

Communicative Competence in Russian Universities: The Impact of Social Learning Factors and Technology Usage

Svetlana Drepak ¹, Hazleena Baharun ², Haliza Binti Harun ³, Maziahtusima Binti Ishak ⁴

^{1,2,3,4} Faculty of Major Language Studies, Universiti Sains Islam Malaysia

Email: ¹ svetlana@raudah.usim.edu.my, ² hazleena@usim.edu.my, ³ haliza@usim.edu.my, ⁴ mshima@usim.edu.my

Article history Submitted: 28 May, 2026 Revised: 10 June, 25 July, 2026 Accepted: 26 July, 2026	Abstract Communicative competence (CC) is increasingly identified as a core graduate capability. However, the development of CC in Russian higher education is still limited due to the dominance of written form and teacher-centred instruction. This study examines the impact of peer learning and student-teacher interaction on CC. The study also examines the moderating role of technology usage. The data was collected from 302 undergraduate students from five universities in Russia. The data was analysed using AMOS. The result of this study showed that peer learning and student-teacher interaction affected positively the CC. In addition, the technology usage moderated the impact of peer learning and student-teacher interaction on CC. The study integrated the social factor and technology usage and highlighted the importance of collaborative learning and technology enhanced pedagogies to improve CC.
Keywords: <i>Communicative Competence, Peer Learning, Student-Teacher Interaction, Technology Usage.</i>	

1. Introduction

During the last decades and with the increasing trend toward globalization, English language has become an important competence for employment and advancement in career development. Universities around the world has increased their focus on communicative competence (CC) to enhance the capability of students and prepare them for the market. Consequently, CC is no longer regarded solely as a linguistic outcome but as a key component of graduates' professional readiness and global engagement (Onishchuk et al., 2020). The growing emphasis on communication-oriented learning is closely associated with the theoretical development of CC in applied linguistics. Early linguistic theory, particularly Chomsky (1972) notion of linguistic competence, focused primarily on grammatical knowledge while paying limited attention to the social and contextual dimensions of language use. This perspective was later challenged by Hymes (1972), who introduced CC to highlight the sociocultural appropriateness of language in real communication. Subsequent contributions by Canale and Swain (1980) conceptualized CC as a multidimensional construct encompassing grammatical, sociolinguistic, discourse, and strategic competencies. These theoretical developments repositioned language learning as a socially situated process in which communicative ability emerges through interaction, contextual understanding, and meaningful engagement rather than through grammatical mastery alone (Alzhanova & Chaklikova, 2022).

Building on this perspective, contemporary language education increasingly emphasizes interaction-based learning approaches that encourage communication through collaboration and dialogue. Sociocultural theory (Vygotsky, 1978) explains that learning occurs through socially mediated interaction in which knowledge is co-constructed through dialogue with peers and guidance from more knowledgeable others, such as teachers (Bervell et al., 2020). Within this framework, peer learning and student-teacher interaction represents two central mechanisms through which learners engage in communicative practice, receive feedback, and gradually develop CC. Peer learning provides opportunities for collaborative problem-solving, negotiation of meaning, and reciprocal feedback, while student-teacher interaction enables scaffolding, guidance, and the creation of supportive learning environments that encourage active participation (Markowski et al., 2021). These interactional processes are therefore essential for promoting communicative engagement and developing students' ability to use language effectively in real-world contexts.

Despite the increasing recognition of interaction-based learning, the implementation of communicative approaches varies considerably across educational systems (Kaldarova et al., 2024). In Russia, foreign language instruction has historically been shaped by Soviet educational traditions that emphasized grammatical accuracy, written assessment, and teacher-centred pedagogy (Dagsland, 2020). Although educational reforms have been introduced to promote communicative language teaching, many universities still provide limited opportunities for interactive communication and collaborative learning (Mustafina et al., 2021). As a result, students often acquire strong theoretical knowledge of language structures but demonstrate limited communicative fluency and confidence in authentic communication settings (Ilyashenko et al.,

2019). These conditions highlight the importance of examining the social interaction processes that support CC development in higher education.

