

## COMPUTER LEXICOGRAPHY IN UZBEK AND ENGLISH EDUCATIONAL DISCOURSE

*M.M Ibaydullaeva, master's degree student*

*G.M. Ibragimova. f.f.f. (PhD), docent*

*Andijan State Institute of Foreign Languages*

**Annotation:** the article examines the features of the functioning of computer lexicography in the context of educational discourse in Uzbek and English. A comparative analysis of digital lexicographic resources, electronic dictionaries and corpus systems used in pedagogical practice is carried out. Special attention is paid to the discursive teaching strategies characteristic of both languages. The differences in the structure of educational interaction, the depth of lexicographic description and the degree of integration of digital technologies into the educational process are revealed. Based on the analysis, recommendations are proposed for improving Uzbek digital lexicography and modernizing educational discourse, taking into account international experience.

**Keywords:** computer lexicography; educational discourse; electronic dictionaries; corpus linguistics; Uzbek language; English; digital learning; discursive analysis.

**Introduction.** It can be noted that this is the modern era of digital technologies, in which language learning is rapidly changing as a result of new linguistic tools and resources. Computational linguistics is considered one of these fields. What exactly is computational linguistics? This is an area where you can use the advantages of corpora, mechanized text processing and electronic dictionaries to describe and teach a language. One should not exclude the fact that interest in educational discourse is gaining momentum every day. Educational discourse can be understood as a certain form of verbal communication that is created in the process of teaching and learning. The relevance of the chosen topic is determined by the need to analyze how education

develops using computer lexicographic tools (including digital dictionaries and corpus systems), as well as how educational discourse is formed and implemented in different linguistic and cultural concepts. Especially, the comparison of Uzbek and English languages made it possible to find differences and similarities in teaching methods, the use of lexical tools and the creation of educational communication.

**Methodology.** The methodological basis of the article is based on an interdisciplinary approach that combines the approaches of practical linguistics, computer lexicography, discursive analysis and information technology. The article used qualitative and quantitative lines of analysis, which allowed for a better study of the phenomenon. As it is already clear, the study is based on a comparative analysis of English-language and Uzbek-language digital dictionaries, a review of resources from educational platforms and electronic tools such as Uztextbook.uz , Uzbekcorpus.uz , milliylugat.uz (Uzbek) and : Oxford Learner's Dictionary, Cambridge Dictionary, COCA (English). Also, the elements of face-to-face and distance learning, which include a lively educational discourse, were not excluded.

Everyone knows that modern linguistics is focused on exploring the advantages of digital dictionaries and the subsequent development of this field in the future. For this reason, there is a need for even more careful analysis of digital dictionary data in order to modernize them. If you study the term "electronic dictionary", you can find out that it has approximately begun to enter linguistics in the last decade. Various researchers named it in different ways, for example: Y.N. Marchuk in 1976 – "computational lexicography", E.V. Vertel in 1984 – "machine lexicography", O.A. Kazakevich in 1985. – "automated lexicography", and V.V. Markovkin in 1990 – "computer lexicography". Next, Y.N. Marchuk decided to combine the above-mentioned names under the general name "computational linguistics". He believed that the existing problems of linguistics are solved using computers with upgraded software tools<sup>1</sup>. It should be noted that G.M. Mandrikova noted in her research that the terms "computational lexicography", "computing machine" and "automatic lexicography"

<sup>1</sup> Marchuk Yu.N. Osnovy komp'yuternoi lingvistiki [Basical computer linguistics]. Moscow, MGOU Publ., 2002, 234 p.

can be considered of the same type due to the fact that they all depend on a computer in their work. She also concludes that the field of lexicography, computer lexicography, can be attributed to an individual category of linguistics. The essence of this science compares the presence of different questions on theory and practice, as well as an understanding of all the results that indirectly relate to this problem<sup>2</sup>.

Educational discourse is a changing consensus of ideological understandings, cognitive and communicative activities that ensure the transmission, understanding and duplication of socio-cultural experience, values, knowledge, mental and behavioral forms. The main comparative aspect of educational discourse is its constancy, which is expressed in changes from one form to another, the ability to change endlessly and changes at any level. This is the reason that the entire classification of discourse is rather relative, which does not pretend to be divisible by all forms and illustrates only the essence of the parameters. The methods of language teaching in higher education have been fundamentally changed by the digital evolution of education and the rapid development of information technology. Computer lexicography is one of the important areas. This is a science that is at the intersection of linguistics, pedagogy and computer science. These areas deal with the implementation, ordering, and use of digital dictionaries. Computer lexicography in the university education area provides not only a supportive part, but is also an important part of language preparation, ensuring an engaging, skillful and personal approach to vocabulary information.

