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## DIDACTIC CHARACTERISTICS AND METHODOLOGICAL FUNCTIONS OF CORPUS LINGUISTICS IN TEACHING ENGLISH ICT COLLOCATIONS TO ICT STUDENTS

Annotation

This paper investigates the use of Corpus Linguistics in teaching English collocations, specifically within the context of Information and Communication Technology (ICT). It focuses on how concordance tools, a core component of Corpus Linguistics, can be employed to identify, analyze, and teach collocations relevant to ICT students. By examining the benefits of corpus-based methods, particularly in terms of authenticity, frequency, and context, this paper explores how these tools enhance ICT students' understanding of specialized vocabulary and improve both fluency and accuracy in professional communication.

**Key words:** Corpus Linguistics, concordance, NOW corpus, corpus-based, collocation, software.

## ДИДАКТИЧЕСКИЕ ХАРАКТЕРИСТИКИ И МЕТОДОЛОГИЧЕСКИЕ ФУНКЦИИ КОРПУСНОЙ ЛИНГВИСТИКИ В ОБУЧЕНИИ АНГЛИЙСКИМ ИКТ-КОЛЛОКАЦИЯМ ДЛЯ СТУДЕНТОВ ИКТ-СПЕЦИАЛЬНОСТЕЙ

Аннотация

Настоящая работа исследует использование корпусной лингвистики в обучении английским коллокациям, особенно в контексте информационных и коммуникационных технологий (ИКТ). В центре внимания находится использование инструментов конкорданса, являющихся основным компонентом корпусной лингвистики, для выявления, анализа и преподавания коллокаций, релевантных для студентов ИКТ. Рассматривая преимущества методов, основанных на корпусах, особенно в аспектах аутентичности, частотности и контекста, работа изучает, как эти инструменты помогают студентам ИКТ лучше понять специализированную лексику и улучшить как беглость, так и точность в профессиональной коммуникации.

**Ключевые слова:** Корпусная лингвистика, конкорданс, корпус NOW, методы на основе корпуса, коллокация, программное обеспечение.

## AKT YO'NALISHI TALABALARIGA INGLIZ TILIDAGI AKT SOHASIGA OID KOLLOKATSIYALARNI O'RGATISHDA TIL KORPUSINING DIDAKTIK XUSUSIYATLARI VA METODOLOGIK FUNKSIYALARI

Annotatsiya

Ushbu maqola ingliz tilidagi kollokatsiyalarni o'qitishda til korpusidan foydalanilishini, ayniqsa Axborot va Kommunikatsiya Texnologiyalari (AKT) kontekstida o'rganadi. Maqola til korpusi asosiy komponentlaridan biri bo'lgan konkordans vositasining AKT yo'nalishi talabalariga kollokatsiyalarni aniqlash, tahlil qilish va o'rgatishda qanday qo'llanilishini ko'rib chiqadi. Til korpusi asosida chet tillarni o'rgatish metodlarining afzalliklari, xususan, ularning autentikligi, chastotasi va konteksti nuqtai nazaridan, ushbu vositalar AKT yo'nalishi talabalarining kollokatsiyalarni tushunishi, samarali va professional muloqotda, ya'ni o'qish va yozish ko'nikmalarida muvaffaqiyatli foydalanishni rivojlantirishga yordam beradi.

**Kalit so'zlar:** Til korpusi, konkordans, NOW korpusi, korpusga-asoslangan, kollokatsiya, dasturiy ta'minot.

**Introduction.** In the realm of Information and Communication Technology (ICT), English has firmly established itself as the global lingua franca. As ICT continues to play an integral role in international communication, research, and development, mastering the technical lexicon becomes a critical component of success for students in this field. A key aspect of this lexicon is the understanding and use of collocations – specific combinations of words that frequently co-occur in natural language use. In professional and academic contexts, collocations are not only essential for fluency but also for precision and clarity in communication.

Corpus linguistics, with its emphasis on large collections of real-world language data, offers a powerful approach to overcoming these limitations. By analyzing authentic language use from specialized texts, corpus linguistics enables learners to engage with collocations in context, fostering both understanding and application. This paper explores the didactic characteristics and methodological functions of corpus linguistics in teaching ICT collocations, with a particular focus on concordance tools and their effectiveness in the learning process.

**Literature Review.** Corpus linguistics is the study of language through large collections of texts (or corpora). It allows for the identification of recurring patterns, such as collocations, and facilitates the study of language in context. In language teaching, corpus-based methods enable students to encounter authentic language use and understand the ways in which words

are typically used together. Sinclair emphasizes that corpus linguistics bridges the gap between theoretical language studies and practical language use, making it a useful tool in English for Specific Purposes (ESP) contexts such as ICT.

