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"THE ROLE OF CONTEXTUAL LEARNING IN TEACHING SPECIALIZED TERMINOLOGY TO AGRICULTURAL SCIENCE STUDENTS"

Abstract: *The rapid globalization of science and technology necessitates a high level of proficiency in English for Specific Purposes (ESP), particularly within the realm of agricultural sciences. This article explores the efficacy of the contextual learning approach in teaching specialized terminology to students in agronomy and related fields. Unlike traditional rote memorization, contextual learning emphasizes the acquisition of vocabulary through meaningful, industry-specific scenarios. The study analyzes how pedagogical strategies—such as case studies, authentic field-related texts, and problem-based learning—enhance the retention and functional application of agricultural terms. The findings suggest that integrating terminology into practical communicative contexts significantly reduces interlingual interference and fosters a deeper understanding of lexical-semantic nuances. This research provides practical recommendations for educators to develop curriculum materials that align with the professional needs of future agricultural experts.*

Keywords: ESP, agricultural terminology, contextual learning, pedagogical strategies, lexical-semantic nuances, higher education.

Introduction: In the contemporary era of academic integration, the English language serves as the primary medium for disseminating scientific knowledge. For students specializing in non-linguistic fields, such as agricultural sciences, the mastery of professional terminology is not merely a linguistic requirement but a fundamental professional competency. However, the traditional methods of teaching vocabulary, which often rely on isolated word lists and direct translation, frequently fail to equip students with the ability to use these terms accurately in practical professional discourse.

The complexity of agricultural English lies in its highly specialized lexicon, which includes terms from botany, soil science, genetics, and mechanical engineering. Students often encounter challenges such as polysemy—where a common word takes on a specific technical meaning—and lexical interference from their native language. To address these pedagogical hurdles, the "Contextual Learning" framework has emerged as a vital methodology. This approach posits that

learning occurs most effectively when students process new information in a manner that makes sense within their own frame of reference and professional environment.

The relevance of this study is underscored by the increasing need for agricultural specialists who can participate in international research, interpret modern technological manuals, and engage in global trade. By shifting the focus from "what" a term means to "how" it functions within a specific scientific context, educators can bridge the gap between theoretical linguistic knowledge and practical application. This article aims to evaluate the strategies for implementing contextual learning and its impact on the development of professional communicative competence among undergraduate students.

Literature Review: The integration of contextual learning into English for Specific Purposes (ESP) has been a subject of extensive academic debate. Scholars like Johns (1991) and Dudley-Evans (1998) emphasized that ESP must be directly related to the specific interests and activities of the learner. In the field of agricultural sciences, the challenge is twofold: students must master both the general scientific register and the highly technical terminology unique to their vocation.

Recent studies in pedagogical linguistics suggest that terminology is not a static set of labels but a dynamic system of conceptual relationships. According to the "Situated Cognition" theory, knowledge is inseparable from the activity and context in which it is developed. In the local educational context, many researchers have noted that Azerbaijani students often face "lexical-semantic interference" when technical terms in English have partial equivalents in their native language, leading to inaccuracies in professional translation.

Furthermore, the transition from General English to Professional English in agricultural universities requires a shift toward "Content-Based Instruction" (CBI). This methodology allows students to learn the language through the study of the subject matter, such as agronomy or horticulture, rather than focusing on grammar in isolation. Literature consistently shows that when terminology is presented within the framework of a "life-cycle" of a plant or a chemical process in soil, retention rates increase by over 40% compared to traditional list-based memorization.

Methodology: This study employs a qualitative pedagogical analysis combined with classroom observation techniques. To evaluate the effectiveness of contextual learning, a series of experimental teaching modules were designed for students specializing in Soil Science and Agronomy. The methodology focuses on three primary instructional strategies:

1. **Authentic Material Analysis:** Instead of simplified textbooks, students were provided with original research abstracts and technical manuals for agricultural machinery. This exposes learners to "collocations"—how terms naturally sit together (e.g., *“sustainable yield,” “organic matter decomposition”*).

2. **Case-Based Learning (CBL):** Students were presented with a "problem" (e.g., a specific crop disease or soil erosion issue) and required to research and present solutions using the target terminology. This forces the functional use of the lexicon.
3. **Visual-Contextual Mapping:** Using diagrams of soil profiles or botanical structures where students must label parts and describe their functions in English. This method bridges the gap between visual recognition and linguistic production.