At the same time, rapid technological advancement has introduced new opportunities for enhancing language learning environments. Digital technologies such as online communication platforms, language learning applications, and collaborative learning systems have the potential to expand opportunities for interaction, feedback, and communicative practice beyond traditional classroom boundaries (Zhang & Pérez-Paredes, 2019). From a sociocultural perspective, technology can function as a mediational tool that facilitates collaborative learning and interaction among students and instructors (Kaldarova et al., 2024). However, technology itself does not directly predict CC; rather, it may strengthen or weaken the effectiveness of interactional learning processes. Despite the growing integration of digital technologies in education, limited empirical research has examined how technology usage influences the relationship between classroom interaction and CC development (Novawan et al., 2021). Addressing this gap, the present study investigates the influence of peer learning and student–teacher interaction on CC among undergraduate students in Russian universities while examining the moderating role of technology usage. By focusing on these interactional and technological mechanisms, the study aims to provide deeper insights into how CC develops within contemporary higher education environments.

2. Literature

2.1 Theoretical Framework

This study is grounded in Sociocultural Theory (SCT), technology-mediated language learning (TMLL), and the CC framework to explain how communicative ability develops in higher education. These perspectives view CC not merely as linguistic knowledge but as a socially constructed capability that emerges through interaction and meaningful participation in communicative activities (Vygotsky, 1978; Canale & Swain, 1980). Accordingly, classroom interaction plays a central role in enabling learners to practice language and develop communicative skills. Sociocultural theory posits that learning occurs through social interaction and guided participation within the Zone of Proximal Development (ZPD) (Vygotsky, 1978). In language learning contexts, CC develops when students engage in dialogue, negotiate meaning, and receive feedback from others. Within the classroom environment, peer learning and student–teacher interaction represents key mechanisms that facilitate such interactional learning processes. Peer learning enables collaborative communication and reciprocal feedback among students, while student–teacher interaction provides instructional scaffolding that supports communicative development (Novawan et al., 2021; Wong & Moorhouse, 2021). The outcome construct is anchored in the CC framework, which conceptualizes language proficiency as the ability to use language effectively and appropriately across social contexts (Hymes, 1972; Canale & Swain, 1980). This perspective emphasizes that CC develops through contextual interaction rather than isolated linguistic instruction. In addition, research on technology-mediated language learning suggests that digital technologies can expand opportunities for communication and collaboration beyond traditional classroom settings (Ben Youssef et al., 2022). From this perspective, technology functions as a mediational tool that supports interactional learning processes. Accordingly, this study conceptualizes technology usage as a moderating factor that may strengthen the effects of peer learning and student–teacher interaction on CC.

2.2 Conceptual Model

Based on SCT and CC framework, this study proposes that the effect of peer learning and student–teacher interaction on CC is positive and significant. The study also proposes that the technology usage moderates the positive effect of peer learning and student–teacher interaction on CC. Figure 1 shows the conceptual framework of this study.

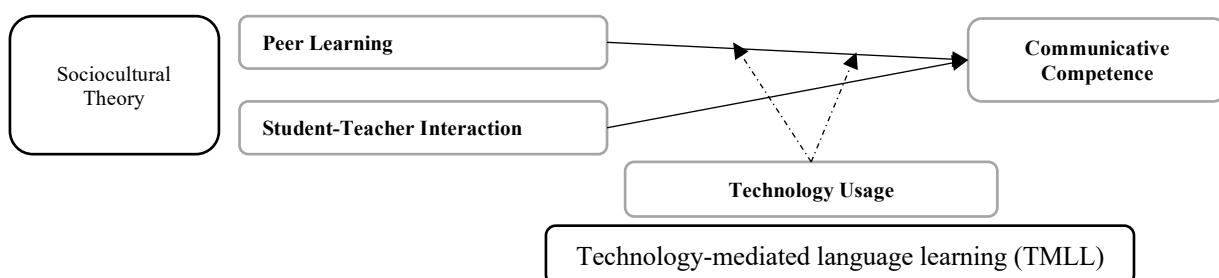


Figure 1: Proposed Conceptual Model

2.3 Hypotheses Development

This study includes four hypotheses. The hypotheses include direct effects and moderating effects. The hypotheses are discussed in the following sections.

