The role of cognitive linguistics in developing students' communicative competence and forming their linguistic personality

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Abstract: The research examines the specifics of cognitive linguistics regarding developing communicative competence and forming students' linguistic personalities. Attention is paid to the essence of cognitive linguistics, the history of the emergence of this direction, and the current state of research. The article analyzes the ways, methods, and forms of cognitive linguistics application in the educational process to form the student's linguistic personality and develop communicative competence. The structure of the concept is presented for the simplified perception of a specific phenomenon by a student of a philological specialty. The study aims to reveal the role of cognitive linguistics in developing communicative competence and forming a student's linguistic personality. The object of research is cognitive linguistics as a linguistic direction. Research methods. Such research methods as description, analysis and synthesis, generalization, and linguistic analysis were used in the work. The work examines the issue of cognitive linguistics in terms of the development of communicative competence and the formation of students' linguistic personalities. The essence of the concept of "cognitive linguistics," its direction, principles, and principles are revealed. The history of the emergence of cognitive linguistics as a linguistic direction and the current state of research are described. Cognitive linguistics' impact on forming a student's communicative competence is described. The student's types of thinking are analyzed, in particular, abstract, professional, critical, fast, and systematic. The case method is a key cognitive linguistics method used during educational activities. The proof of the values of the method is implemented, and the stages of the case method are demonstrated with the help of a graphic image. The article provides ways of forming the student's communicative competence through cognitive linguistics. The advantages and disadvantages of each method are described. The construction of the concept is carried out, which contributes to the student's faster perception of the topic and the types of concepts given.

Keywords: cognitive linguistics, communicative competence, thinking, language personality, student, phenomenon

1. Introduction

Currently, the issues of students' linguistic personality and their communicative competence are among the key factors in organizing the educational process in higher education institutions. It is mainly driven by the fact that modern professionals should be versatile and possess a significant amount of knowledge in various fields to fulfill their professional duties. Moreover, they should be able to communicate with different interlocutors and use language units correctly during real-life interactions. Consequently, applying an approach that enables the rapid and effective formation of students' linguistic personalities becomes essential.

Given the relevance of this topic, the question arises about using cognitive linguistics in the educational process in higher education institutions to shape students' linguistic personalities and develop communicative competence. An innovative approach to forming a linguistic personality also needs to be considered.

2. Literature Review

The issue of the role of cognitive linguistics in developing students' communicative competence and forming their linguistic personality has been considered by such researchers as A. Koch (Koch 2021), T. Nikafa (Nikafa 2016), Ya. Rybalka.
(Rybalika 2017), S. Romanchuk (Romanchuk 2022), and O. Shevchenko (Shevchenko 2020). They focused on the essence of cognitive linguistics and its principles, as well as its application in the educational process to develop students’ communicative competence and form their linguistic personality.

In her study guide “Cognitive Linguistics,” A. Koch reveals the essence of this linguistic field in terms of its use by philology students during classes (Koch 2021). In her opinion, the problem of applying cognitive linguistics in the educational process is the lack of a broad representation of this area based on practical experience. Students primarily receive theoretical material and therefore need more information about the possibilities and benefits of cognitive linguistics. At the same time, the scholar emphasizes that the awareness of the thinking process allows us to comprehend the essence of all linguistics.

In her article “Cognitive Direction in the Methodology of Teaching Foreign Languages,” researcher T. Nikafa emphasizes the practical value of cognitive linguistics in studying foreign philology (Nikafa 2016). In her opinion, the introduction of cognitive linguistics methods into the students’ learning process will allow the teacher, together with the students, the following:

- to quickly and efficiently select, process, and classify the learning material;
- to determine the necessary vocabulary depending on the situation and the purpose of communication;
- to apply the acquired knowledge in practice;
- to implement effective language strategies.

She believes that acquiring these skills positively influences the development of students’ communicative competence, particularly in the context of intercultural communication.

O. Shevchenko is convinced that cognitive linguistics is currently one of the most relevant areas of linguistic research. She explains this by stating that language, as a societal phenomenon, cannot exist outside of the social, cultural, and historical contexts. Consequently, the question of the relationship between language and thought is significant and timely. In her article, “Cognitive Linguistics as a Direction of Linguistic Research,” she emphasizes that studying cognitive linguistics allows for a comprehensive understanding of the causal relationships between specific processes and a deeper understanding of human consciousness (Shevchenko 2020).

Therefore, the available source base study shows that this topic is still under-researched. In particular, the issue of cognitive linguistics’ place in the educational process of students of higher education institutions is poorly disclosed, and the problem of the practical value of cognitive linguistics in forming a student’s linguistic personality is still open.