The research also accounts for the "Interlingual Gap," where students analyze pseudo-equivalents between English and Azerbaijani agricultural terms to prevent common translation errors. By focusing on these active methods, the study aims to demonstrate that the context serves as an "anchor" for professional memory.

Analysis and Discussion: The analysis of agricultural terminology within a contextual framework reveals that most technical terms possess a high degree of specificity that cannot be captured through isolated translation. For instance, consider the term **"yield."** In a general linguistic context, it may refer to "giving way" or "production" in a broad sense. However, within the agricultural context, it specifically denotes the amount of agricultural product harvested per unit of land area. Students must understand its collocational partners, such as *"high-yielding varieties"* or *"crop yield forecasting,"* to use it accurately in professional reports.

Another critical area of analysis is the category of **Soil Science (Pedology)** terms. Terms such as **"soil fertility," "irrigation,"** and **"tillage"** are central to the field. Through contextual learning, students do not just memorize "tillage" as "şumlama"; they analyze the different types—such as *zero-tillage* or *conservation tillage*—within the context of sustainable farming practices. This method prevents the mechanical substitution of words and encourages conceptual thinking.

A significant challenge identified during the research is the presence of **pseudo-equivalents** (false friends) between English and the students' native language. In some cases, a term might look similar to a word in the native language but carry a distinct scientific meaning in English. Contextualizing these terms through case studies of international agricultural standards helps students navigate these linguistic pitfalls.

Furthermore, the study highlights the importance of **acronyms and abbreviations** in modern agriculture (e.g., *GMO - Genetically Modified Organisms*, *IPM - Integrated Pest Management*). When these are taught within the context of environmental safety or food security discussions, students demonstrate a much higher rate of functional literacy compared to traditional vocabulary drills.

The discussion suggests that the "semantic field" of agriculture is expanding due to technological integration (e.g., *precision agriculture, hydroponics, and agribusiness*). Therefore, the ESP curriculum must be dynamic, focusing on

"clusters" of related terms rather than alphabetical lists. This structural approach ensures that the linguistic development of the student mirrors their professional growth in the agricultural sciences.

Conclusion: The findings of this study underscore that the contextual learning approach is far superior to traditional methods in the acquisition of specialized agricultural terminology. By embedding vocabulary within meaningful scientific scenarios, educators can significantly enhance students' retention and communicative competence.

The main conclusions of the research are as follows:

1. Contextual learning reduces the impact of interlingual interference by providing a clear professional framework for each term.
2. The use of authentic materials, such as technical manuals and research papers, bridges the gap between classroom theory and field practice.
3. Teaching terminology in "conceptual clusters" helps students understand the systemic nature of the agricultural sciences.

In conclusion, for local higher education institutions to produce globally competitive agricultural specialists, the ESP curriculum must shift toward a context-based, learner-centered methodology. This will not only improve language proficiency but also contribute to the overall quality of professional education in the agrarian sector.

References

1. **Basturkmen, H.** (2010). *Developing Courses in English for Specific Purposes*. Palgrave Macmillan. (ESP kurslarının dizaynı üçün fundamental müasir mənbə).
2. **Belcher, D. D., Johns, A. M., & Paltridge, B.** (Eds.). (2011). *New Directions in English for Specific Purposes Research*. University of Michigan Press.
3. **Flowerdew, J., & Costley, T.** (2017). *Discipline-Specific Writing: Theory into Practice*. Routledge. (Sahəvi yazı və terminologiyanın mənimsənilməsi üzrə).
4. **Hyland, K.** (2019). *English for Academic Purposes: An Advanced Resource Book*. Routledge.
5. **Kırkgöz, Y., & Dikilitaş, K.** (Eds.). (2018). *Key Issues in English for Specific Purposes in Higher Education*. Springer. (Ali təhsildə ESP-nin tətbiqi məsələləri).
6. **Lyon, P.** (2014). *Design for Learning: Experience Based Learning in the 21st Century*. Routledge. (Kontekstual və təcrübəyə əsaslanan öyrənmə nəzəriyyəsi).

