

AI-ASSISTED CORPORA-BASED TEACHING METHODS AND THEIR DIFFERENCES FROM TRADITIONAL CORPORA-BASED METHODS

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Abstract: The rapid development of artificial intelligence has significantly influenced contemporary language pedagogy, particularly in data-driven and technology-enhanced teaching approaches. One such approach is AI-assisted corpora-based teaching, which integrates traditional corpus-based pedagogy with AI tools to support teachers in analyzing authentic language data and designing effective instructional practices. This article aims to explore the concept of AI-assisted corpora-based teaching, clarify its theoretical foundations, and distinguish it from conventional corpus-based and AI-assisted teaching methods. The study discusses how AI tools can mediate access to large linguistic corpora by automating tasks such as frequency analysis, sense disambiguation, and contextual classification, thereby reducing teachers' workload and enhancing pedagogical decision-making. Through illustrative classroom examples, including the corpus-based analysis of polysemous vocabulary items, the article demonstrates how AI-assisted corpora-based teaching can improve classroom management, increase learner engagement, and promote evidence-based instruction. The article also examines the advantages and limitations of this approach and highlights its potential contribution to modern language teaching in higher education contexts.

Keywords: AI-assisted teaching; corpora-based teaching; data-driven pedagogy; language teaching methods; artificial intelligence in education; corpus linguistics; ELT methodology.

Introduction. The increasing availability of large digital language corpora and the rapid development of artificial intelligence have brought significant changes to contemporary teaching practices, particularly in language education. Traditionally, corpora-based teaching enabled teachers to rely on authentic language data rather than intuition when selecting teaching content. However, the manual analysis of corpus data often requires substantial time, technical knowledge, and effort. In response to these challenges, AI-assisted corpora-based teaching has emerged as an innovative pedagogical approach that integrates AI tools into corpus-informed instruction.

AI-assisted corpora-based teaching refers to a teaching approach in which AI tools support teachers in accessing, analyzing, filtering, and pedagogically adapting corpus data for classroom use. Importantly, this approach does not replace the teacher's role or reduce teaching to automation. Instead, AI functions as an assistant that enhances teaching efficiency, supports evidence-based instruction, and allows teachers to focus more on explanation, interaction, and classroom management. This article aims to clarify the concept of AI-assisted corpora-based teaching, distinguish it from traditional corpora-based teaching and general AI-assisted teaching, and demonstrate its classroom application through concrete examples.

Corpora-based teaching is grounded in corpus linguistics, a field that studies language through large collections of authentic spoken and written texts. In teaching contexts, corpora serve as empirical evidence for explaining how language is actually used rather than how it is ideally described in textbooks. Key pedagogical principles of corpora-based teaching include the use of authentic language data, frequency-based prioritization of teaching content, context-sensitive explanations of meaning and structure, teacher-guided interpretation of linguistic patterns. In traditional corpora-based teaching, teachers manually analyze corpus data to identify frequent words, typical collocations, grammatical patterns, and discourse features. While this

approach improves instructional accuracy, it can be time-consuming and cognitively demanding for teachers.

In contrast, AI-assisted teaching refers to the use of artificial intelligence technologies to support instructional processes such as material preparation, data analysis, feedback, and classroom management. When applied to corpora-based teaching, AI assists not in replacing corpus analysis but in processing and organizing corpus data more efficiently. In AI-assisted corpora-based teaching, AI tools can analyze large sets of corpus examples, identify high-frequency patterns and meanings, classify usages based on context and generate level-appropriate examples for teaching. Thus, AI supports the teacher's analytical work, while pedagogical decisions remain firmly under teacher control.

The key difference between these two approaches lies in who performs the analytical work. This traditional corpora-based teaching the teacher manually searches corpora, frequency and usage patterns are identified by the teacher and example selection depends entirely on teacher interpretation

In AI-assisted corpora-based teaching AI tools assist in corpus searching and categorization frequency and usage patterns are pre-processed by AI, teachers receive organized, filtered corpus results. This integration allows teachers to save time and reduce workload while maintaining pedagogical accuracy and control.