English-speaking educational organizations such as *Oxford English Dictionary Online*, *Merriam-Webster*, *Longman Dictionary of Contemporary English Online*, *Sketch Engine*, and *WordNet* have gained a lot of experience in creating and using electronic tools in lexicography. Just as in teaching English as a native or foreign language, these tools are often used in the research work of teachers and students. Using them, academic vocabulary, the ability of critical thinking and individual activity with complex texts are actively developing.

---

<sup>2</sup> Mandrikova G.M. Uchebnoe komp'yuternoe leksikografirovaniye v teoreticheskom i prikladnom rassmotrenii: dis. ... kand. filol. nauk [Practical computer lexicography and theory. Doct. Diss.]. Moscow, 1994, 194 p.

As for computer lexicography in the Uzbek educational sphere, it is currently actively developing. In recent years, government-based platforms have been created in Uzbekistan to improve education and support local linguistic tools. *Ziyonet* and *Til va Adabiyot* were the first among the digital Uzbek dictionaries. In particular, resources are being implemented that are aimed at teaching two or more languages. But it is worth noting that, compared with English-language programs, Uzbek platforms face problems such as a limited number of improved electronic dictionaries, limited specialized software, and a lack of knowledge in electronic literacy among students and teachers.

**Discussion and results.** Scientists have identified quite important differences in the improvement and use of computer lexicography and in the structure of educational discourse in Uzbek and English. The following examples prove that electronic lexicographic tools have a direct impact on the teaching and use of language in an educational environment.

Feature	Uzbek educational discourse	English educational discourse
<i>Discourse style</i>	Formal, authoritative	Interactive, collaborative
<i>Lexical richness</i>	Limited, with formal vocabulary	Rich, discipline-specific terminology
<i>Use of digital dictionaries</i>	Emerging, mostly print-based	Advanced, wide use of online dictionaries
<i>Corpora availability</i>	Few, developing stage	Extensive, widely used in pedagogy
<i>Learner -centered lexicography</i>	Rare	Common and data-driven



If we consider the level of development and accessibility of digital dictionaries in both languages, we can see that improved electronic dictionaries such as the *Oxford Advanced Learner's Dictionary (OALD)*, *Cambridge Dictionary and Longman Dictionary of Contemporary English (LDOCE)* are often used in English. All these programs include clear definitions with contextual examples, interval marking (A1, B2, etc.), and involving options such as pronunciation, phraseological verbs, and grammatical markings. For example, the word “regulation” in the Oxford Advanced Learner's Dictionary is given with a definition, a couple of contextual examples and information about usage in formal and informal speech: The new regulations had a significant impact on local businesses.

B.T.S. Atkins and M. Rundell indicate in their research that computer lexicography should not have the property of not only being a simple translation of a printed dictionary into an electronic format, but also having a universal system that is adapted to the tasks of users, especially students<sup>3</sup>. According to their statements, then in the near future dictionaries will become upgraded reference programs that will be included in the educational structure.

In comparison with English-language programs, in the educational sphere of the Uzbek language, the following are considered to be the primary electronic resources: *Milliylugat.uz*, *Glosbe (uz-en)* and *Uzbekcorpus.uz* (volume and reach are limited). For example, the word *ta'lim* in *Milliylugat.uz* it has only a short definition, without any concept or combination. Meanwhile, in English sources there are examples for the word *education* by type: A good education is essential for success in modern society.

It follows from this that Uzbek-language dictionaries have more encyclopedic information than educational, which reduces their importance in educational activities.

In his work, N. Yuldashev notes that Uzbek computer lexicography arrives at the initial stage of improvement. He also stated the need for persistent integration of corpus

---

<sup>3</sup> The Oxford Guide to practical Lexicography. Oxford University Press, 2008

technologies and the implementation of digital dictionaries that focus on both translation and teaching<sup>4</sup>.

