



ROLE OF SCIENCE AND EDUCATION IN SUSTAINABLE DEVELOPMENT

(RSESD2026)

Conference proceedings



Katowice 2026

ISBN 978-83-68422-15-3

DOI: 10.54264/M059

Role of Science and Education in Sustainable Development: Conference Proceedings of 5th International Scientific Conference, the Academy of Silesia, 25-26.2.2026. Katowice, Poland.

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This collection of proceedings from the 5th International Scientific Conference *Role of Science and Education in Sustainable Development* (Katowice, Poland) provides a multifaceted analysis of how academic research and pedagogical innovation drive societal progress. The collection examines the integration of advanced technologies, such as Artificial Intelligence, Blockchain, and IoT, as catalysts for economic and educational evolution. Significant attention is devoted to the transformation of vocational and higher education through interdisciplinary approaches, digital tools, and the alignment with European quality standards to meet contemporary labor market demands. Furthermore, the work highlights the critical role of science in addressing humanitarian challenges, focusing on psychological resilience, trauma-informed practices, and the preservation of cultural heritage during periods of global instability and post-war recovery. By bridging the gap between theoretical modeling and practical implementation in healthcare, ecology, and social work, this volume offers a strategic roadmap for achieving sustainable development goals through the synergy of science and education.

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LINGUACULTURAL DIMENSIONS OF FOREIGN LANGUAGE EDUCATION: BUILDING INTERCULTURAL SKILLS FOR A SUSTAINABLE FUTURE

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In recent decades, the concept of Intercultural Communicative Competence (ICC) has emerged as one of the most pressing issues in foreign language education. The rapid development of technology and the intensifying processes of globalization have transformed the way people interact, making the world more interconnected than ever before. In this context, learning a foreign language is no longer limited to mastering grammar rules, perfecting reading comprehension, or articulating ideas. Instead, it requires a deeper understanding of diverse cultures and the skills to engage meaningfully with individuals from different backgrounds. Today, foreign language learning in response to modern challenges must therefore go beyond linguistic proficiency, fostering students' ability to navigate cultural differences, build mutual respect, and communicate effectively in a globalized society (Gutiérrez-Santiuste, & Ritacco-Real, 2023).

Global business operations also depend on the effectiveness of communication across cultural boundaries. Companies operating on a global scale require highly qualified personnel

to establish and further develop intercultural cooperation, to ensure successful business transactions and collaborations (Didenko et al., 2024). For Ukraine, active participation in a globalized environment underscores the need to prepare future specialists who can communicate effectively in multicultural contexts. Integration into the European educational system, therefore, requires universities to prepare modern professionals able to navigate diverse cultural settings (Lysiuchenko et al., 2021).

Globalization also presents both challenges and opportunities for intercultural communication. Language barriers remain a significant issue, even though English has become a global lingua franca. Bridging these gaps requires more than linguistic proficiency; it demands the ability to exchange meaningful information across cultural differences. Foreign language education must therefore extend beyond traditional linguistic training to encompass ICC. As Byram (Byram, 2021) argues, language teaching is inherently cultural teaching, and successful communication depends on sensitivity to cultural norms and values.

The concept of communicative competence, first introduced by Dell Hymes and later elaborated by Canale, Swain, Bachman, and others, highlights the ability to use language appropriately within social contexts. It encompasses several dimensions: grammatical competence (knowledge of linguistic structures), sociolinguistic competence (sensitivity to social norms and conventions), discourse competence (coherence and cohesion in communication), and strategic competence (the ability to overcome communication breakdowns). Together, these components form a multidimensional framework for effective language use (Baker, 2024).

Linguistic mastery is essential, but on its own it does not ensure effective communication across cultures, since genuine interaction also requires sensitivity to cultural norms, values, and expectations. According to Naqeeb (Naqeeb, 2025), communicative competence must be broadened to encompass intercultural dimensions that account for the complexity of human interaction in diverse settings. Intercultural competence extends the traditional framework by integrating sensitivity to cultural norms, values, and expectations, thereby enabling communication that is not only accurate but also socially and culturally appropriate.

