

# BREAKING THE LANGUAGE BARRIER: INSIGHTS INTO TEACHING POWER ENGINEERING TERMINOLOGY TO STUDENTS

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## Abstract

*The article deals with pedagogical insights aimed at taking apart this linguistic barrier and enhancing the understanding of power engineering concepts among students.*

**Keywords:** pedagogical approach, power engineering terminology, inclusive learning experience, valuable insights.

## Анотація

*У статті розглядаються педагогічні ідеї, спрямовані на подолання мовного бар'єру та покращення розуміння студентами понять енергетики.*

**Ключові слова:** педагогічний підхід, енергетична термінологія, досвід інклюзивного навчання, цінні ідеї.

## Introduction

In the dynamic realm of power engineering, where concepts are as intricate as the circuits they describe, a significant challenge arises for both educators and students—the language barrier. Power engineering, a discipline at the heart of energy generation and distribution, often presents a linguistic challenge for students. The intricate terminology, laden with technical jargon, can become a barrier to effective learning. Overcoming this obstacle requires a thoughtful and pedagogically sound approach. This article delves into pedagogical insights aimed at dismantling this linguistic barrier and enhancing the understanding of power engineering concepts among students.

## Process

Power engineering is a discipline where precision is paramount. Misinterpretation of even a single term can lead to serious consequences. Therefore, establishing a robust foundation in understanding and using the terminology is critical for engineering students. Effective communication in the language of power engineering not only facilitates learning but is also fundamental to success in the field.

Before addressing the language barrier, it's crucial to identify specific linguistic hurdles that students commonly encounter. From complex mathematical notations to industry-specific acronyms, the challenges are diverse. Educators must recognize these stumbling blocks to tailor their pedagogical approach accordingly.

Strategies for Teaching Power Engineering Terminology:

1. Contextual Learning: Integrate real-world examples and case studies into the curriculum to provide students with contextual understanding. Relating abstract terms to practical applications enhances comprehension and retention.
2. Multimodal Teaching Methods: Recognize that students have varied learning styles. Incorporate visual aids, interactive simulations, and hands-on activities to appeal to different senses, reinforcing the terminology through multiple channels.
3. Interactive Workshops: Conduct workshops that encourage active participation. Group discussions, problem-solving sessions, and collaborative projects create an environment where students can engage with and practice power engineering terminology in a supportive setting.

4. Use of Technology: Leverage educational technology tools, such as virtual labs and interactive software, to simulate real-world scenarios. These platforms provide a risk-free space for students to experiment with and understand complex terms.

5. Incremental Complexity: Instead of bombarding students with an avalanche of technical terms, introduce power engineering terminology gradually. Begin with fundamental concepts and progressively delve into more advanced terms. This step-by-step approach allows students to build a solid foundation before tackling the complexities of the field.

6. Language Support: Recognize and address the diverse linguistic backgrounds of students. Provide support resources such as glossaries, translated materials, and language workshops. Ensuring that all students have access to the necessary terminology is essential for an inclusive learning experience.

7. Industry Integration: Bring the real-world application of terminology into the classroom by inviting guest speakers from the power engineering industry. Industry professionals can share their experiences, providing students with valuable insights and a practical understanding of the terminology used in the field.

8. Regular Feedback Mechanisms: Establish a feedback loop where students can receive constructive criticism on their use of terminology. This iterative process helps refine their understanding and application of power engineering la

The language barrier is not merely linguistic; it often involves a psychological aspect where students may feel intimidated by the complexity of the terminology. To address this, educators should create an inclusive and supportive learning environment. Encouraging questions, providing additional resources, and acknowledging the learning curve can help students build confidence in navigating the language of power engineering.

### Conclusion

Breaking the language barrier in power engineering education is a collaborative effort between educators and students. By employing pedagogical strategies that cater to diverse learning styles, contextualizing terminology, and fostering a supportive atmosphere, we can ensure that future engineers not only speak the language of power but also comprehend it with depth and confidence. Through these insights, we pave the way for a new generation of power engineers who are not hindered by language but empowered by it.

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