If we consider discursive strategies in educational speech, then educational discourse in English is characterized by the use of imperatives and modal verbs: *“Let’s read the next text.”* / *“You should translate given words.”* In addition to the student's persistent participation in the dialogue, the use of the question-answer structure dominates: “Initiation - response – feedback, IRF approach. A review of 15 videos from school and university lessons showed that in Uzbek discourse, the teacher is most often authoritarian (he speaks 70-80% of the time). It was also found out that the number of open questions is critically small and only formulas such as *“Shu muhim”*, *“Yodlash kerak”*, *“Eslab qoling”* are used. It is possible that this method of teaching reduces the effectiveness of engaging lexical learning and reduces conversational practice.

It is also worth paying attention to the corpus analysis of vocabulary. A comparable analysis of the two cases was carried out (COCA vs. Uzbek National Corpus) on the regularity of the use of educational vocabulary:

Word/synonym	Frequency in COCA (per 1 million words)	Frequency in Uzbek Corpus
Education	712	Ta’lim – 305
Teacher	948	O’qituvchi – 270
Explain/explanation	420	Tushuntirmoq - 152

As can be seen from the analysis, the educational vocabulary in English is most interconnected with the verbs of discourse (*to analyze, to explain, to suggest*), while in Uzbek, imperative forms and abstract terminology prevail.

**Conclusion.** It became clear that computer lexicography plays an important role in the implementation of educational discourse in modern times, namely in the

<sup>4</sup> Yuldashev N. O'zbek tilshunosligida korpus lingvistika va leksikografiya masalalari. – Toshkent: Fan, 2020.

environment of digital transformation of education. English-speaking practitioners have shown that tools such as digitized dictionaries and corpus systems have become an important part of the learning process, helping to improve students' vocabulary, promote critical thinking, and develop a language base. Despite all this, Uzbek electronic lexicographic programs have only begun to develop and need further improvement. A large number of available digital dictionaries do not have the necessary practical resources, which, of course, reduces their effectiveness in the educational process and does not arouse students' interest in individual vocabulary learning. To improve the quality of educational discourse in the Uzbek language, it is necessary to create and use digital dictionaries and corpora; introduce electronic lexicographic tools into educational platforms; redirect learning to inclusive and contextual education. The above points will provide an opportunity to improve the Uzbek educational space and make it more focused on the necessary needs of students.

#### **USED LITERATURE:**

1. Atkins, B. T. S., & Rundell, M. (2008). *The Oxford Guide to Practical Lexicography*. Oxford: Oxford University Press.
2. Béjoint, H. (2010). *The Lexicography of English: From Origins to Present*. Oxford: Oxford University Press.
3. Granger, S., & Meunier, F. (Eds.). (2008). *International Corpus of Learner English*. Louvain-la-Neuve: Presses universitaires de Louvain.
4. Hartmann, R. R. K. (2001). *Teaching and Researching Lexicography*. London: Routledge.
5. Ibragimova, N. (2025). ISSUES OF TEACHING METHODS OF UZBEK LITERATURE ON THE EXAMPLE OF THE LIFE AND WORK OF ABDULLA ORIPOV. *International Journal of Artificial Intelligence*, 1(2), 1824-1828.
6. Ibragimova, G. M. (2024). Study of the Parentheses by World Linguistics. *Excellencia: International Multi-Disciplinary Journal of Education* (2994-9521), 2(3), 5-7. <https://doi.org/10.5281/>

7. McCarthy, M. (1991). Discourse Analysis for Language Teachers. Cambridge: Cambridge University Press.
8. Mandrikova G.M. (1994) Uchebnoe komp'yuternoe leksikografirovanie v teoreticheskom i prikladnom rassmotrenii: dis. ... kand. filol. nauk [Practical computer lexicography and theory. Doct. Diss.]. Moscow, 194 p.
9. Stubbs, M. (2002). Words and Phrases: Corpus Studies of Lexical Semantics. Oxford: Blackwell.
10. Yuldashev, N. (2020). O'zbek tilshunosligida korpus lingvistika va leksikografiya masalalari. Toshkent: O'zbekiston Milliy Ensiklopediyasi.
11. Karimov, Z. (2021). Ta'lim diskursining lingvopragmatik xususiyatlari. Toshkent: Fan.