation and exchange across many cultures is crucial for fostering the development of ICC. To focus on intercultural communication issues in the context of online learning, particular discussion spaces should be set aside. According to post-methods and post-normative approaches, the process should be taken into more consideration rather than the product [29, 33]. Therefore, actively promoting student participation, question-asking, experience-sharing, and engaging in productive arguments is also important. Facilitators should steer the talks, clear up any misunderstandings, and emphasize key points, with the teaching and learning process including reflection tasks [34]. Additionally, to better localize themselves in the forums, students should be encouraged to recognize their own cultural identities, prejudices, and stereotypes [35, 36]. It is advisable to nudge them to consider how they may put their intercultural communication abilities to use in practical contexts.

V. CONCLUSION

Online education forums have developed as a significant medium for fostering intercultural communication skills among Chinese learners, who are becoming increasingly aware of the need for intercultural communication competency in today's globalized world. When interacting with people from different cultural backgrounds, it's important to be able to comprehend their perspectives and modify your communication tactics accordingly. This is what's known as intercultural communication competence.

Chinese learners' intercultural communication abilities are significantly improved through online education forums in a variety of ways. First of all, by exposing students to various cultures, these forums help them to value variety, eliminate biases, and foster cross-cultural understanding. Second, by offering chances for language practice and improvement, online forums support language development by enabling speakers to participate in debates, exchange ideas, and communicate in their native tongues. Third, online education forums work as platforms for knowledge sharing, providing students the opportunity to access valuable information, teaching them about various cultural behaviors, traditions, and customs, and deepening their grasp of global concerns. Additionally, when learners navigate cultural differences, negotiate over terms, and cooperate to achieve common objectives, collaborative learning experiences on online forums promote meaningful intercultural communication.

However, some issues and restrictions limit the effectiveness of online discussion forums for education in China. Meaningful engagement and cultural interaction might be limited by language difficulties, such as poor

English proficiency or unfamiliarity with other languages used in multilingual forums. Besides, China's internet censorship regulations limit access to specific online platforms, limiting exposure to various cultural ideas and cross-border conversations. As Chinese language learners adjust to the many communication conventions, styles, and practices common on online forums, cultural differences may also present difficulties. Furthermore, the learning experience can also be impacted by the lack of management and quality control on online education forums, which can impair the truthfulness and precision of the intercultural knowledge presented. These issues must be resolved to fully realize the promise of online educational forums in fostering Chinese learners' intercultural communication abilities. There are several recommendations, such as emphasizing the improvement of language skills, arguing for unrestricted use of online platforms, offering training on cultural sensitivity, and putting good moderation and quality control systems in position. The development and implementation of intercultural communication projects which are specifically customized for the needs of Chinese learners can also be facilitated by partnerships between educational institutions, governmental organizations, and online forum managers. In general, online education forums have the potential to considerably improve the intercultural communication skills of Chinese learners, but it is imperative to solve the difficulties and barriers to guarantee a more effective and inclusive educational experience for them.

CONFLICT OF INTEREST

The author declares no conflict of interest.

REFERENCES

- [1] D. Landis, J. M. Bennett, and M. J. Bennett, *Handbook of Intercultural Training*, Thousand Oaks (Calif.): Sage, Cop, 2004, pp. 147–165.
- [2] J. Huntington, "From foreign language education to education for intercultural citizenship: Essays and reflections by BYRAM, MICHAEL," *The Modern Language Journal*, vol. 94, no. 1, pp. 148–150, Mar. 2010.
- [3] P. P. Desai, B. A. Dodor, and E. B. Carroll, "Exploring one's family heritage to enhance self-awareness: A step toward developing cultural competence," *Family Relations*, vol. 69, no. 1, pp. 76–91, Sep. 2019.
- [4] E. Akbari, A. Naderi, R.-J. Simons, and A. Pilot, "Student engagement and foreign language learning through online social networks," *Asian-Pacific Journal of Second and Foreign Language Education*, vol. 1, no. 1, Apr. 2016.
- [5] Z. Sun, C.-H. Lin, J. You, et al., "Improving the English-speaking skills of young learners through mobile social networking," *Computer Assisted Language Learning*, vol. 30, no. 3–4, pp. 304–324, Apr. 2017.
- [6] H. Betancourt and S. R. López, "The study of culture, ethnicity, and race in American psychology," *American Psychologist*, vol. 48, no. 6, pp. 629–637, 1993.
- [7] S. R. Harper and S. J. Quaye, *Student Engagement in Higher Education: Theoretical Perspectives and Practical Approaches for Diverse Populations*, New York: Routledge, 2009.
- [8] A. P. Gilakjani and M. R. Ahmadi, "A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement," *Journal of Language Teaching and Research*, vol. 2, no. 5, Sep. 2011.

