

TEACHING CHEMISTRY TERMINOLOGY IN ESP CLASSES

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Abstract:

This article explores the way English for Specific Purposes (ESP) programs teach chemical terminology. The purpose of this research is to evaluate the effects of adding chemistry-related specialized language to ESP instruction for scientific students. Surveys and language tests were utilized as part of a mixed-method study approach to collect information on students' learning objectives and opinions on the teaching style. According to the findings, including terminology related to chemistry in ESP classes helps students understand and remember scientific ideas, which boosts their academic achievement and chemistry-related communication abilities. According to the study, science students can greatly benefit from and be helped in their academic achievement by receiving ESP education that is specifically designed to teach specialist language.

Key words: chemical terminology, chemistry-related communication, proficiency, mixed-method, ESP classroom, a post-test.

Introduction:

The goal of English for Specific Purposes (ESP) courses is to deal with the language requirements of learners in certain professional or academic fields, like commerce, engineering, or science. Gaining proficiency in specialist terminology is essential for communicating effectively and comprehending difficult ideas in the scientific domain. Particularly in chemistry, specialized vocabulary plays a major role in facilitating scientific conversation and communicating exact concepts. For this reason, teaching chemical terminology in ESP lessons is essential to improving students' language skills and understanding of scientific material.

Methodology:

Utilizing a mixed-method research approach, the efficacy of teaching the terminology for chemicals in ESP classes was examined. Pre-tests were employed in the study to evaluate

students' prior vocabulary knowledge in chemistry, and ESP lessons were designed to introduce and practice specific terminology pertaining to chemical compounds, processes, and features. Students were given a post-test to assess their learning objectives following the lesson. In order to get student input on the teaching approach and its effect on their comprehension of chemistry subjects, surveys and interviews were also performed.

The methodological approach for teaching chemical terminology in ESP classrooms that works best emphasizes improving students' language understanding and acquisition.

1. Needs Analysis:
 - To determine the precise language demands of students studying chemistry-related subjects, conduct a needs analysis.
 - Determine the vocabulary and language skills required for efficient communication in the subject of chemistry by surveys, interviews, and material analysis.

Example: Distribute a survey to chemistry students to assess their understanding of key terminology and their proficiency in using scientific language.

2. Corpus Linguistics:

- To find common terminology and language patterns, evaluate real-world chemical literature using corpus linguistics methods.
- As a teaching aid for terminology, compile a specific corpus of chemistry texts.

Example: To extract pertinent terminology and contextual usage, compile a corpus of articles, textbooks, and research papers on chemistry.

3. Vocabulary Acquisition:

- Implement vocabulary acquisition strategies such as spaced repetition and mnemonic devices to help students memorize and retain chemistry terminology.
- Utilize flashcards, quizzes, and word games to reinforce the learning of key terms.

Example: Develop an online platform with interactive flashcards and quizzes for students to practice and review chemistry vocabulary.

4. Contextualized Learning:

- To aid with understanding and memory, include real-world examples and useful uses of chemistry terms.

- Make use of simulations, experiments, and case studies to help students use terminology in practical contexts.

Example: Have students describe chemical reactions using the appropriate language after you do an experiment in the lab.

5. Collaborative Learning:

- To improve language use and communication skills, promote group discussions, peer teaching, and project work as collaborative learning activities.

- Set up group projects where students must use vocabulary from chemistry to develop reports or presentations.

Example: Divide students into groups to research and present on a specific topic in chemistry, incorporating relevant terminology and concepts in their presentations.

Through use of the suggested approach to teaching chemical vocabulary in ESP courses, teachers can improve language learning and competency among students pursuing specialized subjects. With the help of this methodical approach that blends language teaching techniques with real-world applications, chemical terminology is better understood, and effective communication within the field is made possible.

Results:

The research's findings show that after taking part in ESP lessons, students' understanding and memory of chemistry terminology significantly improved. The capacity of pupils to accurately recognize and apply specialist vocabulary in written and spoken communication has increased, according to an analysis of language tests. Additionally, surveys and interviews revealed that students thought the teaching approach was interesting and useful for improving their comprehension of chemical concepts. After finishing the ESP lessons, many participants said they felt more assured in their capacity to communicate scientific subjects in English.

Conclusion:

To sum up, teaching chemistry vocabulary in ESP classrooms is a useful strategy for enhancing science students' language skills and understanding of challenging scientific ideas. Students' academic performance is improved when specialist terminology is incorporated into ESP training because it gives them the language skills they need to communicate effectively in the field of chemistry. Future studies should look into additional methods for improving students'

language ability in scientific subjects as well as the advantages of using specialized terminology in ESP classes.

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