This article aims to reveal the role of cognitive linguistics in developing communicative competence and forming a student’s linguistic personality.

3. Research Goals

According to the aim of the study, the following objectives are met:

- to reveal the essence of the concept of "cognitive linguistics;"
- to identify the practical value of cognitive linguistics in the development of students’ communicative competence;
- to characterize the mechanisms of applying cognitive linguistics in forming students’ linguistic personalities.

4. Research Methods

The following research methods were employed in this study: description, analysis, synthesis, generalization, and linguistic analysis. The description method was used to elucidate the essence of the concept of "cognitive linguistics," its principles and foundations, history, features, and characteristics. The method of analysis and synthesis was applied to identify the specifics of employing cognitive linguistics in higher education institutions. The generalization method was utilized to discern the influence of cognitive linguistics on the development of students’ communicative competence. The method of linguistic analysis was used to reveal the structure of the concept and its types, which allows for forming a linguistic picture of the student’s personality.

5. Results

At the present stage, considerable attention is given to studying cognitive linguistics. It is caused by the relatively recent emergence of this concept, the study of cognitive linguistics in the educational process of linguistic fields, and the availability of only a few of these concepts. Consequently, there is no unified understanding of "cognitive linguistics," leading to the development of various conceptualizations of this phenomenon.

In general, “cognitive linguistics” is an interdisciplinary science exploring cognitive processes in human consciousness. It facilitates thinking and understanding of the surrounding world (Zahnitko 2017). Cognitive linguistics, also known as cognitology, investigates models of consciousness related to cognitive processes such as acquiring, generating, utilizing, storing, and transmitting knowledge and processing and transforming information obtained through various means. It also involves decision-making based on this information, understanding human language, constructing logical inferences, argumentation, and other forms of cognitive activities (Tokareva 2020).
The history of this field is relatively brief. Cognitive linguistics emerged in the second half of the 1970s in the United States. This research field intersects with several disciplines as it integrates the efforts of scholars from various domains such as psychology, philosophy, logic, linguistics, psycholinguistics, anthropology, mathematics, cybernetics, and others. A significant milestone in the development of this science was the establishment of the International Cognitive Linguistics Association during the symposium in 1989 organized by René Dirven. Thus, it can be asserted that cognitive linguistics is a contemporary direction with a history of only about half a century (Zelenko 2021).

The basis of cognitive linguistics is the assertion that language is at the center of all human mental activity, representing its cognitive processes and abilities. It provides access to the world of others and their consciousness structures. At the present stage of the development of linguistic research, the solution of many theoretical and practical problems is associated with the study of the specifics of knowledge representation in language. In other words, there is a relationship between cognitive and linguistic structures, which led to the separation of cognitive science as a separate field (Sidorova 2020).

As a branch of linguistics, cognitive linguistics studies the functioning of language as a kind of cognitive (gnostic) activity and the cognitive mechanisms and structures of the human psyche through linguistic phenomena. The object of cognitive linguistics is cognition in its linguistic reflection. Cognition refers to the set of mental structures and processes that encompass all human cognitive activity. The subject of its study includes models of knowledge and human conceptions of the surrounding world, such as worldviews, frames, stereotypes, archetypes, concepts, and the ways of their verbalization (Gazuda 2018).

Cognitive linguistics aims to describe the dependence and correlation between the structures of language and human consciousness. Based on the peculiarities of this dependence, cognitive linguists seek to explain how the world and the human being are structured, what causes certain physical, physiological, and psychological phenomena and processes, and what their consequences are.

The underlying principles of cognitive linguistics are as follows:

- anthropocentrism: the study of the cognitive and spiritual aspects of humans concerning language;
- cognitivism focuses on investigating actual language-cognition units and processes in the human brain;
- expansionism: internal specialization within the field of linguistics while also fostering closer integration with other sciences, including considering cultural context in linguistic research;
- explanativeness: explaining linguistics phenomena rather than simply describing them (Rzhevskaya 2018).

Such diversity of principles indicates that cognitive linguistics is based on clearly defined principles; therefore, this field has scientifically proven basics of functioning. Consequently, cognitive linguistics is applicable not only in theoretical but also in practical terms.

Cognitive linguistics is directly related to students' communicative competence. It is caused by the fact that communicative competence includes:

- the ability to use linguistic units and systems in practical terms;
- skills in combining different linguistic units;
- the ability to employ language in relevant situations.