In the field of ICT, collocations are essential for clear and precise communication. O'Keeffe, McCarthy, and Carter argue that mastering collocations is particularly important for learners in technical fields, as it not only improves fluency but also ensures accuracy in professional interactions. For ICT students, understanding common collocations such as “cloud computing,” “network security,” and “software development” helps them both read and produce professional content with a high degree of proficiency.

Concordance tools are software programs that display a word in its immediate context within a corpus. These tools allow students to see collocations in action and help them identify language patterns through context. According to McEnery and Hardie, using concordance lines enables learners to observe how specific words or phrases are used across various contexts, which aids in developing both lexical and grammatical understanding.

**Methodology.** This study employs a qualitative approach to examine how Corpus Linguistics, particularly through the use of concordance tools, can be applied in teaching ICT collocations. The methodology is divided into two main components: corpus data collection and the application of concordance software.

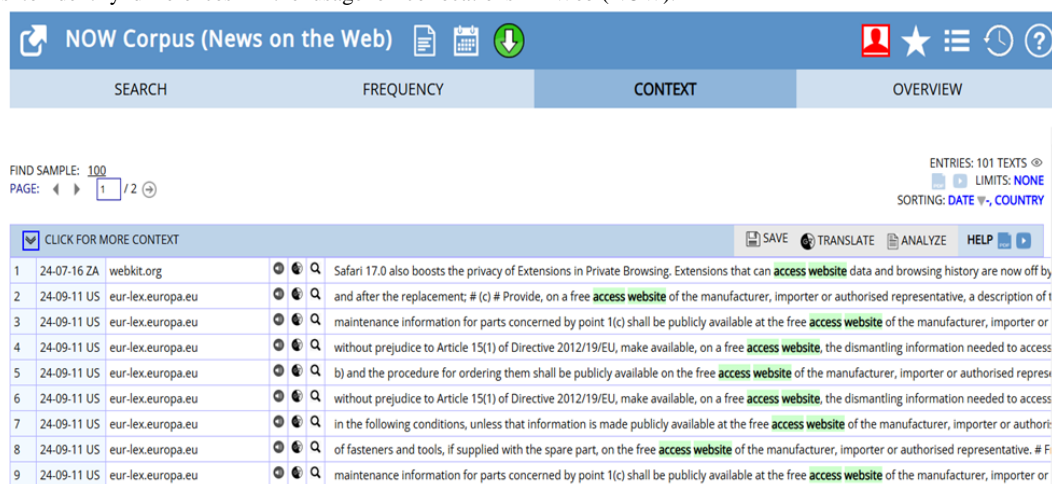
1. Corpus Data Collection

The first step in the methodology involves the compilation of specialized corpora. NOW corpus serves as the foundation for subsequent analyses and classroom activities, offering a rich set of authentic language data that reflects the actual usage of ICT terminology in real-world contexts. NOW corpus was carefully selected to represent a variety of ICT-related texts, including academic papers, technical manuals, and online forums. These texts were chosen for their relevance to the ICT field and their diversity in genre, which provides a broad spectrum of contexts in which ICT collocations appear.

There are numerous corpora available on the Internet that can be used for analyzing word usage or the grammatical structure of a language. In this regard, it is important for the user (learner, student, teacher) to make the right choice of a specific CL to address particular educational or research tasks. For instance, if a user needs to identify differences in the usage of collocations

“access website” and “launch website” in modern English, the most suitable CL for solving this educational task would be the News on the Web (NOW). Image 2.7. provides an example of search results for collocation “access website” in the News on the Web (NOW).

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Picture 1. Screenshot of NOW

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NOW corpus was constructed by collecting publicly available datasets and domain-specific texts. The following types of sources were incorporated into the corpus:

**Academic Papers:** These sources included research articles and conference proceedings from recognized ICT journals and databases such as IEEE Xplore, Springer, and ACM Digital Library. Academic texts typically use formal, technical language and present high-level discussions on specialized topics in areas such as software engineering, computer science, and information systems.

**Technical Manuals:** These texts included user guides, manuals, and documentation for software, hardware, and various ICT systems. They are written with a focus on practical, step-by-step instructions and are often used in professional settings. Examples include documentation for cloud platforms, network security protocols, and software development tools.

NOW corpus was cleaned and processed to remove any irrelevant or non-ICT-related content, ensuring that the data would be focused solely on ICT discourse. After the selection and processing stages, the final corpus comprised approximately 600,000 words.

## 2. Application of Concordance Tools

Concordance software, specifically AntConc, was used to extract concordance lines for high-frequency ICT terms such as “data analysis,” “network security,” and “cloud computing”.

