

СЕКЦІЯ ХІХ. ПЕДАГОГІКА ТА ОСВІТА

INTERCULTURAL COMMUNICATION IN ENGLISH FOR GLOBAL ENGINEERING CONTEXTS

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The engineering profession is becoming increasingly international. Engineers are frequently required to collaborate with colleagues, clients, and stakeholders from a variety of cultural backgrounds. As a result, English has emerged as the main language for international engineering discourse, making it essential for engineering professionals to communicate effectively in English and across cultures – a critical skill for engineering professionals. Intercultural communication involves the ability to understand, respect, and appropriately respond to cultural differences, while English proficiency provides the medium through which this understanding is conveyed.

This paper investigates the relationship between intercultural communication and the English language use by engineers. It aims to offer valuable insights into developing intercultural communicative competence (ICC) and practical strategies for integrating intercultural elements into English language teaching for future engineers.

ICC refers to the ability to communicate effectively and appropriately in different cultural settings, drawing on knowledge, skills, and attitudes [1]. It encompasses several key areas: linguistic competence (grammar and vocabulary), sociolinguistic competence (appropriate use of language in context), discourse competence (coherence and cohesion), and strategic competence (overcoming communication difficulties).

So, English as a Lingua Franca (ELF) refers to English being used as a common language among people who speak different native languages. In the field of engineering, ELF fosters international collaboration, but it also introduces unique communication challenges, like diverse accents, regional expressions, and differences in pragmatics [5].

To better understand how cultural values shape communication styles, we can look at Hofstede's cultural dimensions (e.g., power distance, individualism vs collectivism, and uncertainty avoidance) and Hall's ideas of high-context and low-context communication. Understanding these differences is crucial for engineers operating in global teams [4].

While English serves as the main language in many multinational engineering projects, non-native speakers may struggle with technical terminology, idioms, or fast-paced conversations. Misunderstandings can arise due to differences in pronunciation or a limited vocabulary.

Engineers from various cultures may interpret behaviors, gestures, and communication styles in unique ways. Nonverbal signals such as eye contact, gestures, and personal space can also differ significantly across cultures. It's crucial for engineers to recognize these differences to avoid offending or confusing international colleagues [3].

Additionally, cultural expectations about leadership, decision-making, and conflict resolution can greatly influence team performance. Misalignments in these expectations may lead to frustration or reduced collaboration.

The role of English proficiency is crucial for:

- engineers who need to express complex ideas clearly in English, whether they are speaking or writing. This involves writing reports, giving presentations, and participating in meetings.

- English proficiency supports active participation in discussions, negotiations, and collaborative problem-solving, which are essential in global engineering projects.

- As for lifelong learning and professional development, many engineering resources like journals, manuals, and training programs are available in English. So, having a good command of the language is crucial for continuous professional growth.

Strategies to boost intercultural communicative competence are:

- experiential learning through studying of foreign programs, international internships, and virtual exchange projects offers immersive experiences that help to develop ICC;

- reflective practice encourages students to think about their cultural assumptions and communication experiences, leading to greater awareness and adaptability;
- interdisciplinary courses that combine language learning with cultural studies, global engineering, or international relations can enhance both linguistic and cultural knowledge;
- role-plays and simulations in the classroom that simulate real-life intercultural engineering scenarios allow students to practice their English and intercultural skills;
- collaborative online international learning (COIL) initiatives connect students from different countries to collaborate on projects, fostering cross-cultural understanding and enhancing English communication skills in real-world contexts.

When it comes to teaching English in engineering education, there are some important considerations to keep in mind:

1. Curriculum design for engineering students should integrate technical language training with intercultural communication training. This requires collaboration between language teachers and other teachers of technical disciplines.

2. Task-based language teaching which focuses on using language to complete real tasks. In an engineering context, these tasks could involve writing proposals, creating posters, or even simulating team meetings.

3. Assessment of ICC. When assessing students, it's crucial to look at more than just their language skills but also students' intercultural awareness and adaptability. Developing rubrics can help us measure how well students perform tasks related to intercultural communication.

4. Use of authentic materials by incorporating real-world materials like case studies, engineering podcasts, technical documents, and international project reports, helps students to engage with real-world language and cultural issues.

5. Teacher training is essential for English language teachers in both engineering discourse and intercultural communication theories to effectively teach future engineers [2].

Thus, in the world where engineering challenges cross borders, mastering intercultural communication in English has become essential, not optional. By fostering intercultural communicative competence through targeted language instruction, teachers can train future engineers to tackle the complexities of

global teamwork. It's crucial to shift towards more culturally responsive, communicative, and integrated English language teaching practices to ensure that engineering education meets the needs of a globalized profession.

References:

1. Byram, M. (1997). *Teaching and assessing intercultural communicative competence*. Multilingual Matters.
2. Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266.
3. Hall, E. T. (1976). *Beyond culture*. Anchor Books.
4. Hofstede, G. (2001). *Culture's consequences: comparing values, behaviors, institutions and organizations across nations*. Sage Publications.
5. Jenkins, J. (2007). *English as a lingua franca: attitude and identity*. Oxford University Press.