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## THE USE OF COGNITIVE READING STRATEGY IN TEACHING ENGLISH

**Abstract.** This article presents the implementation of cognitive strategies to improve reading comprehension skills in English in secondary schools. The study aims to gain a better understanding of the cognitive strategies that motivate students to read and comprehend English. The article covers five cognitive techniques: predicting, questioning as you read, visualizing as you read, using graphic diagrams to summarize the story, and answering comprehension questions after reading. Students' reading comprehension through the application of cognitive strategies is the most significant expectation in English language teaching. They should interpret short stories in English using cognitive strategies in the reading process. Moreover, observations prove that students have problems understanding texts and participating in various interactive activities in reading. The research enrolls twenty-five students majoring in V–VI (15 girls and 10 boys) grades to participate in the study to achieve the goals. Data were collected based on a pre-and post-study outcome questionnaire. The analysis showed that the participants were unaware of the cognitive strategies. Nevertheless, the participants eventually recorded valuable insights about the usefulness of cognitive strategies. The study's findings demonstrated that applying cognitive skills to reading comprehension helps readers comprehend texts and briefly activates their ability to visualize them. Reading comprehension also increases participants' desire to set reading objectives and derive new meanings from the text. The article provides a step-by-step description of the cognitive strategies' stages and activities. It was believed that learners at these stages were important for their efficient mastery of reading. Teachers also mentioned that adapting contemporary methods to cognitive strategies is not a problem. Therefore, the research paper is a source of data that aids in identifying students' English reading difficulties.

**Keywords:** cognitive strategy; predicting; visualizing; questioning; summarizing.

## **INTRODUCTION / ВСТУП**

**Formulation of the problem.** The number of people learning English has increased Azerbaijan's integration into global markets. As a result, English is regarded as a language that, as a medium of general communication, can keep up with the expanding demands of the information world. Understanding new information in English requires reading, and mastering this skill becomes a complex process that calls for the active involvement of language learners. For this purpose, the most significant expectation for the new educational programs is to improve reading abilities, one of the most crucial language skills in English. Additionally, reading comprehension is regarded as one of the most required and challenging skills to master English. In the last five years, several topics explaining the linguistic basics of reading have been written in Azerbaijan, but it is hardly seen any research work has been conducted on topic of the methodology of applying reading with cognitive strategies [1].

**Analysis of major research and publications.** Recent studies have attempted to define this term using a variety of perspectives on English reading comprehension. Reading is defined as reading, reviewing, and translating words in Gardner, Berant, Hajishirzi, Talmor, and Min's (2019) [10] explanation of the distinction between reading and reading comprehension in English. Reading comprehension is the ability to decipher a text's meaning through analysis. Moreover, reading comprehension is also known as the acquisition of textual information. According to H. Küçükolu [11] reading comprehension entails two related skills: 1) the ability to decipher symbols on the page by reading the words in the text; 2) the ability to comprehend the language by comprehending the meaning of words and sentences. According to Fitriasia, Tan, and Yusuf (2015), [8] context is crucial for improving cognitive strategies for English reading comprehension and predicting the text's meaning.

Reading in English has typically been viewed as a passive activity. The texts provided in the textbooks were not read or understood by the students, who instead preferred their own grammatically correct translation (S. Rasulova, 2008) [3].

In addition, it was enough to recognize the words given in the text, and students had difficulty reconstructing the meaning while reading the text. Constructing meaning for a text was thought of as a decoding process. Reading comprehension was considered a passive skill, where the students read the text

and understand the questions. This method described reading comprehension as interpretation rather than the construction of meaning, and as a result, students did not know what to do when faced with difficulties. Meaning construction was frequently described as connecting new information to previously held knowledge in writing texts. The research drove the following research questions to examine these issues in students' reading:

1) What difficulties do students face in reading and understanding English?

2) What strategies should be applied in reading and understanding English?

### **AIM AND TASKS / МЕТА ТА ЗАВДАННЯ**

Such understanding of the relevance of this work allowed to formulate the **purpose** of this study – implementation of cognitive strategies to improve reading comprehension skills in English in secondary schools.

The research project plans its work around the following **objectives**:

- to investigate the role of cognitive strategies in the application of reading comprehension in English;
- to present an interpretation of the application of cognitive strategies in reading comprehension;
- to determine the state of the application of cognitive strategies during reading between the participants.