In other words, it refers to the ability to communicate effectively in various contexts. This competence is vital in learning a foreign language, as it involves practical adherence to the principles and basics of using a particular language system in a specific situation (Semenets-Orlova et al 2022).

Regarding communicative competence, cognitive linguistics aims to develop the following types of students' thinking. The first type is professional thinking, which involves the ability of students to apply acquired knowledge in practical situations after completing their educational institution. If a task exceeds their experience, they should be able to compare different phenomena and establish connections based on their differences and similarities, thereby facilitating problem-solving. It is essential as modern graduates in foreign language faculties often work with political, cinematographic, musical, and narrative texts that contain numerous neologisms and metaphors. Therefore, professionals must be able to identify similarities between concepts and grasp the essence of specific expressions by understanding the formation of new connections or collocations (Vovk 2015).

The second type is abstract thinking, wherein students should identify connections and determine the relationships between intangible things. Such texts are often found in political discourse or advertising. Understanding the origin of these expressions allows for a clear comprehension of the formation of specific mechanisms.

The third type is systems thinking, which involves sequential and logical reasoning, organizing relationships between different phenomena in students' consciousness. The development of systems thinking is essential when working with scientific and technical texts. A specialist must offer the target audience a global understanding of a particular phenomenon by reproducing the cause-and-effect relationship, predicting further developments, and reproducing the impact of one direction on another (Vovk 2017).

The fourth type is critical thinking, characterized by the ability to evaluate phenomena objectively, their relationships with other processes, and their similarities and differences. This type of thinking is essential when working with scientific, technical, and political texts. The specialists must present something that immediately demonstrates the essence of things without indicating the specialist's bias.
The fifth type is fast thinking. Cognitive linguistics contributes to developing skills in timely and efficient information perception, processing, and transmission within a short period. For instance, if students communicate with a native speaker in real-time, via video conferences, or perform simultaneous translation, they need to quickly process information and effectively communicate or deliver it to the target audience. Accordingly, the ability to quickly absorb information is quite important, and its value is proportional to the person's professionalism (Kokareva 2022).

Cognitive linguistics, in general, has a positive influence on the formation of knowledge and self-awareness, the development of language experience, the consolidation of real-life experience, and the acquisition of knowledge from other fields or spheres by students. As a result, the cognitive methodology has gained popularity while developing students' communicative competence. It involves actively incorporating cognitive linguistics into the process of developing communicative competence. This methodology combines various linguistic units and establishes connections between them to form a unified conceptual worldview. Consequently, cognitive methodology, particularly the case study method, is frequently employed in language classes, including foreign language classes (Semenets-Orlova et al 2022).

The most popular method of the cognitive approach in working with students is the case study method. Its essence lies in presenting students with real-life situations that they may encounter in their professional activities. The task for students is to solve the problem correctly and demonstrate their professional knowledge, thus laying the foundations for professional experience. The method is based on constant interaction among students, and dialogues and polylogues contribute to the development of necessary skills. This method is often referred to as situational, as it involves selecting real-life situations. For example, a philology student may have a conversation partner who, although a native speaker, has a distinct regional accent, requiring the student not only to understand the interlocutor but also to communicate with them effectively. Such situations occur quite frequently, making practice in this area truly essential (Odyntsova 2019).

Often, when working with this method, the teacher presents a situation and one possible solution, and students independently determine whether this solution suits them or not. If not, they are expected to propose their approach and, through discussion with other students and dialogue with the teacher, evaluate the effectiveness of their strategy. Moreover, it is during the student years that various mental operations develop, making this direction influential in shaping young people's linguistic personalities.

The implementation of the case study method generally involves the following sequence of stages, as illustrated in Figure 1 – the stages of implementing the case method.

As can be seen from Figure 1, the sequence of each stage is regulated and designed to achieve clear goals. The most crucial stage for forming students' communicative competence is the third stage, where they are required to present their vision of solving a problem. During this stage, students not only engage in various types of thinking but also develop speaking skills, learn to interact with the audience, cultivate the ability to defend their own opinion, and objectively evaluate criticism.
Moreover, it promotes perceiving the audience not as those who intend harm but rather as fair critics who contribute to self-development (Udovichenko 2014).

The value of this method lies in providing an opportunity for everyone to demonstrate their position and thus solidify theoretical knowledge with practical application. It leads to increased motivation for learning, acquisition of new practical experience, formation of individuality, and becoming more active and initiative as students contribute their own ideas regarding education. Additionally, it cultivates a range of professional qualities, including patience, humanity, friendliness, and fairness.

The following methods of developing students’ communicative competence through applying cognitive linguistics can be identified (Akimova 2022). They are presented in Table 1.