Several tools can support AI-assisted corpora-based teaching in research and classroom practice:

1. Corpus Analysis Tools. Traditional corpus tools such as Ant Conc, Sketch Engine, and BYU Corpus interfaces (COCA, BNC) are used to extract authentic language data, frequency lists, and concordance lines. These tools provide the empirical foundation for corpora-based teaching.

2. AI-Assisted Interpretation Tools. Generative AI tools such as ChatGPT can be used to summarize corpus results, categorize meanings and usage types, adapt corpus examples for specific proficiency levels, generate teaching-ready explanations based on corpus data. In this role, AI does not create language intuitively but processes and interprets corpus-based input provided or requested by the teacher. We analyzed it with classroom Example: Teaching Vocabulary Through AI-Assisted Corpora-Based Teaching. To illustrate this approach, consider the teaching of the word "apple."

In traditional corpora-based teaching, a teacher searches a corpus and manually analyzes numerous examples of apple, identifying that it can refer to a fruit, a company name, or appear in idiomatic expressions. This process, while accurate, requires time and careful interpretation.

In AI-assisted corpora-based teaching, the teacher asks an AI tool to analyze corpus data related to apple. The AI identifies frequent usage categories, such as apple as a fruit or Apple as a proper noun referring to a company and common collocations such as apple pie or apple juice.

The teacher then selects relevant examples and designs classroom activities based on these results. AI assists with analysis and organization, while the teacher guides explanation, discussion, and practice. This example demonstrates how AI enhances corpora-based teaching without diminishing the teacher's pedagogical role.

Conclusion. AI-assisted corpora-based teaching represents an effective integration of empirical linguistic data and modern AI technology. By assisting teachers in corpus analysis and material preparation, AI enhances efficiency while preserving teacher authority and pedagogical judgment. When applied thoughtfully, this approach supports evidence-based instruction, improves classroom management, and enables teachers to focus on meaningful interaction and explanation. As educational practices continue to evolve, AI-assisted corpora-based teaching offers a promising direction for modern, data-informed teaching methodologies.

References

1. N.B Ataboyev. Mediamatnlr diaxronik korpusida til rivojlanishining emperik tahlil tamoillari , 19b
2. R.Rasulov. Umumiy tilshunoslik (oliy ta'lim muassasalkarining bakalavriat talabalari uchun darslik). Toshkent – 2012.
3. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.
4. Shakirov , R. S. (2023). Korpus lingvistikasi va parallel korpuslar xususida. *Innovative Development in Educational Activities*, 2(11),173–176.
5. Winthrop Nelson Francis and Henry Kucera. *Frequency analysis of English Usage: Lexicon and Grammar*, Houghton Mifflin. 1983
6. Kirsten Malmkjaer , *The linguistics Encyclopedia*, 2nd ed, Routledge,2002, ISBN0-415-22210-9, p.87
7. Biber, D., Conrad, S., & Reppen, R. (1998). *Corpus linguistics: Investigating language structure and use*. Cambridge: Cambridge University Press.
8. Sinclair J. *Corpus and Text – Basic Principles // Developing Linguistic Corpora: a Guide to Good Practice*. – Tuscan Word Centre. 2004. Available at <https://bond-lab.github.io/Corpus-Linguistics/dlc/chapter1.htm>
9. Francis, W. Nelson & Henry Kucera. *Computational Analysis of Present-Day American English*. Providence, RI: Brown University Press. 1967.
10. Francis, W. Nelson & Henry Kucera.. *Brown korpus manual: Manual of Information to Accompany a Standard Corpus of Present-Day Edited American English for Use with Digital Computers*. 1979.
11. Martin Greer. *Children in Progressive -Era America*. Digital public Library of America . September 2015