2.3.1 Peer Learning and CC

Peer learning involves students with similar knowledge or abilities working together in pairs or small groups to learn from each other. Based on sociocultural theory by Vygotsky (1978), peer learning facilitates the development of CC through collaborative interactions, where students scaffold each other's language acquisition within their zone of proximal

development. Existing research demonstrates that peer learning enhances psychological well-being (Pangantihon & Tantiado, 2024), fosters deeper learning through cooperation, and improves academic performance in blended environments (Lim et al., 2020). These benefits emerge from the dynamic interplay of mutual support and authentic language practice among peers who share established relationships (Wu & Dong, 2024), with the specific pedagogical implementation varying across contexts (Danzeng, 2024). Building on this theoretical and empirical foundation, this study believes that peer learning contributes to CC development by creating opportunities for collaborative language practice and reciprocal feedback. Consequently, the following hypothesis is proposed:

H1: Peer learning has a positive relationship with CC among undergraduate students.

2.3.2 Student-Teacher Interaction and CC

Positive student-teacher interactions have been shown in several studies to significantly improve the learning and participation of students (Çebi, 2022; Dörnyei & Muir, 2019). According to these studies, students feel more encouraged to participate in class, take part in communicative activities, and take risks while speaking the target language when instructors provide a good and encouraging classroom atmosphere. Within the ZPD framework, teachers serve as knowledgeable others who provide: (1) tailored linguistic scaffolding that bridges students' current and potential competence levels, (2) calibrated feedback that promotes gradual skill internalization, and (3) a socially supportive environment that reduces affective barriers to language production (Daumiller & Hemi, 2025). These interactional features create optimal conditions for CC development by enabling students to attempt complex communicative tasks beyond their independent capabilities, while receiving immediate guidance on appropriateness, fluency, and cultural pragmatics (Namaziandost et al., 2024). The anticipated positive relationship specifically aligns with SCT's emphasis on guided participation (Vygotsky, 1978). Therefore, this study believes that the effect of student-teacher interaction on CC is positive and significant.

H2: Student-teacher interaction has a positive relationship with CC among undergraduate students.

2.3.3 Moderating Role of Technology Usage

Empirical studies indicate that online language learning platforms, mobile applications, and language exchange tools facilitate meaningful language practice by enabling learners to interact with peers and native speakers, engage in multimodal communication, and access authentic linguistic input (Curran et al., 2021; Karasimos, 2022). These environments support key communicative processes such as negotiation of meaning, collaborative dialogue, and exposure to varied sociolinguistic contexts, all of which are central to CC development. Digital platforms function as mediational tools that facilitate peer learning and student-teacher interaction by enabling socially situated communication and collaborative knowledge construction (Novawan et al., 2021).

Despite the growing recognition of technology's role in language learning, empirical research examining technology usage as a moderating variable remains limited, particularly in educational contexts. Existing moderation studies in related domains suggest that technology can alter the strength of relationships between social or organisational variables and performance outcomes. Prior research has demonstrated that technology can act as a moderating factor in the relationship between social processes and performance outcomes in organisational settings (Tyagi & Dhar, 2017). While conducted outside the educational context, this finding illustrates the broader principle that technology can alter how social interactions translate into outcomes, a mechanism that this study extends to CC in language learning environments. Sa'ad Al Hyari (2023) found that technology moderated the relationship between resistance management and successful transition to distance learning. In educational research, Yuan et al. (2022) found that students' attitude toward technology, rather than the mere use of technology, moderated the relationship between innovation climate and academic self-efficacy. Their findings indicate that learners' perceptions of technology can influence how social and environmental factors translate into learning-related outcomes.

