Developing Dictionary Skills in English Language Learners (Polysemy, Conversion)

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ABSTRACT

The paper presents the results of a study, conducted at one of the public schools in Tbilisi which aimed to reveal the efficiency of specially tailored exercises for developing dictionary skills in students at schools. In particular, the experiment concentrated on two lexical issues, polysemy and conversion and tested the ability of students to recognize the contextual meaning of a polysemous word, as well as its part of speech meaning with the help of dictionaries. The research question was how these skills could be improved with the help of special exercises designed for this purpose. 50 students, participating in the study, were divided into 2 groups, group A and group B. Group A students had special training in polysemy and conversion with exercises, while the second group did not undergo such training. At the second stage of the experiment both groups were given the same tasks in order to test their ability in guessing the contextual meaning as well as the part of speech meaning of test words and the results of both groups were compared and evaluated.

Keywords: *experiment; dictionary skills; polysemy; conversion.*

Introduction

Lexicography, as a field, has undergone a long and versatile evolution. Practical lexicography dates back to the earliest stages of human civilization, as people have long shown interest in the languages of neighboring communities and attempted to compile bilingual word lists. Theoretical lexicography, or metalexicography, emerged much later (Wiegand, 1984). According to Wiegand, metalexicography comprises the following components: 1. History of lexicography; 2. General theory of lexicography; 3. Research on dictionary use; 4. Review of dictionaries (1984).

Research on dictionary use, as one of the important directions of theoretical lexicography, was founded in the 1970s, and to date, more than 200 studies have been conducted in different countries around the world (Bejoint 2010; Kosem et al. 2019; Nied Curcio 2022). The goals of these studies are different, namely, what are language learners' attitudes towards dictionaries, what are dictionaries used for, what are the strategies for looking up information in dictionaries, which types of dictionaries are used predominantly, and in general, what is the attitude of a society towards this field.

On the basis of these studies, comments and wishes of dictionary users, the structure of dictionaries and the methods of presenting material in them have improved considerably, and modern

online dictionaries have become truly user-friendly resources. However, this process was not accompanied by the development of the other side of the relation between a dictionary and its users, namely by teaching dictionary use, developing dictionary skills in learners (Rundell 1999; Gouws 2022; Markus et al. 2023). "Users should be trained to be more skilled in using dictionaries and other lexicographic tools because no matter how user-friendly the source is, in order to successfully retrieve data, the user needs to know exactly what kind of data set is represented in different dictionary types. Knowing the layout and the basic properties of data structure is essential to accessing the right information" (Margalitadze and Markus, 2024, p. 762). Unfortunately, dictionary didactics has been ignored for years, which led to the loss of the dictionary culture in many countries, including Georgia (Nied Curcio, 2022; Gouws, 2022; Margalitadze and Meladze, 2023).

This situation has had a negative impact on the knowledge of both foreign and native languages in many countries. According to Georgian scholars the influence of English on modern Georgian, proliferation of Anglicisms and calques in it, can be partly explained by the loss of the dictionary culture (Margalitadze, 2020). As a school teacher of English, I am well aware of this problem and see its consequences in my daily interactions with students. I share the view that these circumstances affect negatively the Georgian language and that some measures need to be taken. I am also aware of the fact that school teachers of English need help, methodological guidelines, training in order to introduce and successfully implement teaching dictionary skills in the classroom. The experiment, which I conducted at a public school in Tbilisi, was designed to get a better insight into this problem. My study is the first attempt to explore the dictionary use issues at Georgian schools.

Literature Review

As mentioned above, numerous studies have been conducted on dictionary use in many countries. Welker divides this type of research into six categories: 1. Survey, 2. Studies on actual dictionary use; 3. Studies on the effect of dictionary use; 4. Studies on specific dictionary features and on specific dictionaries; 5. Research on the use of electronic dictionaries, and 6. Research on the teaching of dictionary use (Welker, 2010).