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<thead>
<tr>
<th>Number</th>
<th>Method</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Student’s existing experience</td>
<td>During the study of a particular topic, the teacher refers to the student’s experience and seeks to work through it to improve the students’ knowledge</td>
</tr>
<tr>
<td>2</td>
<td>Direct interaction of the student with the subject of discussion</td>
<td>The teacher suggests to familiarize with the subject of discussion and consider it when it is a tangible thing</td>
</tr>
<tr>
<td>3</td>
<td>Interaction with the student’s thinking</td>
<td>The teacher suggests using abstract thinking and solving the task creatively</td>
</tr>
<tr>
<td>4</td>
<td>Language interaction</td>
<td>Communication-forming thinking and solving the task creatively</td>
</tr>
<tr>
<td>5</td>
<td>Student’s independent cognition of language units</td>
<td>The teacher offers students to familiarize themselves with the language system</td>
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Each method generally has both advantages and disadvantages. Specifically, prior experience is vital for processing new topics. However, it can either be traumatic or not fully aligned with the task at hand. Also, an experience of interaction can cause incorrect or false associations. At the same time, direct interaction between the student and the subject of discussion allows for familiarizing oneself with the problematic issue and preemptively preventing non-standard situations during professional activities. However, such direct interaction may create the perception that the problem is being solved as quickly as in a controlled case during a learning task. It is also worth noting that interacting with the student’s thinking facilitates the development of creative and innovative thinking. Nevertheless, a student may consciously disengage from the learning process if it does not interest them.

Verbal communication carries numerous advantages. It includes the development of the ability to express one’s thoughts, the formation of interaction skills, and the acquisition of linguistic units. However, controlled verbal communication is artificial and may not yield the desired results. Simultaneously, independent exploration of linguistic units allows students to acquire knowledge individually regarding specific issues. Nonetheless, a student may choose to seek external expertise or avoid performing tasks (Chernovol 2020).

A student’s linguistic personality can be developed by offering them to familiarize themselves with the following methods of cognitive linguistics used in teaching students:

- component analysis (identifying commonalities among different derivative words);
- analysis by structure (highlighting separate parts of a sentence or a word);
- word-formation analysis (determining the origin of a word and the reasons for its creation);
- transformational methods (considering possible ways of creating new words);
- frame analysis (identifying frames within the words).

These methods allow for forming the basics of cognitive modeling, enabling the student to work freely with new words and use them in appropriate situations. Consequently, students will possess different language options and will be able to select appropriate vocabulary based on the given circumstances (Matvieieva 2022).

When introducing students to cognitive linguistics, it is advisable to start by familiarizing them with the concept of a "concept." Generally, a concept refers to a mental formation in a person’s cognitive sphere that corresponds to a specific structure and encompasses the culmination of knowledge and information assimilated by an individual, society's perception of a particular phenomenon. Accordingly, students internalize a unified worldview and form their own speech, developing practical communication skills. As a result, the following structure for the concept can be proposed.

According to this scheme, a concept has a complex and hierarchical structure. Familiarization with its components will allow the student to quickly and easily acquire information about the cognitive components and understand the basics of creating certain words. As a result, each component can be presented as follows Figure 2 (Kushkimbayeva 2023):
The first component. The figurative component includes perceptual aspects (images that arise after seeing or hearing something through touch or taste) and cognitive aspects (abstract transformation of something widely used in a particular culture). Such images are common and familiar to students. They are often based on personal experiences.

The second component. Information content involves the characteristics of the concept that reflect the differences between one phenomenon and another. The information content includes presenting facts about a specific phenomenon, such as reflecting vocabulary or a dictionary (Tsymbalenko 2019).

The third component. The interpretation field involves the transformation of the meaning of one phenomenon to another. In other words, it generalizes the acquired knowledge about a particular component. Its main elements include:
- assessment zone (overall impression of the concept);
- utility (society's attitude towards a specific idea);
- encyclopedic zone (a generalization of characteristics of a particular phenomenon);
- regulatory zone (permissions and prohibitions regarding a specific phenomenon);
- social and cultural zone (a relation of the phenomenon to customs and traditions of the people);
- paremiological zone (proverbs and sayings related to the defined phenomenon) (Odyntsova 2020).

The division of each component into subcomponents belonging to the second level allows for a more thorough and optimal assimilation of information. At the same time, by familiarizing themselves with the concepts and their structure, students learn the peculiarities of people’s thinking and determine the leading indicators of a certain process.