### **THE THEORETICAL BACKGROUNDS / ТЕОРЕТИЧНІ ОСНОВИ ДОСЛІДЖЕННЯ**

The significance of the theory of the study. The study offers a new theoretical perspective on comprehending English texts using effective cognitive strategies. These strategies include inferring meaning from context, learning new vocabulary while reading, using imagery to interpret content, and summarizing.

The research innovation is the detailed analysis of the concept of cognitive reading strategies by several authors. It has been found that predicting the content of the text using keywords and correctly answering questions about the text is the best example of comprehension. All of these strategies require the manipulation of language to improve reading. At the same time, cognitive strategies enable the formation of metacognitive strategies and strengthen the social-affective impact of the meaning after reading the text.

Barth, Tolar, Fletcher, and D. Francis [4], and C. Cassata [5] note that the

successful reading and understanding of texts in English must use different cognitive strategies. M. Gardner [10] asserts in her research that reading comprehension is a set of skills used to create a mental representation of the content of a text. This strategy requires students to be able to predict and ask questions in order to understand the English text deeply.

Dahle [7] [states that in a cognitive strategy, students actively interact with the text using prior knowledge of reading comprehension. While applying the reading activity to interact with text, learners use prior knowledge and life experiences to improve vocabulary and coherent speech. Foorman, Herrera, Petscher, Mitchell, and Truckenmiller [9] emphasize the importance of having a rich vocabulary and grammar to successfully summarize a text and the significance of thoughtful reading as the key to coherent speaking.

Reading comprehension and cognitive skills are defined as various processes, including encoding words, lexical access, determining semantic roles, and combining information into sentences based on the reader's prior knowledge. The mentioned factors include reading and understanding the text aloud, knowing vocabulary and morphology, mastering lexical units, and knowing grammar and syntactic rules. They define reading comprehension as the process of gathering, storing, and later using new information.

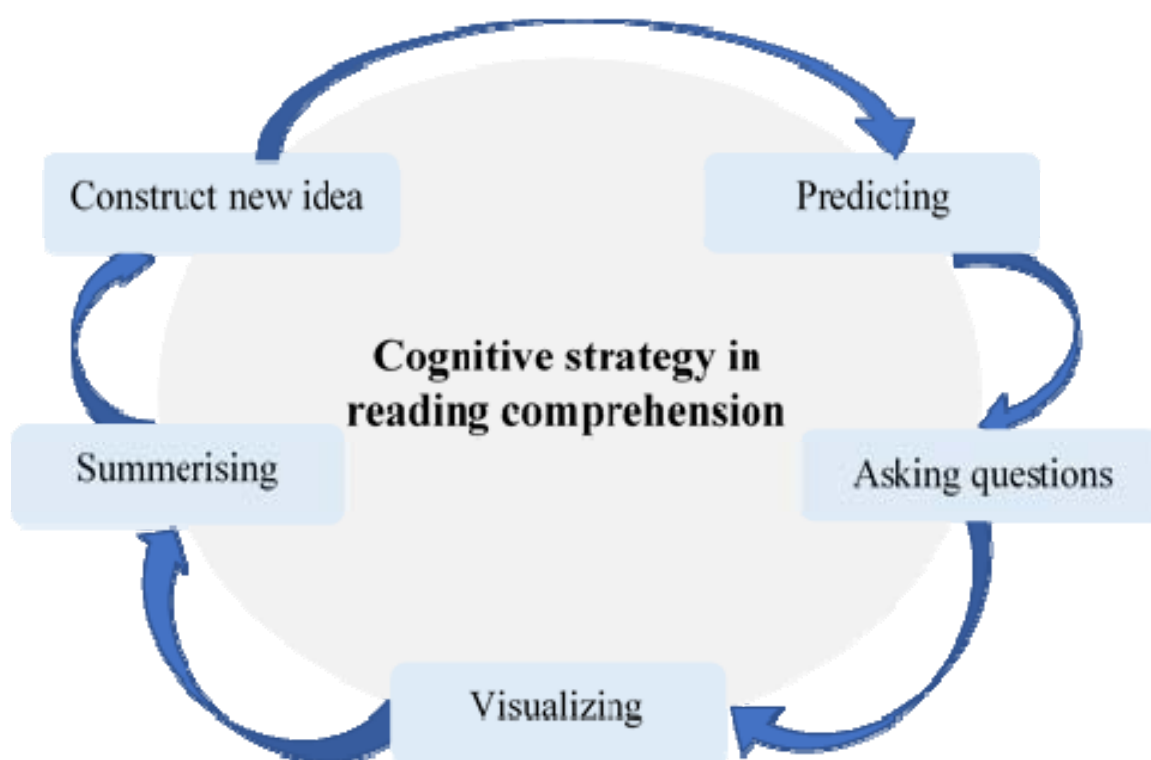
According to M. Gardner, J. Berant, H. Hajishirzi, A. Talmor, & Min [10] mindful reading can help readers develop better reading habits. They claim that it enables readers to expand their worldview and visualize meaning. Reading ability is a predictable process for students' academic success, just like all other abilities. In addition, the reader should employ cognitive reading techniques like anticipating the text's idea, speculating about the data, summarizing the information, drawing conclusions, or visualizing.

