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CREATIVITY STUDIES

ENHANCING CREATIVE PROFESSIONAL COMPETENCE IN FOREIGN LANGUAGE ACQUISITION FOR FUTURE ENVIRONMENTAL DESIGNERS IN UKRAINE: A SYSTEMATIC REVIEW

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Abstract. This comprehensive study investigates the development of creative professional competence in foreign language among students enrolled in Ukraine's Environmental Design educational programmes. Drawing on survey data from 226 participants, the research highlights the growing recognition of the role of English language proficiency in equipping future environmental designers for global, interdisciplinary practice. The findings reveal that while a majority of students appreciate the importance of such competence, significant gaps remain in curriculum structure, resource accessibility, and instructional design. In particular, students report insufficient instructional hours and a lack of integration of authentic, profession-specific English materials – challenges that hinder the acquisition of specialized communicative skills. The study emphasizes that foreign language education must go beyond basic instruction and instead be embedded within real-world, design-related contexts. It advocates for the adoption of content and language integrated learning approaches, using debates, discussions, and design-based tasks to foster creativity, linguistic fluency, and intercultural competence. The dual use of English – both in scientific (designer-to-designer) and conversational (designer-to-client) registers – demands a curriculum that addresses both academic and practical communication needs. Therefore, the research calls for strategic reforms, including curriculum realignment, increased exposure to authentic materials, faculty training in English for specific purposes, and the integration of project-based and blended learning. Thus, creative professional competence in foreign language is not a supplementary skill but a foundational one – essential for enabling designers to express innovation, collaborate globally, and adapt in a dynamic professional landscape. Systemic institutional support may find benefit from to realize these educational goals and prepare designers for 21st century challenges.

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1. Introduction

Ukraine's integration into European and global processes is reshaping higher education to meet international standards. Reforms under the Law of Ukraine No. 1556 (Verkhovna Rada of Ukraine, 1994–2025) emphasize multilingualism, intercultural competence, and student-centered learning to foster mobility, professional readiness, and lifelong learning. Professional

competency is defined as a coherent cluster of knowledge, skills, and attitudes applied in real contexts (Mulder, 2017) and develops through independent, purposeful activity that integrates cognitive, practical, and personal experience (Bondar & Pavliuk, 2024).

Higher education is shifting from teacher-directed to student-centered approaches, aligning learning with societal needs and effective pedagogy (George & Siranchuk, 2025). European integration highlights the need for globally competitive, highly skilled designers who can respond to socio-economic changes and work effectively in market conditions (Faizulina et al., 2024). This requires fostering creativity, knowledge, skills, and attributes for labour market success, including proficiency in key international languages such as English, the global *lingua franca* for business, research, and academia (Fisher, 2004; Abelha et al., 2020; Abbas et al., 2021).

Foreign language competence is a multidimensional skill enabling designers to comprehend, produce, and interact effectively across interpersonal, academic, and professional contexts (Bondar & Pavliuk, 2024). It integrates receptive skills (listening, reading) and productive skills (speaking, writing), supported by lexical, grammatical, phonological, and sociolinguistic knowledge, along with pragmatic awareness and intercultural sensitivity. Effective communication allows designers to articulate ideas, collaborate in multidisciplinary teams, engage stakeholders, and make informed decisions (Xiong & Yuan, 2018; Doan & Hamid, 2019; Tjahja & Yee, 2022).

Communicative competence is developed through training, not just natural talent, and benefits from the communicative approach, digital resources, and interactive, student-centered methods (Isayeva et al., 2020; Sefa, 2020; Kurniawan & Sumani, 2022). Self-confidence, motivation, autonomy, and critical thinking further enhance language performance (Omar et al., 2020; Kernagaran & Abdullah, 2022). Creativity, comprising domain-relevant skills, creative processes, intrinsic motivation, and social environment, underpins the ability to apply language innovatively in professional contexts (Bee Tin, 2022).