Building on TMLL and prior moderation research, this study conceptualizes technology usage as a contextual amplifier rather than an independent instructional approach. Specifically, high levels of technology usage are expected to enhance the positive effects of peer learning and student-teacher interaction on CC by increasing access to authentic language input, expanding interactional opportunities, and supporting sustained communicative practice. Conversely, low levels of technology usage are expected to weaken these relationships by limiting learners' exposure to diverse communicative contexts and reducing opportunities for interactive language use. Accordingly, the following is hypothesized:

H3: Technology usage moderates the relationship between peer learning and CC.

H4: Technology usage moderates the relationship between student-teacher interaction and CC.

3. Research methodology

This study employs a quantitative, deductive methodology to test a theoretically specified model of CC development among undergraduates in Russian higher education. The study population comprises undergraduate students from five major public universities in Russia, Moscow State University, HSE, RANEPA, Bauman Moscow State Technical University, and RUDN University, selected to ensure broad disciplinary and geographic coverage. Consistent with the study's problem framing, sampling targeted non-English majors who are enrolled in compulsory English courses, a group frequently characterised by long formal exposure to English but constrained opportunities for sustained interactive use,

given the continued dominance of grammar- and literacy-oriented instruction in many contexts (Onishchuk et al., 2020; Shcherbakova & Ilina, 2019). A purposive sampling strategy was implemented with an initial screening item to confirm eligibility. Instrument development followed a rigorous adaptation-and-validation protocol. Items were drawn from established measures for peer learning, self-efficacy, student–teacher interaction, social influence, technology usage, and CC, then refined to reflect English learning experiences within Russian universities while preserving conceptual equivalence. Content validity was strengthened through expert review by scholars in linguistics and language education, followed by a pilot test to assess clarity and internal consistency; reliability evidence supported retention of the final scales at conventional thresholds (Hair et al., 2017; Sekaran & Bougie, 2019). Given the respondent population, the questionnaire was translated into Russian using a back-translation procedure to protect semantic accuracy and reduce measurement bias. Data were collected online through university-associated communication channels for English courses during the Spring semester, yielding 310 usable responses from an initial distribution plan aligned with institutional population proportions.

Table 1: Research Design

Aspect	Description
Methodology	Quantitative, deductive
Theoretical Framework	SCT
Hypotheses	Peer learning and student–teacher interaction on CC
Moderator	Technology usage
Design	Explanatory, cross-sectional survey
Measurement	Multi-item scales, five-point Likert format
Population	Undergraduate students
Universities	Moscow State University, HSE, RANEPa, Bauman Moscow State Technical University, RUDN University
Sampling	Purposive sampling
Eligibility	Non-English majors in compulsory English courses
Instrument Development	Adaptation-and-validation protocol, items from established measures
Validity	Expert review, pilot test
Reliability	Retention of final scales at conventional thresholds
Translation	Back-translation procedure
Data Collection	Online via university communication channels, Spring semester
Responses	310 usable responses

4. Findings

To enhance the quality of the collected data, several analyses were conducted. The missing value was checked followed by outliers, normality, and multicollinearity. This has resulted in reducing the valid and complete responses to 302. In addition, the data was found to be normally distributed and no multicollinearity issues. In the next section, the measurement model and structural model are assessed to answer the research questions and test the hypotheses of this study.

4.1 Measurement Model

Four variables were included in this study and the study examined their mean score and found that they have high to moderate level indicating that the respondents have agreement level with the variable of the study. The study evaluated the measurement model by conducting the confirmatory factor analysis (CFA). A modification index was consulted to improve the level of indices. As a results, some of the items were removed. After removing the problematic items, the level of the indices improved significantly. The final measurement model achieved acceptable fit on key indices (CFI and IFI > 0.90; RMSEA < 0.08), and while GFI remained below 0.90 (GFI = 0.841), proceeding was justified because multiple core indices met recommended thresholds and all retained indicators demonstrated adequate standardized loadings.