Early studies primarily relied on questionnaires, which were either distributed in person or sent electronically. This method gained popularity due to its ability to collect data from a large number of participants efficiently. However, it faced criticism as a quantitative research tool, particularly because researchers had no direct observation of participants' responses. This limitation raised concerns about whether respondents fully understood and accurately interpreted the questions. As a result, greater emphasis was placed on qualitative research methods (Labov, 1972; Lew, 2002). In addition to

questionnaires, there are alternative methods for studying dictionary usage and dictionary users. One such method is direct observation, in which the researcher observes the participant's behavior in real-time and collects reliable data through firsthand observation (Hatherall, 1984). Among the various research methods mentioned above, one alternative approach is the think-aloud method, in which participants verbalize their thoughts while performing a given task (Wingate, 2002). Additionally, these methods can be combined to achieve more effective results.

Although these studies aimed to consider the opinions of dictionary users in order to improve the quality and structure of dictionaries, they also revealed that many language learners lack basic dictionary skills. They often struggle to find the contextual meaning of polysemous words, select the correct part of speech within a given context, and perform other essential dictionary-related tasks (Welker, 2010; Margalitadze and Meladze, 2023; Margalitadze and Markus, 2024). Among the various studies conducted, experiments on dictionary use skills were of particular interest to us. Nearly all studies confirm that language learners who receive instruction on dictionary use are significantly better at extracting relevant information, completing dictionary-related tasks, and understanding and retaining foreign language vocabulary (Rundell, 1999). The above-mentioned studies have also revealed that often teachers are not prepared to introduce the topic of dictionary use into the classroom. There are no methodological guidelines for teachers, no teaching materials that would help them conduct teaching dictionary use properly (Nied Curcio, 2022).

In many countries, representatives of the educational sphere, together with lexicographers, have begun to shoulder this problem and improve it. Online courses are being created, led by famous lexicographers, who explain to listeners issues related to lexicography and language (Rundell, 1999; Margalitadze and Meladze, 2023), special dictionaries are being created for early school education (Gavriilidou and Konstantinidou, 2022), and exercises are being created to develop dictionary skills in students (Thornbury, 2002; Leaney, 2007; Marchisio et al., 2019; Markus, 2022).

Teaching dictionary skills comprises various aspects, such as spelling, pronunciation, grammatical information, lexical issues – polysemy, homonymy, conversion, collocations, phrasal verbs, and idioms. In my study, I decided to concentrate on polysemy and conversion. This decision was dictated by the conducted surveys, which identified polysemy and conversion as the most problematic issues for students. They don't read the entire entry and choose the first dictionary meaning, which, in many cases, is not the contextual meaning of this polysemous word. The conducted experiments also revealed that students have difficulty guessing the correct part of speech of a word in context, which is why they look up the word in a wrong dictionary entry.

The English language is highly polysemous, with many words having multiple but related

meanings. These words frequently appear in English, often complicating communication between speakers and listeners and causing confusion in the classroom between teachers and students. However, many teachers tend to address such words only within a specific context, rather than exploring their broader semantic range. A more effective approach to vocabulary mastery would be to provide students with a deeper understanding of polysemy, demonstrate how to determine a word's correct meaning using a dictionary, and guide them in developing strategies for interpreting multiple meanings (Vardidze, 2020).

This problem is to be addressed by developing dictionary skills in students. Proceeding from these considerations, there arise the following questions:

- Should foreign language learners be explicitly taught dictionary skills during their school education to improve their ability to identify and understand polysemous words and other complex lexical items?

- How effective are targeted exercises in developing dictionary usage skills for dealing with polysemy, part-of-speech identification, and other aspects of English vocabulary in context?

To explore these questions, I conducted a study at a public school where I teach English. I selected tenth-grade students with an intermediate level of English as study participants.