Creative professional competence in a foreign language combines linguistic proficiency, critical thinking, professional knowledge, and design-oriented communication. It enables problem-solving, collaboration, and intercultural knowledge exchange using both formal (scientific/technical) and informal (client-facing) registers. In Ukraine, however, language teaching in non-linguistic higher education remains underdeveloped, with gaps in program design and implementation.

The study aims to examine the challenges and pedagogical requirements for developing creative professional competence in foreign language among Environmental Design students in Ukrainian higher education, and to propose curricular reforms integrating language education with the interdisciplinary and global demands of the profession.

Methods included a structured survey of 226 students to gather attitudinal, experiential, and evaluative data; quantitative and descriptive statistical analyses to identify trends in perceived importance and curriculum adequacy; and a needs-based curriculum diagnosis to highlight gaps between students' linguistic and professional requirements and existing pedagogical offerings.

2. Research design

2.1. Participants

A total of 226 participants from various academic years took part in the survey, all enrolled in the Environmental Design educational and professional programme across different institutions. The participants were from the following universities: Kyiv National University of Technology and Design, Ukraine (25), Lviv National Academy of Arts, Ukraine (41), Lviv National Environmental University (LNEU), Ukraine (15), Lviv Polytechnic, Ukraine (59), Chernihiv Polytechnic National University, Ukraine (23), Ternopil Volodymyr Hnatiuk National Pedagogical University (TVHNPU), Ukraine (26), and H.S. Skovoroda Kharkiv National Pedagogical University (HSSKNPU), Ukraine (37).

As shown in Figure 1, the largest group of respondents included 111 first-year students (49.12%). This was followed by 65 second-year students (28.76%), 28 third-year students (12.39%), and 22 fourth-year students (9.74%) respectively.

2.2. Procedures

During the survey, we adhered to the principle of anonymity, which was communicated to participants in advance, encouraging them to provide honest responses. As noted by Neri de Souza et al. (2016, p. 6), "In research in humanities and social sciences, questioning takes place throughout the entire research process, and it is of great importance in qualitative research". To conduct the survey, we developed an eight questions questionnaire using *Google Forms* and distributed it to potential participants via electronic mail.
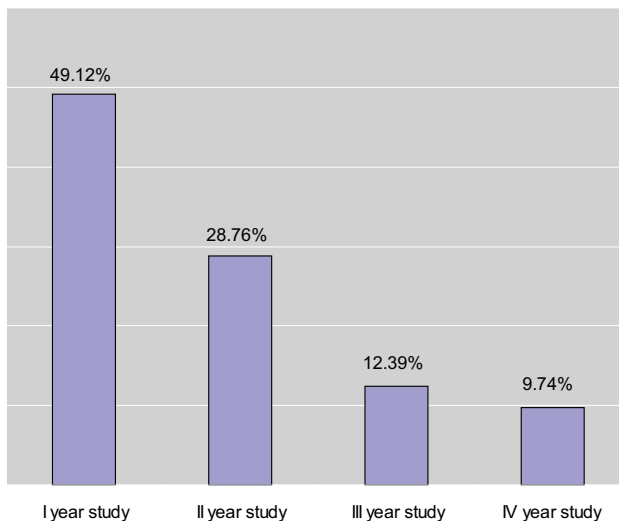

Figure 1. Distribution of respondents by the category of year of study (source: created by authors)

The questions were as follows:

1. Does the study of a foreign language contribute to the development of creative professional competence in foreign language?
2. Do you recognize the value of creative professional competence in foreign language and consider it an essential component of the professional competence of a modern environmental designer?
3. How do you assess the adequacy of the number of hours allocated for developing creative professional competence in foreign language?
4. How well does the content of the educational courses Foreign Language/Foreign Language for Specific Purposes align with the professional needs of a modern environmental designer?
5. What resources should be utilized to develop creative professional competence in foreign language of a modern environmental designer?
6. How do you evaluate the role of creative professional competence in foreign language in achieving success in the professional activities of a modern environmental designer?
7. How do you assess the improvement of knowledge, skills, and abilities (components of creative professional competence in foreign language)?
8. Which specific knowledge, skills, and abilities within the scope of creative professional competence in foreign language do you think have received the most emphasis in the Foreign Language/Foreign Language for Professional Purposes courses?