Table 2 provides the psychometric summary for the finalized measurement model. All constructs satisfied internal consistency requirements, with Cronbach's alpha (CA) ranging from 0.75 to 0.85 and composite reliability (CR) from 0.76 to 0.88, exceeding the commonly accepted threshold of 0.70. Convergent validity was also supported, as AVE values ranged from 0.60 to 0.74, surpassing the 0.50 criterion (Awang 2014). Discriminant validity was assessed using the Fornell–Larcker criterion (Awang, 2014). The square roots of AVE (diagonal values) are higher than the corresponding inter-construct correlations in the same rows and columns, indicating that each construct shares more variance with its own indicators than with other constructs.

Table 3: Mean and Measurement Model Assessment

Variable	CA	CR	AVE
Peer Learning (PL)	0.75	0.76	0.65
Self-Efficacy (SE)	0.76	0.78	0.65
Student–Teacher Interaction (STI)	0.81	0.85	0.64
Social Influence (SI)	0.81	0.84	0.74
Technology Usage (TU)	0.85	0.88	0.71
Communicative Competence (CC)	0.80	0.81	0.60

4.2 Structural Model

The structural model was analyzed using AMOS to examine both the direct effects of peer learning and student-teacher interaction on CC as well as the moderating role of technology usage. The baseline structural model demonstrated acceptable goodness-of-fit, with most indices achieving recommended thresholds, although the GFI value (0.841) remained slightly below the suggested level of 0.90. All factor loadings exceeded 0.60, confirming adequate construct representation. The model explained 55.1% of the variance in CC ($R^2 = 0.551$), indicating a moderate level of explanatory power (Hair et al., 2023). This finding confirms that the proposed predictors collectively provide meaningful explanatory insight into CC development.

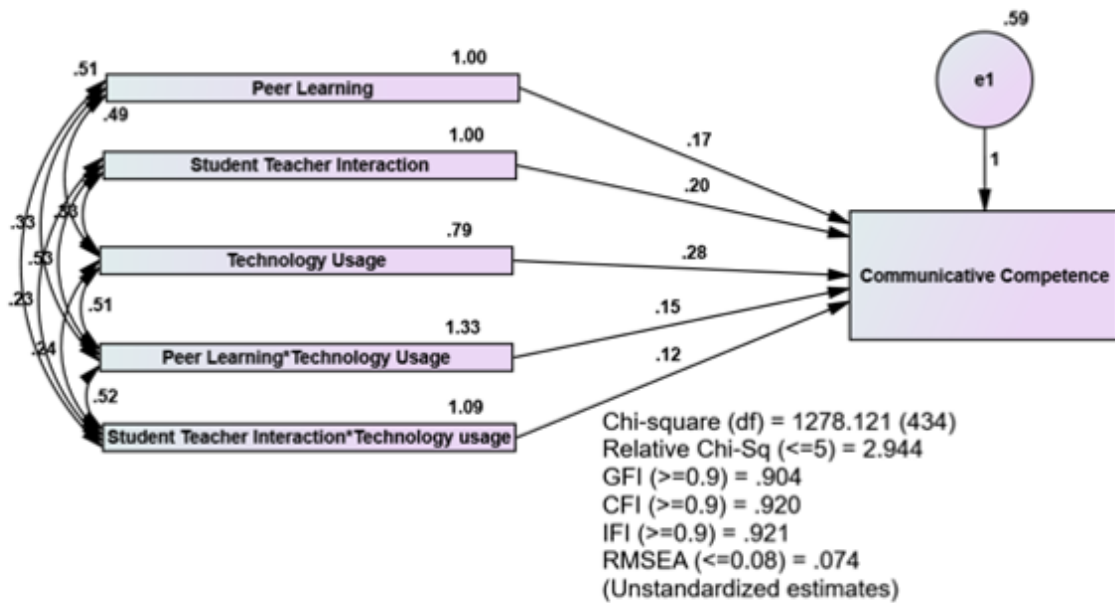


Figure 2: Structural Model of Technology Usage as Moderator

Table 4 shows the results of testing the hypothesis of this study. It shows the direct effect of social factors on CC as well as the moderating role of technology usage between social factors and CC.