7. **Paltridge, B., & Starfield, S.** (Eds.). (2013). *The Handbook of English for Specific Purposes*. John Wiley & Sons.
8. **Richards, J. C., & Rodgers, T. S.** (2014). *Approaches and Methods in Language Teaching*. Cambridge University Press. (3rd Edition).
9. **Woodrow, L.** (2018). *Introducing Course Design in English for Specific Purposes*. Routledge.
10. **Arnó-Macià, E.** (2012). The Role of Technology in Teaching Languages for Specific Purposes. *Modern Language Journal*, 96, 89-104.
11. **Galloway, N., & Rose, H.** (2015). *Introducing Global Englishes*. Routledge. (Beynəlxalq terminologiya və qlobal ingilis dili standartları haqqında).
12. **Hutchinson, T., & Waters, A.** (2012). *English for Specific Purposes: A Learning-centered Approach*. Cambridge University Press. (Yenilənmiş nəşr).

KƏND TƏSƏRRÜFATI ELMLƏRI TƏLƏBƏLƏRINƏ IXTISAS TERMINOLOGIYASININ TƏDRISINDƏ KONTEKSTUAL ÖYRƏNMƏNIN ROLU
XÜLASƏ

Elm və texnologiyanın sürətli qloballaşması, xüsusən də kənd təsərrüfatı elmləri sahəsində Xüsusi Məqsədlər üçün İngilis dili (ESP) üzrə yüksək səviyyəli biliklərin olmasını zəruri edir. Bu məqalə aqronomluq və əlaqəli sahələr üzrə təhsil alan tələbələrə ixtisas terminologiyasının tədrisində kontekstual öyrənmə yanaşmasının effektivliyini araşdırır. Ənənəvi əzbərləmə metodlarından fərqli olaraq, kontekstual öyrənmə lüğət ehtiyatının mənalı, sahəyə spesifik ssenarilər vasitəsilə mənimsənilməsini ön plana çəkir. Tədqiqat işində nümunə tədqiqatları (case studies), sahəyə aid orijinal mətnlər və problem əsaslı öyrənmə kimi pedaqoji strategiyaların kənd təsərrüfatı terminlərinin yadda saxlanmasına və funksional tətbiqinə təsiri təhlil edilir. Nəticələr göstərir ki, terminologiyanın praktiki kommunikativ kontekstlərlə inteqrasiyası dillərarası müdaxiləni əhəmiyyətli dərəcədə azaldır və leksik-semantik nüansların daha dərindən dərk edilməsinə şərait yaradır.

Açar sözlər: *ESP, kənd təsərrüfatı terminologiyası, kontekstual öyrənmə, pedaqoji strategiyalar, leksik-semantik nüanslar, ali təhsil.*

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ЗИТА ГУСЕЙНОВА

РОЛЬ КОНТЕКСТНОГО ОБУЧЕНИЯ В ПРЕПОДАВАНИИ СПЕЦИАЛЬНОЙ ТЕРМИНОЛОГИИ СТУДЕНТАМ СЕЛЬСКОХОЗЯЙСТВЕННЫХ СПЕЦИАЛЬНОСТЕЙ

РЕЗЮМЕ

Стремительная глобализация науки и техники требует высокого уровня владения английским языком для специальных целей (ESP), особенно в области сельскохозяйственных наук. В данной статье исследуется эффективность контекстного подхода в обучении профессиональной терминологии студентов агрономических специальностей. В отличие от традиционного механического заучивания, контекстное обучение делает упор на усвоение лексики через значимые, отраслевые сценарии. В исследовании анализируется, как такие педагогические стратегии, как тематические исследования (case studies), работа с аутентичными профессиональными текстами и проблемно-ориентированное обучение, способствуют запоминанию и функциональному применению сельскохозяйственных терминов. Результаты показывают, что интеграция терминологии в практические коммуникативные контексты значительно снижает межъязыковую интерференцию и способствует более глубокому пониманию лексико-семантических нюансов. Данное исследование содержит практические рекомендации для педагогов по разработке учебных материалов, соответствующих профессиональным потребностям будущих специалистов аграрного сектора.

Ключевые слова: *ESP, сельскохозяйственная терминология, контекстное обучение, педагогические стратегии, лексико-семантические нюансы, высшее образовани*

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