3. Research results

During the survey (question 1), participants reported that their educational and professional programmes include the development of creative professional competence in foreign language. This is achieved through the study of the Foreign Language course, as indicated by 144 respondents (63.72%), and the Foreign Language for Specific Purposes course, as indicated by 82 respondents (36.28%), as shown in Figure 2.
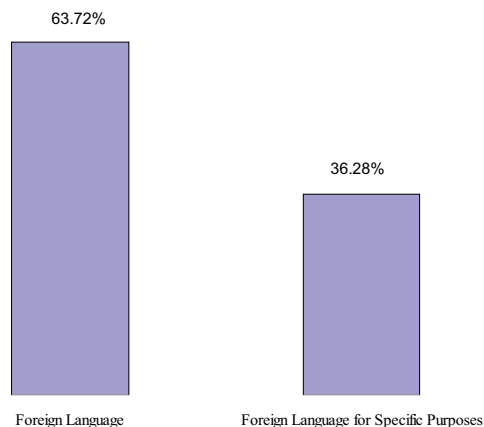

Figure 2. Distribution of respondents by the category of study discipline that forms creative professional competence in foreign language (source: created by authors)
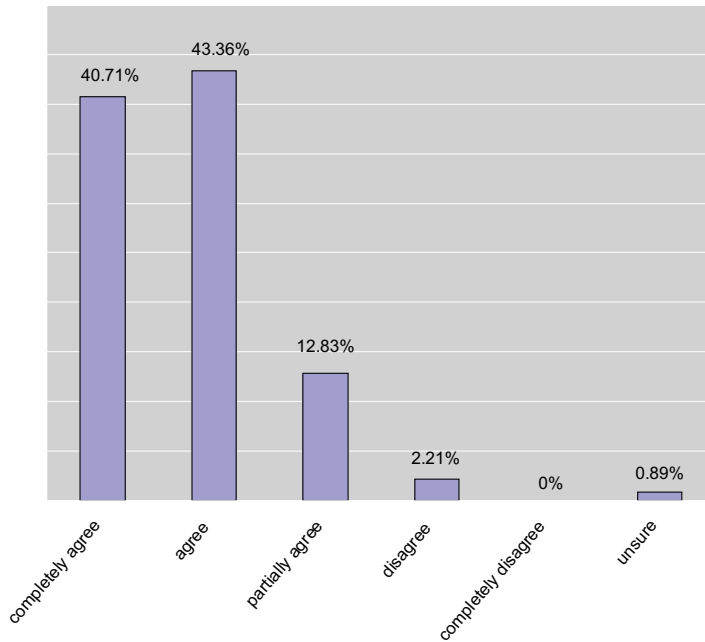
Figure 3. The distribution of respondents' responses, which reflects the perception and understanding of creative professional competence in foreign language as a component of the professional competence of a modern environmental designer (source: created by authors)

Responses to question 2 indicate that first-year Environmental Design students recognize creative professional competence in a foreign language as essential. Specifically, "completely agree" – 40.7%, "agree" – 43.4%, "partially agree" – 12.8%, "disagree" – 2.2%, and "unsure" – 0.9% (Figure 3).

Regarding question 3 on the sufficiency of hours for developing creative professional competence in a foreign language, the students are "completely agree" – 27.4%, "agree" – 20.4%, "partially agree" – 12.4%, "disagree" – 8.0%, "completely disagree" – 30.5%, and "unsure" – 1.3% (see Figure 4).

From our perspective, these findings are concerning, as more than one-third of the respondents (38.50%) consider the allocated hours insufficient for the development of creative professional competence in foreign language within their educational and professional programmes. The institutions as LNEU and HSSKNPU assign 5 European Credit Transfer and Accumulation System (ECTS) credits for foreign language study, and TVHNPU assigns 6 ECTS credits, thus, these results are not surprising.