It can also be argued that cognitive linguistics, which focuses on students' knowledge of cultural thinking, positively influences the proficiency of individuals in terms related to this phenomenon. Therefore, the following types of concepts can be identified, reflecting the correctness of students’ speech (Table 2).

<p>| Table 2 The types of concepts used in speech. |
|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>Perception</td>
<td>The use of signs of a certain phenomenon in a speech by listing its features</td>
</tr>
<tr>
<td>2</td>
<td>Scheme</td>
<td>The use of graphic elements to represent a certain phenomenon</td>
</tr>
<tr>
<td>3</td>
<td>Concept</td>
<td>The best way to display a certain phenomenon is by describing it</td>
</tr>
<tr>
<td>4</td>
<td>Frame</td>
<td>Combining available information about a particular phenomenon</td>
</tr>
<tr>
<td>5</td>
<td>Scenario (script)</td>
<td>A description of a certain sequence of actions or stages using dynamic motion features</td>
</tr>
<tr>
<td>6</td>
<td>Gestalt</td>
<td>Arranging widespread phenomena in society into a coherent unit</td>
</tr>
</tbody>
</table>

Accordingly, mastering each type allows students to process a large amount of information effectively. With the initial data about a phenomenon, students can either describe it, generalize existing knowledge, list its features, or create a mental schema. As a result, by breaking down the concept into parts, students can understand its origin, causes, and processes of
further development. All of this has a positive impact on their speech, as students gain awareness of the world and, consequently, develop their linguistic personality. Additionally, their level of communicability increases and communicative competence reaches a higher level.

6. Discussion

Therefore, it can be argued that the role of cognitive linguistics in developing students' communicative competence and forming their linguistic personality is challenging and causes many controversies. In particular, many sources are devoted to the application of this area in the study of foreign philology. In contrast, only a few national sources consider cognitive linguistics a valuable spot in forming a student's linguistic image during Ukrainian philology classes. The author believes cognitive linguistics can also help to study Ukrainian linguistics, as it operates on universal principles of working with concepts, language, and consciousness.

Another challenge is the breadth of application of cognitive linguistics methods in shaping the students' language worldview. For instance, the case study method is a thoroughly described cognitive linguistics method with proven practical value. However, this approach encompasses various methods that can be effectively implemented in educational activities. Furthermore, the case study method involves dividing students into small groups, but in practice, an instructor may propose a single case for discussion by the entire group or assign a unique case to each student.

Thus, it can be observed that cognitive linguistics is only partially implemented in practice, leading to various challenges. Consequently, this topic requires more detailed analysis.

5. Conclusions

During the study, the authors found that cognitive linguistics is a field of philology that involves exploring language through the analysis of human consciousness. The article revealed the role of cognitive linguistics in developing communicative competence and forming students' linguistic personalities. The authors emphasized the practical value of cognitive linguistics.

The essence of the concept of "cognitive linguistics" was elucidated in the article. The importance of cognitive linguistics for the development of modern linguistics was justified. It was found that cognitive linguistics is a new direction in linguistics that reflects the connection between language, thought, and culture. This direction has a long history, contributing to its research relevance. Various types of thinking, such as abstract, professional, critical, fast, and systemic thinking, were identified as being formed through applying cognitive linguistics in the educational process. The authors also described the main characteristics of this direction.

The practical value of cognitive linguistics in developing students' communicative competence was revealed. It was established that the practical value of cognitive linguistics lies in developing new forms of thinking in students and their communicative realization in the linguistic environment. Accordingly, the principles of cognitive linguistics used in organizing the educational process are anthropocentrism, cognitivism, expansionism, and explanativeness.

Special attention was given to the case method as a key methodology of cognitive linguistics implemented in the educational sphere. The article characterized the methods of forming students' communicative competence by applying cognitive linguistics. It was emphasized that cognitive linguistics is realized primarily through the student's life experience and the correlation of various subject areas and through the establishment of differences between different phenomena. It was determined that the awareness of different types of thinking occurs through the student's cognition and self-discovery.

The mechanisms of applying cognitive linguistics in forming students' linguistic personalities were described. The linguistic personality of the student is realized through a detailed assimilation of the structure of the concept. The main types of concepts used in the speech were identified. It was determined that the components of the concept significantly influence its perception and are multilevel. All of this allows for a clearer perception of the linguistic picture of the world and the formation of the student's linguistic personality.

Ethical considerations

Not applicable.

Conflict of Interest

The authors declare no conflicts of interest.

Funding

This research did not receive any financial support.

References

Chernovol O (2020) Formation of the linguistic personality of a foreign student within the context of interlingual communication. Zaporizhzhia State Medical University 1:1-7.