Table 4: Results of Hypotheses Testing

H	D.V		I.V	Estimate	S.E.	C.R.	P	Label
H1	CC	<---	Peer learning	.171	.074	2.093	.009	Supported
H2	CC	<---	Student teacher interaction	.201	.063	2.904	.004	Supported
H3	CC	<---	Peer learning X technology Usage	.152	.051	3.013	.008	Supported
H4	CC	<---	Student teacher interaction * technology Usage	.122	.046	2.252	.019	Supported

Regarding the direct hypotheses, H1 and H2 were supported. Specifically, H1 revealed that peer learning positively influences CC ($\beta = 0.171$, $p = 0.009$), supporting SOCT, which emphasizes learning through collaborative interaction. H2 confirmed a significant positive effect of student–teacher interaction on CC ($\beta = 0.201$, $p = 0.004$), highlighting the importance of scaffolded instructional support provided by teachers as more knowledgeable others. The moderating structural model provided additional explanatory value, increasing the variance explained in CC to $R^2 = 0.599$, thereby confirming the relevance of technology usage within the framework. The results indicated that H3 and H4 were supported. Specifically, H3 showed that technology usage strengthens the relationship between peer learning and CC ($\beta = 0.152$, $p = 0.008$), suggesting that digital platforms amplify collaborative interaction opportunities. H4 confirmed that technology

enhances the effect of student–teacher interaction on CC ($\beta = 0.122$, $p = 0.019$), indicating that technology extends instructional scaffolding beyond classroom boundaries.

The findings indicate a significant positive association between peer learning and CC, suggesting that collaborative interaction plays an important role in developing students' communicative abilities. This relationship implies that CC is strengthened through dialogue, feedback exchange, and shared problem-solving rather than individual learning alone. The result supports SCT (Vygotsky, 1978), which emphasizes socially mediated learning, and aligns with empirical studies demonstrating that peer interaction enhances fluency, engagement, and communicative confidence (Hamad et al., 2021; Tang et al., 2022).

A significant positive relationship was also observed between student–teacher interaction and CC, indicating that supportive instructional communication facilitates learners' participation and language practice. Meaningful interaction with instructors appears to provide scaffolding, modelling, and emotional support that encourage communicative engagement. This finding reflects the role of the more knowledgeable other within SCT and is consistent with prior research showing that interactive teaching environments enhance willingness to communicate and communicative development (Dörnyei & Muir, 2019; Çebi, 2022).

Regarding moderation, technology usage strengthened the relationships among the variables. It strengthened the effects of peer learning and student–teacher on CC. This suggests that digital environments expand opportunities for interaction, feedback, and autonomous practice, supporting perspectives from TMLL, which conceptualize technology as a mediational tool that amplifies learning processes (Wong & Moorhouse, 2021; Novawan et al., 2021). Collectively, the findings demonstrate that CC is primarily shaped by social interaction and psychological readiness, while technology functions as a contextual enhancer rather than an independent determinant of communicative outcomes.