For our research (question 4), it was crucial to understand students' perceptions of the content of the academic discipline Foreign Language/Foreign Language for Specific Purposes and how well it aligns with the professional needs of a modern environmental designer (see Figure 5).
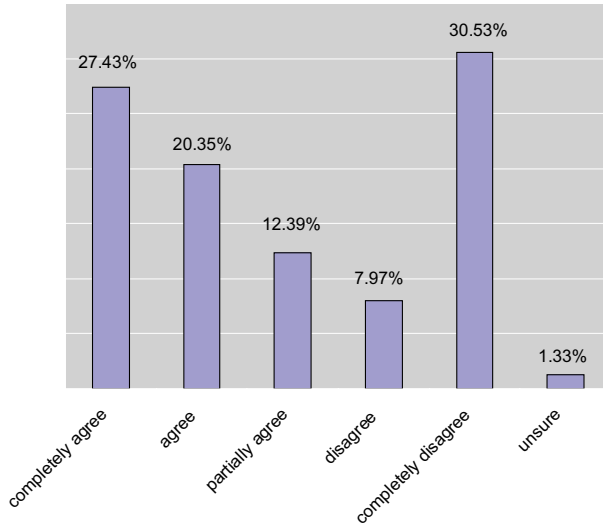
Figure 4. The distribution of respondents' responses about the sufficiency of the number of allocated hours for the formation of creative professional competence in foreign language (source: created by authors)
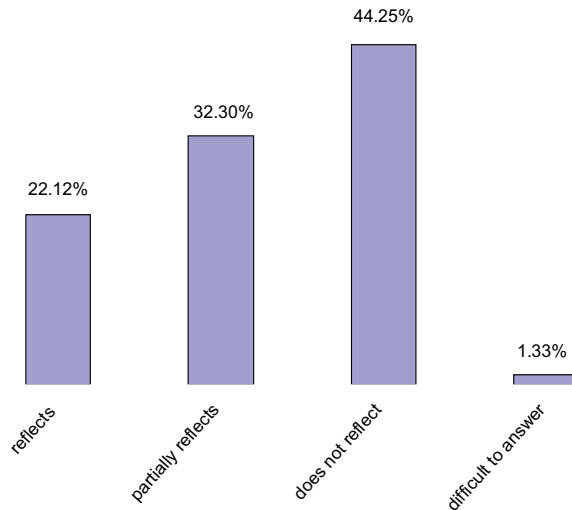

Figure 5. Distribution of responses regarding the alignment of the content of the educational discipline Foreign Language/Foreign Language for Specific Purposes with the professional activity of a modern environmental designer (source: created by authors)
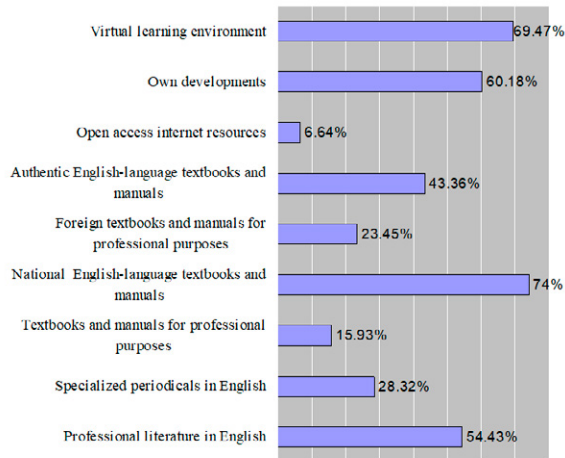
Figure 6. Distribution of respondents' answers regarding the use of various resources in developing creative professional competence in foreign language of a modern environmental designer (source: created by authors)

Survey results indicate that students perceive a gap between course content and professional practice: the students said the courses "reflect" professional needs – 22.1%, "partially reflect" – 32.3%, "do not reflect" – 44.3%, and "undecided" – 1.3%.