These terms were chosen because of their prevalence in ICT texts and their relevance to the student audience.

## 3. Pedagogical Application

The study involved classroom-based exercises where ICT students were tasked with analyzing concordance lines for selected ICT collocations. Students were asked to:

Identify the most frequent collocates for each key term.

Analyze how the collocates vary in context.

Produce their own sentences using the identified collocations.

Students' responses were assessed for fluency, accuracy, and context appropriateness. Teacher feedback was also incorporated to evaluate the effectiveness of using concordance-based methods in teaching ICT collocations.

**Results.** The results of the concordance analysis provided clear insights into the frequency and contextual variation of ICT collocations across different genres of texts. This section outlines the key collocations identified in the corpus, as well as their relevance to ICT students in both academic and professional contexts. The analysis also demonstrates how the genre of the text influences the use of specific collocations, highlighting the importance of teaching students the most frequent and contextually appropriate combinations of words in ICT communication.

The concordance lines also demonstrated that the frequency of certain collocations in the ICT corpus varied depending on the genre of the text. For example, academic papers often contained more formal collocations like “network protocol” and “data encryption,” while industry forums and technical manuals included more practical terms such as “server management” and “software testing”.

Students showed a significant improvement in their ability to recognize and use ICT collocations correctly after engaging with the concordance-based activities. The majority of students were able to identify common collocates, and their written assignments demonstrated a greater understanding of how to use ICT collocations in context.

Teachers noted that using concordance tools helped students become more autonomous learners, as they could independently explore language patterns and apply their findings to real-world scenarios. Moreover, students appreciated the authenticity of the data, which they found more useful than traditional vocabulary exercises or word lists.

**Discussion.** The study shows that concordance tools offer several advantages for teaching ICT collocations. The primary benefits include:

**Contextual Learning:** Students gain a deeper understanding of how words are used in context, which is crucial for mastering specialized terminology in ICT.

**Real-World Relevance:** By working with authentic data, students are exposed to the language they will encounter in professional ICT environments.

**Increased Learner Autonomy:** Concordance-based activities encourage independent learning and help students develop skills to navigate complex language structures on their own.

One challenge noted in the study was that some students initially struggled with using concordance software due to a lack of familiarity with the tools. Additionally, the need for specialized ICT corpora was identified as a potential limitation, as not all institutions have access to extensive domain-specific corpora.

Despite these challenges, the benefits of corpus linguistics in teaching collocations far outweighed the drawbacks, and with adequate training, students quickly adapted to using the tools.

Concordance tools provide immediate access to extensive language data, making them highly efficient for teaching and self-directed learning of ICT collocations. This tool enables real-time feedback through exercises based on authentic corpus data, allowing learners to refine their understanding and application of collocations in context. Based on the didactic characteristics of CL in teaching English collocations, it would be better to highlight their methodological functions, which are given in Table 1.

Table 1.

Didactic characteristics and methodological functions of concordance in teaching English ICT collocations.

№	Didactic characteristics of concordance in teaching English ICT collocations	Methodological functions of concordance in teaching English ICT collocations
1.	Authenticity	It helps expose students to genuine examples of ICT collocations as they appear in natural language, enhancing their understanding and usage.
2.	Relevance	By selecting concordance lines from relevant texts, teachers can focus on collocations that are applicable to the student's field of study, professional interests, or daily life.
3.	Variety of contexts	It helps students understand the nuances and variations in meaning that can occur based on the context, fostering a more comprehensive grasp of ICT collocations.
4.	Focus on meaning and usage	Students not only learn the words themselves but also how they combine with other words to convey specific meanings and nuances.
5.	Developing language awareness	This awareness contributes to improved language proficiency and allows students to make informed choices in their own language use.
6.	Independent learning	They can use concordance tools and databases to explore language patterns on their own, promoting self-directed learning and language exploration outside the classroom.
7.	Corpus linguistics integration	Teachers can integrate corpus-based activities into the curriculum, exposing students to a broader range of language and promoting a data-driven approach to language learning.
8.	Error analysis	By studying instances where collocations are misused or where errors occur, students can enhance their understanding and avoid making similar mistakes in their own writing and speaking.

**Conclusion.** This study demonstrates that Corpus Linguistics, particularly through the use of concordance tools, offers a highly effective approach for teaching ICT collocations. By exposing students to authentic data and enabling them to explore language patterns in context, concordance-based methods enhance both the fluency and accuracy of ICT students in

professional and academic communication. The findings suggest that incorporating corpus linguistics into ICT courses can significantly improve students' technical English proficiency, preparing them for effective communication in the global ICT workforce.

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