As D'Orazi & Marangell (D'Orazi, & Marangell, 2025) underscores, communicative competence cannot be understood in isolation from cultural contexts. It requires the ability to adapt flexibly and to respond appropriately to the conventions of different cultural environments. This involves more than grammatical precision or fluency; it demands

an awareness of how meaning is shaped by cultural perspectives and how communicative choices may be interpreted differently across communities.

In practice, this means that effective communicators must learn not only how to construct correct sentences, but also when, why, and to whom particular forms of expression are suitable. Such intercultural awareness helps to prevent misunderstandings, fosters empathy, and builds bridges across cultural divides. Ultimately, it transforms communication into a dynamic process of negotiation and mutual understanding, where language serves as both a tool for conveying information and a medium for cultivating respect and connection among people of different backgrounds.

The development of ICC is a lifelong process. It calls on learners to remain open, curious, and tolerant, while also reflecting critically on their own cultural identities. In this sense, ICC is not just a skill but a value-based competence that supports sustainable development by encouraging peaceful coexistence and intercultural dialogue.

The linguacultural approach emphasizes that language and culture are inseparable. Learning a language always involves learning culture, and teaching language inevitably means teaching culture. J. Shaules' Developmental Model of Linguacultural Learning (DMLL) highlights that effective pedagogy must balance language-centered and culture-centered learning. The model identifies four guiding elements: reflection, vision, roadmap, and community, which support learners in developing both linguistic ability and cultural awareness.

This approach fosters three complementary dimensions:

- Linguistic competence (mastery of vocabulary, grammar, and discourse).
- Cultural competence (understanding the norms, traditions, and values of the target culture).
- Inter-sociocultural competence (the ability to interact productively and respectfully with people from other cultures).

Together, these components transform the classroom into a space for intercultural dialogue, where students actively negotiate meaning and identity. Rather than treating culture as an “add-on,” linguaculture integrates it into every aspect of language learning, turning the classroom into a laboratory for empathy, adaptability, and global citizenship (Ngo Cong-Lem, 2025). The linguacultural approach thus reshapes the foreign language classroom into a space for intercultural dialogue, where learners practice negotiating meaning and identity across diverse contexts.

This approach is rooted in the anthropocentric paradigm, which views language as a dynamic human activity shaped by cognitive, emotional, and social factors. Language is not a fixed system but a living reflection of cultural experience. Consequently, foreign language education must integrate pragmatic, sociocultural, and historical dimensions to help learners grasp the deeper meanings embedded in linguistic practices.

Sustainable development in education requires preparing students for lifelong learning, global citizenship, and intercultural cooperation. ICC plays a crucial role in this process by enabling individuals to engage in dialogue, negotiate differences, and contribute to social cohesion. The linguacultural approach supports sustainable development by:

- Promoting tolerance and respect for cultural diversity. Students learn to appreciate differences rather than perceive them as barriers.
- Enhancing employability in a global labour market. Multilingual and interculturally competent graduates are more competitive internationally.
- Strengthening international collaboration in science, business, and professional domains. ICC facilitates teamwork across borders.
- Developing critical thinking and reflection on cultural identities and worldviews. Learners become aware of their own cultural biases and learn to evaluate them critically.

An important extension of the linguacultural approach is Content and Language Integrated Learning (CLIL). CLIL involves teaching subject matter such as history, science, or economics through a foreign language. In this way, students are not only learning the language but also engaging with authentic cultural and disciplinary contexts. CLIL naturally supports ICC because it immerses learners in real-world situations where language and culture are inseparable. By combining CLIL with linguacultural pedagogy, universities can prepare students for global citizenship, professional competitiveness, and sustainable development. Moreover, CLIL aligns with the UN Sustainable Development Goals by equipping learners with multilingual skills and intercultural sensitivity, which are essential for international cooperation.

For example, a CLIL history class taught in English might expose students to multiple perspectives on world events, encouraging them to compare narratives across cultures. A CLIL science course could highlight how scientific terminology varies across languages, reflecting cultural approaches to knowledge. These experiences deepen ICC by showing students that language is never neutral as it carries cultural assumptions and worldviews (Naqeeb, 2025; Ngo Cong-Lem, 2025).