The Experiment

To answer the above questions, I planned and conducted an experiment in two stages during the spring of 2024, involving 50 tenth-grade students. The first stage was preparatory and involved providing and training one group of tenth-grade students (Group A) with pre-prepared materials and exercises designed to develop their dictionary skills in two areas: polysemy and conversion. The second group (Group B), which participated in the study's second stage, did not receive preliminary training. This stage, along with its exercises, was entirely original and designed by me. In the second part of the study, I used materials from an experiment carried out by Donna Farina, a professor at the University of New Jersey, and her Slovenian colleagues at the University of Ljubljana (Farina and Vrbinc, 2019). This material includes contexts in which common, high-frequency English words are used figuratively rather than literally. In the second stage of the study, both groups were required to analyze these contexts and, using dictionaries, determine the part of speech of the words and their contextual meaning. With the written consent of the authors, I incorporated these contexts into the study, where, as mentioned, high-frequency English words familiar to students were presented with unexpected polysemous meanings. The study aimed to determine how effective could be working with students on English vocabulary through targeted exercises on various vocabulary aspects. Our study

focused specifically on polysemy and conversion, although the list of relevant topics is much broader, including homonyms, collocations, idioms, phrasal verbs, terminology, and more.

The Research Process

The First Stage of the Research

I worked in advance with the students from Group A, who are also my students. I explained to them that an English word can belong to different parts of speech and that determining the part of speech of a word is crucial for accurately understanding the text. I also explained that English words are polysemous and that recognizing their meanings is possible through context, which allows for a more accurate interpretation of these words. Additionally, I emphasized the importance of using dictionaries and demonstrated how to find a word or its meaning in a dictionary. Unfortunately, it should be noted that most of the students at school do not know how to use a dictionary properly, and many believe that a word has only one meaning. Therefore, I decided to include targeted exercises on polysemy for the students of Group A. Below, I present one example of such an exercise (see example 1):

(1) Exercise 1:

Below are listed seven polysemous meanings of the English verb "to break," along with two sentences in which the verb is used. Identify the contextual meaning of "to break" in each sentence and circle the corresponding number in brackets.

1. to separate into parts with suddenness or violence;

2. to fracture a bone;

3. to rip, to burst;

4. to weaken;

5. to ruin financially, to bankrupt;

6. to inform, to make known, to tell;

7. to violate, transgress (law, promise).

Tom broke the news of her husband's death to Mary

(1 2 3 4 5 6 7)

The money-lenders soon broke him

(1 2 3 4 5 6 7).

In these types of exercises, I initially provided the meanings of polysemous words in Georgian and then, in other exercises, in English, as in the second stage of the research, the students were required to complete the task using Merriam-Webster Learner's Dictionary.

I also included exercises on conversion for the students in Group A. Below is an example of this type of exercise (see example 2):

(2) Exercise 2

Circle the correct part of speech:

TOP

1. She was standing at the **top** of the stairs.
a. verb   b. noun   c. adverb   d. adjective

2. My father was a **top** lawyer.
a. verb   b. noun   c. adverb   d. adjective

3. Fruit salad is **topped** with cream.
a. verb   b. noun   c. adverb   d. adjective

While working on the exercises, I found that the students had more difficulty identifying adjectives and adverbs than nouns and verbs. As a result, I dedicated more time to working on these two parts of speech.

I also worked with the students of Group A on mixed-type exercises, which combined conversion and polysemy. Specifically, the exercise required the students to first identify the part of speech of the target word and then find its correct meaning from the given English definitions (see example 3).

(3) Exercise 3.

Identify the part of speech of the highlighted word, and then circle the correct contextual meaning from the definitions given below.

THIN

1. Their arguments all sound a little **thin** for me.
2. The sauce was **thin** and tasteless.

Definitions:

a. having a small distance between the top and bottom or front and back surfaces:

b. of a liquid: flowing very easily: containing a lot of water

c. not having a lot of extra flesh on the body: not fat

d. not large or impressive

e. not very convincing, weak.

The work with the Group A students continued for three weeks.