Regarding resources for developing creative professional competence in a foreign language, students reported using multiple options (multiple responses allowed): virtual learning environments – 69.5%, teachers' materials – 74.8%, authentic English textbooks/manuals – 60.2%, native English textbooks/manuals – 43.4%, Internet resources – 54.4%, professional literature in English – 28.3%, professional periodicals – 15.9%, and specialized English textbooks/manuals for professional use – 6.6% (Figure 6). These results highlight uneven access to and use of professional English-language resources.

The data show that while future environmental designers have access to virtual learning environments, teachers' materials, and open-access resources, the use of professional English-language literature is limited. Only 28.3% use professional literature, 23.5% rely on national English textbooks, 15.9% consult English-language periodicals, and just 6.6% use authentic English textbooks or manuals, indicating limited availability for educational purposes.

In the next question 6, respondents were asked to indicate which answer best reflects their understanding of the importance of creative professional competence in foreign language for achieving success in the professional activity of a modern environmental designer. The data collected are presented in Figure 7.

As shown in Figure 7, 50.4% of respondents view creative professional competence in a foreign language as key to success in environmental design, 21.7% acknowledge its importance, 21.2% disagree, and 6.6% are unsure.
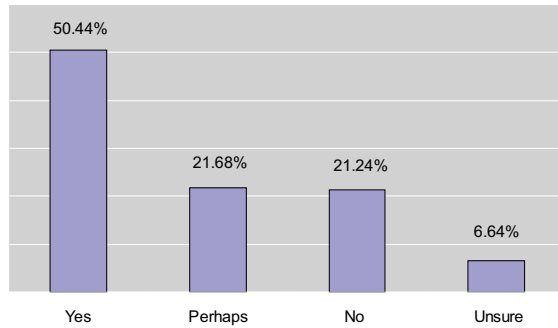
Figure 7. Distribution of answers regarding the importance of creative professional competence in foreign language for achieving success in the professional activity of a modern environmental designer (source: created by authors)

Subsequent survey questions explored students' perceptions of areas for improvement in their knowledge, skills, and abilities, and which aspects of creative professional competence are emphasized in Foreign Language/Professional Purposes courses (Figure 8).

Survey results show student priorities for developing creative professional competence in a foreign language: communication – 88.9%, listening – 74.3%, writing – 39.4%, and reading – 34.1%.

Educational opportunities in courses reflected similar trends: communication – 73.9%, reading – 60.2%, listening – 57.5%, and writing – 43.8%, indicating generally balanced alignment with minor gaps.

Overall, the data highlight both strengths and areas for improvement in current training approaches for Environmental Design students in Ukraine.
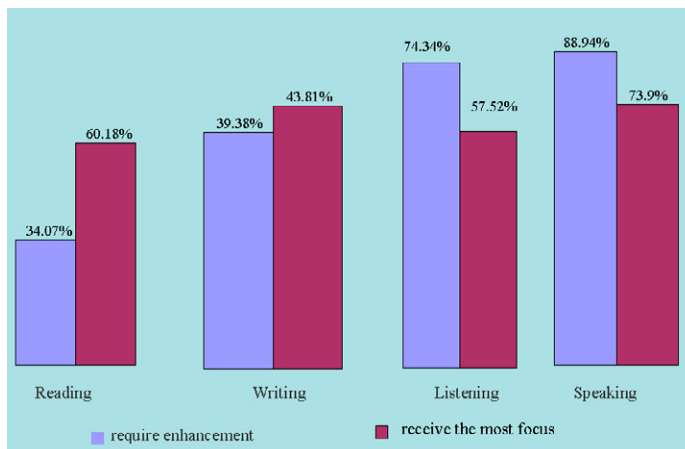

Figure 8. Distribution of responses regarding the alignment of priorities between education seekers and the educational process in the course Foreign Language/Foreign Language for Specific Purposes (source: created by authors)

4. Recognition of importance and foundational relevance

The majority of respondents acknowledge the integral role of creative professional competence in foreign language as a core component of the professional skillset required for success in environmental design. Over 84% of students either completely agree or agree that such competence is vital, demonstrating a shared understanding of the increasingly globalized and interdisciplinary nature of the profession. This recognition is critical for fostering motivation and engagement in language-related coursework.