5. Implications

This study contributes to the CC literature by emphasizing the role of interactional learning processes in the development of CC. Drawing on SCT, the findings demonstrate that CC is not merely a linguistic outcome but emerges through social interaction within learning environments, particularly through peer learning and student–teacher interaction. By integrating these interactional processes with the CC framework, the study extends existing research by highlighting the importance of collaborative dialogue and instructional scaffolding in language learning. In addition, the study conceptualizes technology usage as a contextual moderator, showing that digital technologies can strengthen the influence of interactional learning processes on CC. Methodologically, this study contributes by applying AMOS to examine the relationships between classroom interaction and CC within a single integrated framework. The findings demonstrate the usefulness of SEM for analysing complex relationships among latent constructs in language education research and provide empirical evidence from a non-English-speaking higher education context, which remains relatively underexplored in CC studies. The findings suggest that language instruction should move beyond grammar-focused approaches toward interactive and collaborative learning environments. Encouraging peer discussion, group activities, and active teacher–student engagement can enhance communicative practice and student participation. In addition, integrating digital technologies into language learning can expand opportunities for communication and feedback, although technology should complement rather than replace face-to-face interaction.

6. Conclusion

This study examined the role of classroom interaction in the development of CC among undergraduate students in Russian universities. The findings demonstrate that CC is strongly influenced by interactional learning processes, particularly peer learning and student–teacher interaction. In addition, the study shows that technology usage strengthens the effects of classroom interaction on CC, suggesting that digital tools can expand opportunities for communication, feedback, and practice beyond traditional classroom settings. The study contributes to the literature by highlighting the importance of integrating interaction-based pedagogy with technology-supported learning environments to enhance communicative outcomes in higher education. Future research may extend this work by examining CC development across different cultural and educational contexts, employing longitudinal research designs to capture developmental changes over time, and incorporating mixed-method approaches that combine survey data with qualitative or performance-based assessments. Further studies may also explore the influence of specific digital technologies, including AI-assisted language learning platforms and collaborative online communication tools, to better understand how technology can support CC development.

References

- Alzhanova, A., & Chaklikova, A. (2022). Multilingual Education: Development of Professional Foreign Language Communicative Competence of Students in a Digital Environment. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*, 17(1), 1–13.
- Ben Youssef, A., Dahmani, M., & Ragni, L. (2022). ICT use, digital skills and students' academic performance: Exploring the digital divide. *Information*, 13(3), 129.
- Bervell, B., Umar, I. N., & Kamilin, M. H. (2020). Towards a model for online learning satisfaction (MOLS): re-considering non-linear relationships among personal innovativeness and modes of online interaction. *Open Learning*, 35(3), 236–259. <https://doi.org/10.1080/02680513.2019.1662776>
- Canale, M., & Swain, M. (1980). Theoretical bases of com-municative approaches to second language teaching and