The Second Stage of the Research

The second stage of the study involved presenting contexts to students of Groups A and B, in which the target words were highlighted. The students were required to identify the part of speech and the contextual meaning of these words using the Merriam-Webster Learner's Dictionary. I divided the study into two stages, conducting it with each group on different days. On the first day, I conducted the study with students who had not received any prior training and had not worked with the same types of exercises as the students in Group A. On the second day, the study was conducted with students who had previously completed various types of exercises. On both days, the study lasted for one lesson (45 minutes). The students worked individually in a quiet environment at their designated computers, where they searched for the part of speech and the meaning of the target word in the given context using the specified dictionary. During the experiment, I had the opportunity to observe the students' look up process, which allowed me to partially combine the quantitative method with the qualitative approach.

I selected six contexts and six test words from Donna Farina's material, which included two verbs, two nouns, and two adjectives: to fix (verb), to score (verb), plug (noun), ticket (noun), sharp (adjective), rich (adjective). Below are given some samples of these contexts (see example 4).

(4)

(4a) A man arrived at the police station here in 2011 with an unusual tip. He told the police that a Singaporean man was **fixing** matches with the local professional soccer team. The police were incredulous.

To fix (verb): primary meaning 'to make firm, stable, or stationary'

contextual meaning 'to influence the actions, outcome, or effect of by improper or illegal methods.'

(4b) He added that the party would be "working collaboratively with our county chairs over the coming weeks and months to put together the statewide **ticket**."

Ticket (noun): primary meaning 'a certificate or token showing that a fare or admission fee has been paid'

contextual meaning 'a list of candidates for nomination or election.'

(4c) Her rock 'n' roll friends might have expected a hip 'n' cool outfit for her English country wedding. But it was her husband, Jamie Hince, the guitarist from The Kills, in his **sharp** blue Yves Saint Laurent suit, who brought a touch of music-world fantasy.

Sharp (adjective): primary meaning 'having a thin keen edge or fine point'

contextual meaning 'stylish, elegant, dressy.'

As can be seen from the 4a, 4b and 4c contexts, they include words, which are known to students of intermediate level - *ticket*, *fix*, *sharp*. On the other hand, they are used in unusual contexts where they have a completely different meaning from their primary meanings. These contexts enable a researcher to check the ability of students to retrieve necessary information successfully from a dictionary, in general, to check dictionary skills of students.

Research Results

After completing the experiment, I assessed a total of 50 assignments. Each assignment included six test words, each presented within a specific context. Correct answers were awarded 5 points each, with a maximum possible score of 30 points. Based on the scores, I categorized the assignments into three performance levels: excellent (25–30 points), good (15–20 points), and poor (5–10 points). The scores were distributed as follows: In Group A, out of 25 participants, 20 students (80%) received an excellent score, out of which 15 students (60%) got 30 points and 5 students (20%) - 25 points. None of the participants in Group A received a good score, and the work of 5 students (20%) was evaluated as poor, with a score of 10 points.

Regarding the results for the participants in Group B, none of them received an excellent score. Seventeen students (70%) earned a good grade, with 5 students (20%) scoring 20 points and 12 students (50%) scoring 15 points. Eight students (30%) submitted poor work, with 5 students (20%) earning 5 points and 3 students (10%) earning 10 points (see Table 1 and Table 2).

Table 1

Group A

Excellent	20 Students (80%)
Good	0 Students
Poor	5 Students (20%)

Table 2

Group B

Excellent	0 Students
Good	17 Students (70%)
Poor	8 Students (30%)

Regarding the identification of the parts of speech, 22 participants in Group A correctly identified all test words, except for one word. In Group B, 20 out of 25 participants made errors in identifying the parts of speech, particularly with the words ***scoring*** (incorrectly identified as a noun in the given context) and ***plug*** (incorrectly identified as a verb). Additionally, one student mistakenly classified ***sharp*** as a noun.

Students in Group B had the most difficulty recognizing the words *score*, *fix*, and *sharp*, as it was unusual for them to understand familiar words used in such different contexts. For example, the word *score* was used in that context in its slang meaning: 'to buy or get illegal drugs' (He couldn't score any drugs). Students failed to guess the correct meaning from the dictionary entry.

Regarding the word *sharp*, the 12th meaning listed in the dictionary entry was overlooked by Group B participants, as they were unfamiliar with the nuances of polysemous words. In contrast, they found the word *rich* relatively easy to interpret, as the dictionary entry included illustrative material that closely aligned with the test context (see example 5).