5. Structural limitations and curriculum misalignment

Despite this recognition, the study reveals structural deficiencies in the existing curricula. A substantial portion of students (38.5%) perceive the allocated instructional hours as insufficient, while nearly 44.25% believe that course content fails to reflect the actual professional demands of the discipline. These findings point to a misalignment between pedagogical design and the practical linguistic needs of environmental designers, underscoring the necessity for curricular revision and instructional realignment with real-world expectations.

6. Resource accessibility and utilization discrepancies

Students report access to a diverse range of resources, including virtual learning environments, open access materials, and teacher-developed content. However, the limited use of authentic professional English-language materials (*e.g.*, professional periodicals and manuals) suggests both a lack of availability and integration within the curriculum. These gaps hinder the development of specialized language proficiency and familiarity with discipline-specific discourse, which are essential for effective communication in international contexts.

7. Competence development and instructional priorities

The survey indicates a strong student emphasis on communicative competence, with communication and listening ranked highest among prioritized skills. Although the educational process largely reflects these priorities, discrepancies remain – particularly in areas such as writing and reading. These mismatches suggest a need for pedagogical recalibration to more effectively balance skill development in accordance with students' professional trajectories and self-identified learning needs.

8. Pedagogical implications and future directions

The data collectively point to a fragmented approach to competence formation – one that is currently characterized by inconsistency in instructional scope, insufficient time allocation, and limited integration of profession-specific language materials. To remedy this, a comprehensive, interdisciplinary, and practice-oriented system of instruction must be developed. This system should integrate authentic professional content, enhance exposure to field-specific

discourse, ensure proportional focus across all language skills, and increase the allocation of instructional time within the curriculum.

9. Strategic curriculum reform and institutional commitment

Advancing creative professional competence in a foreign language requires systemic reform supported by institutional commitment. Key steps include curriculum redesign, investment in professional English resources, faculty training, and the adoption of blended, project-based learning. A comprehensive, competency-based framework integrating language acquisition with design education is essential. This approach recognizes language as a mediating tool in collaborative, creative learning and highlights the pedagogical value of practice-oriented methods central to design education.

10. Discussion

Globalization highlights the need to modernize Ukraine's higher education, especially in training environmental designers. Designers require not only artistic and technical skills but also foreign language competence to navigate intercultural communication and professional collaboration (Jones, 2020). Creative professional competence in a foreign language combines text-forming, interpretive, and communicative abilities across two registers: 1) scientific (designer-to-designer, professional texts and lectures) and 2) conversational (designer-client interactions). Strong speaking skills are crucial for articulating ideas, collaborating in teams, and presenting designs.

Language learning should be integrated with design practice through engagement with articles, case studies, videos, critiques, and presentations in English. Carefully selected texts and audio-visual materials support comprehension, design thinking, and professional knowledge. Listening skills are vital for understanding client needs and team collaboration, reinforced through structured exercises: four stages for listening – 1) orientation; 2) analysis; 3) autonomous processing, and 4) reflection; and three for reading – 1) pre-reading; 2) reading, and 3) post-reading.

Practical strategies include using English-language design software, collaborative projects in English, and scenario-based writing (reports, presentations), effectively developing reading, listening, speaking, and writing as components of creative professional competence in foreign language.

Thus, one can offer a set of exercises with the aim to improve knowledge, skills, and abilities (components of creative professional competence in foreign language) as

> "many of the language tasks favored by contemporary language teaching methods are believed to release creativity in learners – particularly those involving student-centred, interaction-based, and open-ended elements" as stated Richards (2013, p. 20):

Example 1. The ancient city Petra, Jordan, a United Nations Educational, Scientific and Cultural Organization World Heritage Site, is a remarkable example of preservation. The site faces threats from erosion and tourist impact. Preservationists are using advanced techniques three-dimensional scanning and digital mapping to monitor and preserve this archaeological

wonder. Analyse the preservation strategies, discuss how modern technology aids in conserving historical sites (compare scans to identify the changes, track erosion, and identify areas that require immediate intervention, indicate potential damage, simulate the appearance of damaged structures, prevent collapses, manage restoration changes, virtual tours, viewing platforms decrease the impact of tourist traffic on the site). Prepare a brief analysis focusing on the effectiveness of these methods;