Teachers can foster ICC through:

- authentic materials (films, literature, media) that reflect cultural realities;
- role-playing and simulations of intercultural encounters, where students practice negotiation and empathy;
- comparative analysis of cultural norms and communicative strategies, highlighting both similarities and differences;
- reflection activities that challenge students to examine their own assumptions;
- CLIL projects that integrate subject content with language learning, encouraging students to apply intercultural skills in academic and professional contexts.

Teachers play a crucial role in facilitating these practices. Their responsibilities extend well beyond language instruction, as they increasingly serve as cultural mediators, helping students navigate the complexities of intercultural communication. To carry out this role effectively, teachers require ongoing professional development in linguacultural and CLIL pedagogy, as well as a readiness to collaborate across disciplines such as sociology, psychology, and cultural studies. These practices not only strengthen language proficiency but also nurture empathy, adaptability, and intercultural awareness. In doing so, they prepare students to act as bridges between cultures, a skill that is becoming indispensable in professional, academic, and everyday contexts.

As Didenko et al. (Didenko et al., 2024) and Lysiuchenko et al. (Lysiuchenko et al., 2021) emphasize, ICC plays a vital role in advancing sustainable development. It promotes tolerance and respect for diversity, enhances employability in global markets, and strengthens international collaboration in science, business, and education. At the same time, ICC encourages critical reflection on cultural identities and worldviews, fostering deeper awareness of how communication shapes social relations.

When linked to the United Nations (2015) Sustainable Development Goals, ICC becomes more than an educational achievement; it becomes a social necessity. It directly supports SDG 4 (Quality Education) by embedding intercultural sensitivity into learning processes, and SDG 16 (Peace, Justice, and Strong Institutions) by fostering dialogue, justice, and inclusive communities (United Nations, 2015). Beyond these, ICC also contributes to SDG 8 (Decent Work and Economic Growth) by equipping learners with multilingual and intercultural skills that enhance employability in global labor markets. Similarly, it aligns with SDG 17 (Partnerships for the Goals) by strengthening international cooperation across science, business, and education.

Unlike grammar or vocabulary, intercultural competence involves values, attitudes, and reflection, which are far more difficult to measure. To address this challenge, European higher education increasingly relies on portfolios, reflective journals, and intercultural simulations to evaluate how students develop openness, empathy, and cultural awareness. In addition, telecollaboration projects and virtual exchanges provide authentic opportunities for students to practice and demonstrate ICC in real-world contexts. These initiatives allow learners to engage directly with peers from different cultural backgrounds, making assessment not only about linguistic ability but also about the capacity to negotiate meaning, build relationships, and interpret cultural perspectives (Gutiérrez-Santiuste, & Ritacco-Real, 2023; Ngo Cong-Lem, 2025). In this way, foreign language education becomes not only a means of linguistic training but also a strategic tool for building sustainable, inclusive, and resilient societies. By cultivating ICC, universities and schools prepare learners to participate actively in global dialogue, to collaborate across borders, and to contribute meaningfully to the shared goals of humanity.

So, ICC is not just another outcome of foreign language education. It is a way of preparing learners to live and work in a diverse world. Developing of students' intercultural communicative skills has become one of the primary tasks during foreign language instruction. It helps future professionals collaborate internationally, strengthen business relationships, and support integration into global systems. Linguacultural and CLIL approaches show that language learning is inseparable from culture, turning classrooms into spaces where students practice empathy, adaptability, and dialogue. These experiences help them grow into cultural mediators who can bridge differences in professional, academic, and everyday life.

At the same time, ICC directly aligns with the United Nations Sustainable Development Goals. It promotes tolerance, enhances employability, and strengthens cross-border partnerships. By embedding intercultural reflection into language learning, educators are not only teaching communication but also shaping citizens who can contribute to inclusive and sustainable societies. In this sense, foreign language education becomes more than grammar or vocabulary. It becomes a strategic force for building understanding, resilience, and shared progress in the 21st century.

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