(5) Information in the Dictionary entry: 'used to say that a person's comment or criticism is surprising or amusing because the same comment or criticism could be made about that person'. Example: His remarks about the importance of saving money are pretty rich coming from a man who just bought another new car.
The test context: "She says we're working too slowly." "Oh, that's rich. She's the one who keeps delaying things with all her meetings."

Analysis of Research Results

The study revealed that students who were familiar with the concept of polysemy, had worked with various types of exercises, and knew how to use a dictionary, performed better in the task. In contrast, students who lacked knowledge of polysemous words and dictionary usage struggled to complete the task effectively. The research made it evident that teaching polysemous words should not rely solely on theoretical, oral learning. Instead, it should incorporate practical training through the development of various types of exercises. Moreover, it is crucial to teach students how to use

dictionaries effectively. Observations of Group B participants showed that, during the word-search process, many students did not explore alternative meanings of words and paid little attention to identifying the part of speech of the test words. For example, when searching for the word *fix*, many students searched for it in its contextual form, *fixing*, which led to errors as they were searching for a noun instead of a verb.

At the end of the experiment, I spoke with five students from Group A who received poor marks in the assessment. It turned out that they had missed lessons due to illness, which led to their insufficient knowledge of how to search for or identify meanings of polysemous words in the dictionary.

Conclusion

Research on dictionary use, one of the components of theoretical lexicography, was founded in the 1970s, and to date, more than 200 studies have been conducted in different countries around the world. On the basis of these studies, comments and wishes of dictionary users, the structure of dictionaries and the methods of presenting material in them have improved considerably, and modern online dictionaries have become truly user-friendly resources. However, these studies also revealed that many language learners lack basic dictionary skills. They often struggle to find the contextual meaning of polysemous words, select the correct part of speech within a given context, and perform other essential dictionary-related tasks. Moreover, disregard of teaching dictionary uses for years led to the loss of dictionary culture in many countries including Georgia. This situation has had a negative impact on the knowledge of both foreign and native languages in many countries. As a school teacher of English, I am well aware of this problem and see its consequences in my daily interactions with students. The experiment, which I conducted at a public school in Tbilisi was designed to explore these issues in more depth.

My research questions were the following:

- Should foreign language learners be explicitly taught dictionary skills during their school education to improve their ability to identify and understand polysemous words and other complex lexical items?
- How effective are targeted exercises in developing dictionary usage skills for dealing with polysemy, part-of-speech identification, and other aspects of English vocabulary in context?

The experiment clearly demonstrated the need for teaching dictionary skills. On the one hand, we saw that three weeks of work with students of Group A was sufficient to help them perform the vocabulary tasks better. On the other hand, observation of students in Group B, observing the process

of obtaining information from the dictionary by them, clearly showed the deficiency of dictionary skills and the necessity in their development. This result is consistent with research conducted in other countries, which highlights the need for teaching dictionary use, i.e. that users who have been taught how to search for information in a dictionary are better able to extract relevant and necessary information from it.

The experiment convinced me that it is necessary to create exercises for students that should cover all aspects of dictionary use, comprising spelling and pronunciation, grammar and vocabulary, polysemy and homonymy, conversion and collocations, idioms, and terminology. Before developing such exercises, it is necessary to conduct a large-scale survey in schools with the participation of both students and teachers. This survey will better identify the needs of both students and teachers at schools, and the creation of exercises, manuals, and methodological guidelines should be based on a more insightful understanding of these needs.

References

Bejoint, H. (2010). *The lexicography of English*. Oxford University Press.

Farina, D., Vrbinc, M., & Vrbinc, A. (2019). Problems in online dictionary use for advanced Slovenian learners of English. *International Journal of Lexicography, 32*(1), 1–22. https://doi.org/10.1093/ijl/ecy025

Gavriilidou, Z., & Konstantinidou, E. (2022). The effect of an explicit and integrated dictionary awareness intervention program on dictionary use strategies. In A. Klosa-Küchenhaus, S. Engelberg, Ch. Möhrs, & P. Storjohann (Eds.), *Dictionaries and society: Proceedings of the XX EURALEX International Congress* (pp. 471–479). IDS-Verlag.