- [9] C. E. Hmelo-Silver, R. G. Duncan, and C. A. Chinn, "Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006)," *Educational Psychologist*, vol. 42, no. 2, pp. 99–107, Apr. 2007.
- [10] J.-S. Chen and S. Yang, "Fostering foreign language learning through technology-enhanced intercultural projects," *Language Learning & Technology*, vol. 18, no. 1, pp. 57–75, Feb. 2014.
- [11] M. G. Mighani, M. Yazdanimoghaddam, and A. Mohseni, "Developing intercultural awareness and skills in English majors: A constructivist approach," *Journal of Teaching Language Skills*, vol. 38, no. 3, pp. 81–112, Oct. 2019.
- [12] C. Sinicrope, J. E. Norris, and Y. Watanabe, "Understanding and assessing intercultural competence: A summary of theory, research, and practice (Technical report for the Foreign Language Program Evaluation Project)," *University of Hawai'i Second Language Studies Paper*, vol. 26, no. 1, Jan. 2007.
- [13] B. Mullings, "Insider or outsider, both or neither: Some dilemmas of interviewing in a cross-cultural setting," *Geoforum*, vol. 30, no. 4, pp. 337–350, Nov. 1999.
- [14] K. V. Hardy and T. A. Laszloffy, "The cultural genogram: Key to training culturally competent family therapists," *Journal of Marital and Family Therapy*, vol. 21, no. 3, pp. 227–237, Jul. 1995.
- [15] R. Brislin, R. Worthley, and B. Macnab, "Cultural intelligence," *Group & Organization Management*, vol. 31, no. 1, pp. 40–55, Feb. 2006.
- [16] E. M. Onyema, E. C. Deborah, A. O. Alsayed, et al., "Online discussion forum as a tool for interactive learning and communication," *International Journal of Recent Technology and Engineering*, vol. 8, no. 4, pp. 4852–4859, Nov. 2019.
- [17] L. F. Motiwalla, "Mobile learning: A framework and evaluation," *Computers & Education*, vol. 49, no. 3, pp. 581–596, Nov. 2007.
- [18] F. Li, S. Fan, and Y. Wang, "Mobile-Assisted language learning in Chinese higher education context: A systematic review from the perspective of the situated learning theory," *Education and Information Technologies*, Apr. 2022.
- [19] M. Lamy and R. Hampel, *Online Communication in Language Learning and Teaching*, Springer, 2007.
- [20] C.-C. Lin, V. Lin, G.-Z. Liu, et al., "Mobile-Assisted reading development: A review from the activity theory perspective," *Computer Assisted Language Learning*, vol. 33, no. 8, pp. 1–32, May 2019.
- [21] Y.-T. Sung, K.-E. Chang, and T.-C. Liu, "The effects of integrating mobile devices with teaching and learning on students' learning performance: A meta-analysis and research synthesis," *Computers & Education*, vol. 94, pp. 252–275, Mar. 2016.
- [22] B. J. Zimmerman, "Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects," *American Educational Research Journal*, vol. 45, no. 1, pp. 166–183, Mar. 2008.
- [23] C. Dignath, G. Buettner, and H.-P. Langfeldt, "How can primary school students learn self-regulated learning strategies most effectively?" *Educational Research Review*, vol. 3, no. 2, pp. 101–129, Jan. 2008.
- [24] F. Guo, Y. Zhang, and Z. Wu, "Mobile-Assisted vocabulary learning through the Shanbay App outside the classroom: Effects of self-regulation and peer scaffolding," *Frontiers in Psychology*, vol. 13, Oct. 2022.
- [25] M. Moallem, W. Hung, and N. Dabbagh, *The Wiley Handbook of Problem-Based Learning*, Hoboken, NJ: John Wiley & Sons, 2019.
- [26] R. B. Marks, S. D. Sibley, and J. B. Arbaugh, "A structural equation model of predictors for effective online learning," *Journal of Management Education*, vol. 29, no. 4, pp. 531–563, 2005.
- [27] D. L. Beres, "Mobile-Assisted language learning from the student perspective," *Academic Podcasting and Mobile Assisted Language Learning: Applications and Outcomes*, Jan. 2011.
- [28] J. Li and Z. Zhang, "An intercontinental inquiry on multicultural education: Canadian and Hong Kong university students connected through a Web 2.0 learning environment," *Intercultural Education*, vol. 26, no. 6, pp. 562–583, Nov. 2015.
- [29] B. Kumaravadivelu, *Cultural Globalization and Language Education*, Estados Unidos: Yale University Press, 2008.
- [30] R.-S. Shaw, "A study of the relationships among learning styles, participation types, and performance in programming language learning supported by online forums," *Computers & Education*, vol. 58, no. 1, pp. 111–120, Jan. 2012.
- [31] A. J. Moeller and S. R. F. Osborn, "A pragmatist perspective on building intercultural communicative competency: From theory to classroom practice," *Foreign Language Annals*, vol. 47, no. 4, pp. 669–683, Nov. 2014.
- [32] D. Nandi, M. Hamilton, and J. Harland, "Evaluating the quality of interaction in asynchronous discussion forums in fully online courses," *Distance Education*, vol. 33, no. 1, pp. 5–30, May 2012.
- [33] B. Giesbers, B. Rienties, D. Tempelaar, and W. Gijssels, "A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation," *Journal of Computer Assisted Learning*, vol. 30, no. 1, pp. 30–50, Jun. 2013.
- [34] A. Kumi-Yeboah, "Designing cross-cultural collaborative online learning framework for online instructors," *Online Learning*, vol. 22, no. 4, Dec. 2018.
- [35] M. Rico-García and L. V. F. Burns, "Intercultural communication in engineering studies: A key competence in global labour markets," *European Journal of Engineering Education*, vol. 45, no. 6, pp. 833–853, Sep. 2019.
- [36] J. Dewey and M. L. Rogers, *The Public and Its Problems*, Penn State Press, 2012.

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