- testing. *Applied Linguistics*, 1(1), 1–47.
- Çebi, A. (2022). How e-learning readiness and motivation affect student interactions in distance learning? *Education and Information Technologies*, 1–20.
- Chomsky, C. (1972). Stages in language development and reading exposure. *Harvard Educational Review*, 42(1), 1–33.
- Curran, N. M., Zhen, L., & Galperin, H. (2021). Pop cosmopolitanism and online language learning: Findings from a discrete choice experiment. *Information, Communication & Society*, 1–19.
- Dagland, A. (2020). *Grammar in the past and present: a historical account of the presence of grammar and linguistics in second language teaching*.
- Danzeng, Y. (2024). Mapping knowledge dynamics: social network analysis of English as a third language acquisition in Tibetan classrooms. *Journal of the Knowledge Economy*, 15(4), 18303–18327.
- Daumiller, M., & Hemi, A. (2025). Peer relationships and student motivation: Theoretical and methodological approaches, empirical evidence, and future directions. In *British Journal of Educational Psychology* (Vol. 95, Issue 4, pp. 905–923). Wiley Online Library.
- Dörnyei, Z., & Muir, C. (2019). Creating a motivating classroom environment. *Second Handbook of English Language Teaching*, 719–736.
- Hair, J., Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2023). *Advanced issues in partial least squares structural equation modeling*. saGe publications.
- Hymes, D. (1972). *On communicative competence in: Sociolinguistics*. Penguin.
- Ilyashenko, L. K., Gladkova, M. N., Kutepov, M. M., Vaganova, O. I., & Smirnova, Z. V. (2019). Development of communicative competencies of students in the context of blended learning. *Amazonia Investiga*, 8(18), 313–322.
- Kaldarova, A., Kulgildinova, T., Berdenova, S., Zakirova, G., & Zhanabayeva, S. (2024). Subject-related communicative language competence: Exploring future information technology specialists' learning and teaching. *Journal of Education and E-Learning Research*, 11(1), 26–35. <https://doi.org/10.20448/jeelr.v11i1.5288>
- Karasimos, A. (2022). The battle of language learning apps: a cross-platform overview. *Research Papers in Language Teaching and Learning*, 12(1), 150–166.
- Lim, C., Ab Jalil, H., Ma'rof, A., & Saad, W. (2020). Peer learning, self-regulated learning and academic achievement in blended learning courses: A structural equation modeling approach. *International Journal of Emerging Technologies in Learning (IJET)*, 15(3), 110–125.
- Markowski, M., Bower, H., Essex, R., & Yearley, C. (2021). Peer learning and collaborative placement models in health care: a systematic review and qualitative synthesis of the literature. *Journal of Clinical Nursing*, 30(11–12), 1519–1541. <https://doi.org/10.1111/jocn.15661>
- Mustafina, R. F., Shcherbakova, I. A., & Ilina, M. S. (2021). Interactive teaching methods as means of foreign language communicative competence formation of university students. *EntreLinguas*, 7(1), 76–85.
- Namazandost, E., Behbahani, H. K., & Naserpour, A. (2024). Peer support in language learning: Mitigating anxiety, enhancing achievement, cultivating growth mindsets, and increasing enjoyment. *Journal of Applied Learning and Teaching*, 7(2), 296–313.
- Novawan, A., Alvarez-Tosalem, S. M., Ismailia, T., Wicaksono, J. A., & Setiarini, R. B. (2021). Students' experiences of online English language learning by using YouTube. *The First International Conference on Social Science, Humanity, and Public Health (ICOSHIP 2020)*, 220–226.
- Onishchuk, I., Ikonnikova, M., Antonenko, T., Kharchenko, I., Shestakova, S., Kuzmenko, N., & Maksymchuk, B. (2020). Characteristics of foreign language education in foreign countries and ways of applying foreign experience in pedagogical universities of Ukraine. *Revista Romaneasca Pentru Educatie Multidimensionala*, 12(3), 44–65.
- Pangantihon, A. L. D., & Tantiado, R. C. (2024). Cooperative learning strategies and students' well-being. *International Journal of Multidisciplinary Research and Analysis*, 7(6), 2716–2729.
- Sa'ad Al Hyari, H. (2023). Change Resistance Management And The Transition To Distance Learning During COVID-19: Moderating Role Of Education Technology. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(3), 4.
- Tyagi, D. A., & Dhar, D. R. (2017). Knowledge sharing as a mediator between organization culture and police investigation performance-moderating role of technology: A study of tourist destinations of Uttarakhand, India. *Policing: A Journal of Policy and Practice*, 11(2), 185–201.
- Vygotsky, L. S. (1978). Interaction between learning and development. In *Mind and Society* (pp. 79–91). [https://doi.org/10.1016/S0006-3495\(96\)79572-3](https://doi.org/10.1016/S0006-3495(96)79572-3)
- Wong, K. M., & Moorhouse, B. L. (2021). Digital competence and online language teaching: Hong Kong language teacher practices in primary and secondary classrooms. *System*, 103, 102653.
- Wu, D., & Dong, X. (2024). Autonomy support, peer relations, and teacher-student interactions: implications for psychological well-being in language learning. *Frontiers in Psychology*, 15, 1358776.
- Zhang, D., & Pérez-Paredes, P. (2019). Chinese postgraduate EFL learners' self-directed use of mobile English learning resources. *Computer Assisted Language Learning*, September. <https://doi.org/10.1080/09588221.2019.1662455>