Gouws, R. (2022). Dictionaries: Bridges, dykes, sluice gates. In A. Klosa-Küchenhaus, S. Engelberg, Ch. Möhrs, & P. Storjohann (Eds.), *Dictionaries and society: Proceedings of the XX EURALEX International Congress* (pp. 36–52). IDS-Verlag.

Hatherall, G. (1984). Studying dictionary use: Some findings and proposals. In *LEXeter '83 proceedings: Papers from the International Conference on Lexicography at Exeter, 9–12 September 1983* (pp. 13–30). Max Niemeyer.

Kosem, I., Lew, R., et al. (2019). The image of the monolingual dictionary across Europe: Results of the European survey of dictionary use and culture. *International Journal of Lexicography, 32*(1), 92–114. https://doi.org/10.1093/ijl/ecy021

Labov, W. (1972). Some principles of linguistic methodology. *Language in Society, 1*(1), 97-136. Cambridge University Press.

Leaney, C. (2007). *Dictionary activities*. Cambridge University Press.

Lew, R. (2002). Questionnaires in dictionary use research: A re-examination. In *Proceedings of the tenth EURALEX International Congress* (pp. 112-123). Copenhagen, Denmark.

Marchisio, M., et al. (2019). Adapting STEM automated assessment system to enhance language skills. In *The 15th International Scientific Conference eLearning and Software for Education* (Vol. 2, pp. 403–410). Bucharest: "CAROL I" National Defence University Publishing House.

Márkus, K. (2022). *Teaching dictionary skills*. L'Harmattan Publishing.

Margalitadze, T., & Meladze, G. (2023). How to solve problems in dictionary use: The Georgian case. *Lexikos, 33*(2), 63–78. https://doi.org/10.5788/33-2-1840

Margalitadze, T., & Márkus, K. P. (2024). Cross-border collaboration in teaching dictionary skills. In *Proceedings of the XXI International Congress of EURALEX: Lexicography and Semantics* (pp. 35-48). Institute of the Croatian Language, Cantat, Croatia.

Margalitadze, T. (2020). Language and ecology of culture. *Lexicographica* (International annual for lexicography), 36. https://doi.org/10.1515/lex-2020-0012

Nied Curcio, M. (2022). Dictionaries, foreign language learners, and teachers: New challenges in the digital era. In A. Klosa-Küchenhaus, S. Engelberg, Ch. Möhrs, & P. Storjohann (Eds.), *Dictionaries and society: Proceedings of the XX EURALEX International Congress* (pp. 71–84). IDS-Verlag.

Márkus, K. P., Fajt, B., & Dringó-Horváth, I. (2023). Dictionary skills in teaching English and German as a foreign language in Hungary: A questionnaire study. *International Journal of Lexicography, 36*(2), 173–194. https://doi.org/10.1093/ijl/ecab015

Rundell, M. (1999). Dictionary use in production. *International Journal of Lexicography, 12*(1), 35–53.

Thornbury, S. (2002). *How to teach vocabulary*. Longman.

Vardidze, T. (2020). The impact of teaching English polysemy through similarity-based approach. *Journal of Education in the Black Sea Region, 5.* https://jebs.ibsu.edu.ge/jms/index.php/jebs/article/view/205

Welker, H. A. (2010). *Dictionary use: A general survey of empirical studies*. Author's Edition.

Wiegand, H. E. (1984). On the structure and contents of a general theory of lexicography. In *LEXeter '83 proceedings: Papers from the International Conference on Lexicography at Exeter, 9–12 September 1983* (pp. 13–30). Max Niemeyer.

Wingate, U. (2002). The effectiveness of different learner dictionaries: An investigation into the use of dictionaries for reading comprehension by intermediate learners of German. *Tübingen: Niemeyer.*