Will [13] asserts that reading comprehension can have either a favorable or unfavorable effect on cognitive strategy. In this sense, reading comprehension entails comprehending vocabulary, figuring out how words and concepts relate to the content, organizing ideas, and the author's purpose, assessing the context and forming conclusions. These strategies create interaction and manipulation with the reading text.

Reading comprehension is cited as the most successful result of cognitive activity in English language teaching methodology in research by cognitive theorists (Foorman, Herrera, Petscher, Mitchell, and Truckenmiller, 2015) [9]. The use of special techniques to complete the task at hand and, during the interactive process, the drawing of inferences in the decoding of the meaning of vocabulary and learning to predict the events are examples of cognitive

strategies in reading.

These studies have demonstrated that English language learners can use different reading strategies when performing reading tasks. The reading methodology of teaching English as a foreign language to students of the V–VI grades enhances their ability to conduct research, analyze information, and read texts critically. There are five different categories of cognitive strategies, and they are applied in training in the following ways:



*Figure Cognitive strategy in reading comprehension*

**Predicting:** This strategy allows students to set goals. Prior knowledge is gathered from several keywords and content questions that students are not presented with within the reading text. While predicting, students think about the content of the text and set a purpose for reading. Observations show that predicting before reading can increase participants' motivation to read. The research requires the application of various strategies, such as constructing the essence of the information in the text, monitoring it, revising the meaning, reflecting, and learning while noting the prediction in reading meaning (Chalak, 2015) [6] (Figure).

Asking questions before reading: At this stage, the teacher asks general questions about the text to encourage readers to keep reading by drawing on their knowledge and experiences. The teacher can obtain answers to questions and use a variety of images, illustrations, and schemes. It has been observed that students evaluate their comprehension of the presented stories, determine whether the story meets their goals, and indicate their willingness to keep reading (Barth, Tolar, 2014) [4].

Visualization while reading: Students are asked to form their mental images of the subject while reading using the visualization technique. When students visualize a text while reading, they envision reading a story as a movie and form mental pictures. Students get better understanding skills by reading the story and can illustrate the text's content on paper. This strategy visualization technique helps students develop their original ideas and form mental images of the subject while reading. When students visualize a text while reading, they envision the story as a movie and mental pictures (Dahle, 2017) [7].

Summarizing in graphic tables: Students can define the main idea of the reading story in an understandable way and summarize the content on graphic tables and charts. Ultimately the most meaningful strategy is implemented by the students. Students can use keywords to interpret the entire story in all details (Fitrisia, 2015) [8].

Constructing new meaning: Students can connect the story to their own experiences, create new meaning, and increase their motivation to read by giving their thoughts and opinions in response to reading comprehension questions (B. Hasanli, 2010) [2].

Thus, to develop perceptions, memories of past experiences, and new thinking and reasoning, cognitive strategies for reading comprehension call for students to engage with the text. According to studies, reading in English among children aged 11 to 13 is initially interpreted as word encoding, vocabulary size, and phonemic knowledge to develop cognitive skills. Opportunities for metacognitive abilities are constrained in the absence of a reading strategy.

## **RESEARCH METHODS / МЕТОДИ ДОСЛІДЖЕННЯ**

The research paper implemented experiments enrolled 25 students and 2 teachers, interview, semi-structured interviews, observations, survey analysis, questionnaires and tests for increasing descriptive methods. Data collected looking discussing professors' scientific works and theoretical papers, English Language Core Curriculum, theoretical documents and conference materials.

The descriptive research method entails providing descriptions of



activities of experimental constructiveness (Dahle, 2017) [7]. The purpose of the descriptive research method is to get information about the students' preferences, attitudes to strategies, and reading practices of some groups to answer a range of questions on the current status research study. Then, this research aims at obtaining information on cognitive strategies in reading.

The present study aims to investigate the reading comprehension difficulties among V–VI students in English. In the study, data were collected based on results in two phases. Data analysis included participants' comments on the usefulness of the cognitive strategies.

