

CULTIVATING CROSS-CULTURAL COMPETENCE IN FOREIGN LANGUAGE PROFESSIONAL COMMUNICATION AMONG FUTURE POWER ENGINEERS

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In an increasingly interconnected and globalized world, the ability to communicate effectively in a foreign language within a professional context has become a crucial skill for future power engineers. As the energy sector transcends national borders and collaborates on a global scale, engineers are frequently required to interact with colleagues, clients, and stakeholders from diverse linguistic and cultural backgrounds. This necessitates not only proficiency in a foreign language but also the cultivation of cross-cultural competence.

The aim of this work is to delve into the multifaceted aspects of foreign language professional communication within the specific domain of power engineering. It explores the significance of cross-cultural competence in this context and underscores its pivotal role in ensuring successful communication, project execution, and international collaboration. Furthermore, this article will examine the challenges faced by prospective power engineers in developing these skills and provide insights into effective pedagogical approaches and strategies that can aid in the acquisition of cross-cultural competence.

By addressing these issues, this article seeks to contribute to the academic discourse on language and engineering education, providing educators, institutions, and aspiring power engineers with valuable insights and practical recommendations for enhancing their cross-cultural competence in foreign language professional communication. Ultimately, this proficiency is poised to play an indispensable role in the success and sustainability of power engineering endeavours on a global scale.

The problem at the heart of this research lies in the critical need for power engineers to excel in foreign language professional communication and develop cross-cultural competence. In an era where energy projects span international boundaries, the ability to effectively collaborate with colleagues and stakeholders from diverse linguistic and cultural backgrounds is paramount. Addressing this problem is essential not only for the success of individual engineers but also for the advancement and sustainability of the global energy sector, presenting both a scientific challenge and a practical imperative.

Recent research and publications have highlighted the increasing recognition of the problem regarding foreign language professional communication and cross-cultural competence among power engineers. Marc J. Riemer, in his work "English and communication skills for the global engineer" (2002), emphasizes the need for engineers to possess not only technical expertise but also cross-cultural communication skills [1].

Furthermore, Jesiek, Brent & Shen, Yi & Haller, Y. research in "Cross-cultural competence: a comparative assessment of engineering students" (2012) underscores the limited attention this crucial aspect has received within the engineering field, highlighting a research gap [2].

Mallaband's work, "The reality of cross-disciplinary energy research in the United Kingdom: A social science perspective" (2017), provides a comprehensive analysis of the interplay between language, culture, and the energy sector, offering insights into practical strategies for improving cross-cultural competence among engineers [3].

Jiang's study, "A systematic review of engineering students in intercultural teamwork: Characteristics, challenges, and coping strategies" (2023), investigates pedagogical methods to enhance foreign language proficiency among engineering students, shedding light on potential solutions to the identified problem [4].

Dalia Rosa's research in "Cross-cultural Project Management and Intercultural Communication Competencies in Non-profit Organizations" (2018) offers practical recommendations for project managers in the energy sector, recognizing the significance of effective cross-cultural communication in successful project execution [5].

These recent studies collectively highlight the emerging awareness of the issue and the beginnings of a scholarly discourse on the significance of foreign language professional communication and cross-cultural competence in the field of power engineering. However, further research and practical solutions are needed to fully address this challenge.

The main material of the study comprises three primary components:

1. Data collection and analysis. To investigate the problem of foreign language professional communication and cross-cultural competence among future power engineers, a comprehensive data collection process was initiated. This involved surveys, interviews, and assessments of both engineering students and professionals currently working in the power engineering sector. The data collected included language proficiency levels, experiences in cross-cultural interactions, and perceived challenges.

2. Literature review. The study extensively reviewed existing research and publications from notable scholars such as Marc Riemer, Brent Jesiek, Yi Shen, and Y. Haller, Mallaband et. al., Jiang, D., Dahl, B., & Du, X, and Rosa, D & Karimov, D, among others. This literature review provided the

theoretical foundation for understanding the significance of language and cross-cultural competence in the power engineering domain.

3. Pedagogical approaches and strategies. A significant portion of the study focused on identifying effective pedagogical approaches and strategies to enhance foreign language proficiency and cross-cultural competence among prospective power engineers [6]. This involved analysing language learning curricula, cultural sensitivity training programs, and best practices in engineering education. The study also explored the integration of language and culture into engineering coursework.

The combination of empirical data, theoretical insights from existing research, and practical pedagogical approaches formed the main material of the study. This comprehensive approach allowed for a nuanced exploration of the problem and the formulation of recommendations for improving foreign language professional communication and cross-cultural competence in the field of power engineering [7].

Conclusion. This study has shed light on the critical importance of foreign language professional communication and cross-cultural competence in the realm of power engineering. The analysis of data, supported by a thorough review of relevant literature, underscores the following key conclusions.

1. In today's interconnected world, power engineering projects transcend borders. Engineers must not only excel in technical skills but also possess cross-cultural competence to navigate international collaborations effectively.

2. Language proficiency is a core skill. Language proficiency, particularly in a foreign language, is an essential component of successful professional communication. Engineers should aim to achieve proficiency levels that enable effective technical discourse.

3. Lack of attention to cross-cultural training. The study reveals a notable gap in engineering education, where insufficient attention has been given to cross-cultural training. To address this, there is a need for curriculum enhancements that incorporate language and culture alongside technical subjects.

4. Effective pedagogical approaches and strategies play a pivotal role in developing language and cross-cultural skills. Integrating these elements into engineering coursework can foster more competent professionals.

The findings of this study open avenues for future research and exploration in several directions. Conducting longitudinal studies to track the impact of cross-cultural competence and language proficiency on the career trajectories of power engineers would provide valuable insights into the long-term benefits of addressing this issue. Exploring the role of technology, such as language learning apps and virtual reality simulations,

in enhancing language and cross-cultural skills within engineering education could yield innovative solutions. Investigating the challenges and opportunities of international collaboration in power engineering projects and how cross-cultural competence influences project success could further deepen our understanding. Collaborating with power engineering industry stakeholders to develop and implement educational initiatives that align with industry demands for cross-cultural competence would bridge the gap between academia and practice.

In conclusion, addressing the challenges related to foreign language professional communication and cross-cultural competence among power engineers is a multifaceted endeavour with far-reaching implications. Continued research and proactive measures are necessary to equip future engineers with the skills needed for successful global collaboration in the dynamic field of power engineering.

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