Example 2. Split into two groups. One group is in favour of the importance of respecting the "spirit of the place" in design, while the other debates the need for innovation and modernisation. Use examples to support your arguments;

Example 3. Make groups and conduct debates using the phrases: *all historic buildings should be preserved regardless of cost*; *adaptive reuse is the only ethical way to deal with outdated structures*; *modern architecture has no place in historic city centers*; *the most beautiful spaces are often the least functional*;

Example 4. Research some repurposed, restored, or renovated buildings in your area that have provoked mixed reactions. Make a short outline of them;

Example 5. Organize a roundtable discussion on the topic *inclusive design principles*, highlighting the importance of designing spaces and products accessible and usable by people with a wide range of disabilities. Use the tips to vocal the ideas – principles of inclusive design: equal opportunities, flexibility, *etc.*; types of disabilities: physical, sensory, cognitive, and intellectual disabilities; social, ethical, and economic benefits: social inclusion, reduction of discrimination, more customers, possibilities for innovation, to save costs, *etc.*; common barriers to accessibility in public spaces: stairs, narrow doorways, unclear signage, uneven surfaces, discrimination, *etc.*; assistive technologies and their role in inclusive design: screen readers, hearing aids, new possibilities for inclusive design, *etc.*).

Creating a language-rich environment through lectures, discussions, and design briefs in English strengthens communication, design thinking, and intercultural competence. Personalized feedback and exposure to global design trends further prepare future designers to address technical and linguistic challenges.

Creative professional competence integrates language proficiency, intercultural communication, design-specific vocabulary, and innovative thinking. Foreign language learning, embedded in cognition and culture, shapes the professional identity of future environmental designers and should be systematically built into their training.

11. Conclusions and implications

The research underscores the importance of creative professional competence in a foreign language as a multidimensional element in training environmental designers. Beyond language acquisition, it enables professionals to navigate intercultural and complex communicative contexts, making it vital for both career success and sectoral innovation.

Professionally oriented language education must move beyond traditional instruction, embedding linguistic development in authentic design contexts. Students recognize its value for career growth and collaboration, yet gaps in curricula, time, and resources hinder full fluency, highlighting the need for reform. Competence also involves merging linguistic

proficiency with design thinking, fostering the ability to articulate ideas through both scientific and conversational registers.

Content and language integrated learning – through debates, design assessments, and scenario-based tasks – proves effective in cultivating creativity, autonomy, and communicative competence. Balanced development of receptive (reading, listening) and productive (speaking, writing) skills is essential, supported by staged strategies and collaborative activities.

Ultimately, competence development is a systemic, long-term process that integrates intercultural skills, critical thinking, and lifelong learning within a language-rich environment. It should be treated as a core component of design education, requiring institutional commitment, innovative pedagogy, and forward-looking curricula.

References

Abbas, F., Khan Rana, A. M., Bashir, I., & Bhatti, A. M. (2021). The English language proficiency as a global employment skill: The viewpoint of Pakistani Academia. *Humanities and Social Sciences Reviews*, *9*(3), 1071–1077. https://doi.org/10.18510/hssr.2021.93106

Abelha, M., Fernandes, S., Mesquita, D., Seabra, F., & Ferreira-Oliveira, A. T. (2020). Graduate employability and competence development in higher education – A systematic literature review using PRISMA. *Sustainability*, *12*(15). https://doi.org/10.3390/su12155900

Bee Tin, T. (2022). *Unpacking creativity for language teaching and learning*. Routledge. https://doi.org/10.4324/9781003225393

Bondar, G., & Pavliuk, V. (2024). Content of professional competence of foreign language lecturer. *Pedagogy and Education Management Review*, *1*(15), 51–61. https://doi.org/10.36690/2733-2039-2024-1-51

Doan, L. D., & Hamid, M. O. (2019). Economics of English: Examining the demand for English proficiency in the Vietnamese job market. *RELC Journal*, *52*(3), 618–634. https://doi.org/10.1177/0033688219863166

Faizulina, E., Yessengaliyeva, A., & Jumagaliyeva, V. (2024). Development of professional competencies of the future costume designer in the design system. *Harmonia*: *Journal of Arts Research and Education*, *24*(1), 208–220. https://doi.org/10.15294/harmonia.v24i1.50298

Fisher, R. (2004). What is creativity? In R. Fisher & M. Williams (Eds.), *Unlocking creativity*: *Teaching across the curriculum* (pp. 6–20). David Fulton Publishers.

George, A. Sh., & Siranchuk, N. (2025). From teacher-centered to learner-driven: A review of the progression towards student-centric education models and practices. *Partners Universal Multidisciplinary Research Journal*, *2*(2), 15–23.

Isayeva, O., Shumylo, M., Khmilyar, I., Myskiv, I., & Mylyk, O. (2020). Blended learning in higher medical education: Principles and strategies of teaching foreign languages. *Advanced Education*, *14*, 11–18. https://doi.org/10.20535/2410-8286.183725

Jones, R. H. (2020). Creativity in language learning and teaching: Translingual practices and transcultural identities. *Applied Linguistics Review*, *11*(4), 535–550. https://doi.org/10.1515/applirev-2018-0114

Kernagaran, V., & Abdullah, A. (2022). A systematic literature review of flipped learning in English as second language (ESL) context. *International Journal of Instruction*, *15*(2), 793–814. https://doi.org/10.29333/iji.2022.15243a

Kurniawan, A. B., & Sumani, S. (2022). Communicative language teaching approach potential for English language teaching. *KnE Social Sciences*. *The International English Language Teachers and Lecturers*, 37–44. https://doi.org/10.18502/kss.v7i7.10648

Mulder, M. (Ed.). (2017). *Technical and vocational education and training*: *Issues, concerns and prospects*. *Competence-based vocational and professional education*: *Bridging the worlds of work and education* (Vol. 23). R. Maclean (Series Ed.). Springer International Publishing Switzerland. https://doi.org/10.1007/978-3-319-41713-4

Neri de Souza, F., Neri de Souza, D., & Costa, A. P. (2016). Asking questions in the qualitative research context. *The Qualitative Report*, *21*(13), 6–18. https://doi.org/10.46743/2160-3715/2016.2607

Omar, S. F., Ahmad Nawi, H. S., Tengku Shahdan, T. Sh., Wong Mee Mee, R., Seong Pek, L., & Che Yob, F. S. (2020). Interactive language learning activities for learners' communicative ability. *International Journal of Evaluation and Research in Education*, *9*(4), 1010–1016. https://doi.org/10.11591/ijere.v9i4.20605

Richards, J. C. (2013). Creativity in language teaching. *Iranian Journal of Language Teaching Research*, *1*(3), 19–43.

Sefa, B. (2020). Challenges and suggestions for a successful implementation of communicative language teaching in EFL context in Albania. *International Journal of Education and Philology*, *1*(2), 32–40.

Tjahja, C., & Yee, J. (2022). Being a sociable designer: Reimagining the role of designers in social innovation. *CoDesign*: *International Journal of CoCreation in Design and the Arts*, *18*(1), 135–150. https://doi.org/10.1080/15710882.2021.2021244

Verkhovna Rada of Ukraine. (1994–2025). Law of Ukraine on Higher Education. *The Official Bulletin of the Verkhovna Rada No. 37–38, Article No. 2004*. https://zakon.rada.gov.ua/laws/show/en/1556-18#Text

Xiong, T., & Yuan, Z. (2018). "It was because I could speak English that I got the job": Neoliberal discourse in a Chinese English textbook series. *Journal of Language*, *Identity and Education*, *17*(2), 103–117. https://doi.org/10.1080/15348458.2017.1407655