The student's reading knowledge and experiences and applying cognitive strategies were examined during the observations. A mixed method is preferred, which cannot be done by the second collection method. Then, semi-structured interviews were conducted using the experiment. The questionnaire contained ideas about reading comprehension difficulties faced by English language learners. The research question of the problem helps explore perspectives on reading comprehension:

1) What difficulties do students face in reading and understanding English?

2) What strategies should be applied in reading and understanding English?

## **RESULTS OF THE RESEARCH / РЕЗУЛЬТАТИ ДОСЛІДЖЕННЯ**

The findings revealed that using cognitive reading facilitated students to understand the main ideas activating reading on schemata and improving new vocabulary. Moreover, participants can construct meaning from the text, identify a purpose for reading, and increase their motivation to read. Additionally, the results of this study might provide ideas for English language teachers to improve students' reading comprehension skills.

The first survey analysis presented the correct understanding of reading comprehension in English. For this purpose, students answer the ideas in the following table according to the indicated levels.

1 = not true

2 = very little true

3 = somewhat true

4 = almost true

5 = exactly true

There are 12 items on the questionnaire developed from indicators of cognitive strategy in reading (Joseph, Alber-Morgan, 2016) [12].

*Table 1*

**General questionnaire on reading comprehension**

1	When I read a text, I understand the main content	1	2	3	4	5
2	I use the dictionary a lot while reading the text	1	2	3	4	5
3	I understand the text from the first questions	1	2	3	4	5
4	I don't focus on the meaning of the text	1	2	3	4	5
5	I prefer doing grammar tasks in reading	1	2	3	4	5
6	I understand sentence structures morphologically	1	2	3	4	5
7	I can analyze the roots and suffixes of words	1	2	3	4	5
8	I prefer to translate the content of the text	1	2	3	4	5
9	I can answer questions on the text	1	2	3	4	5
10	I can describe the events in order in the text	1	2	3	4	5
11	I can briefly summarize the text	1	2	3	4	5
12	New ways of comprehending motivate me to read	1	2	3	4	5

The results of the pre-research and preliminary questionnaire survey in the table are summarized as follows. The items mentioned in the table are to realize the students' attitudes toward reading comprehension with traditional and new strategies.

*Table 2*

**General questionnaire on reading comprehension**

Evaluating skills	Total respondents	Achieved scores
Using vocabulary	25	12
Grammar acquisition	25	11
Lexic acquisition	25	10
Relate prior experiences	25	09
Motivation to read	25	08
Lack of cognitive strategies	25	06

It is clear from the tables that these skills intended for reading comprehension of V–VI graders are not at a very encouraging level. The scoring percentage of using keywords in the text with looking up vocabulary is 50%, which means 12/25 people achieved it. Grammatical mastering of the text, understanding of sentence structures, the correctness of syntactic relations, morphological classification, and compatibility of subject and action were performed by 56%, which means 14/25 students achieved this skill (table 2).

Students' lexical acquisition in finding the meaning of new words and word phrases, and correctly identifying homophones, homographs, opposite words, and synonyms, were performed at 48%, which means 10/25 students



can achieve this skill. Connecting the events in the text with life and mastering cognitive strategies was answered with 25%, which means 06/25 students can do it successfully. It can be concluded that, though the linguistic skills of V–VI students in reading and understanding English texts are somewhat satisfactory, their cognitive skills achieved half the scoring percentage.

In the second phase of the study, the post-survey survey, the exact level of mastery among boys and girls were determined as shown in the table below.

*Table 3*

### **Mastering cognitive strategies in reading comprehension**

Cognitive strategies	Girls	Boys	Medium score
Predicting	14/15	09/10	98 %
Participating in questioning	13/15	10/10	95 %
Visualizing	14/15	09/10	98 %
Summarizing	12/15	09/10	94 %
Creating new meaning	13/15	08/10	96 %

According to the latest results of the research, it is known that the cognitive strategies in reading comprehension have been able to bear fruit thanks to the applied modern methods and techniques. The result obtained according to the total number of students was achieved with an average percentage of 90–98 % (table 3).

During the study, it was emphasized that teachers need instructional training that elaborates cognitive strategies in reading comprehension. The application of these strategies in reading was observed with improvements in several lesson observations after the study.

The students shared their experiences in predicting the content of the text in advance, developed questions based on the pictures and illustrations presented an understanding of the content of the text. It was interesting for students to visualize the text on different schemata, and it motivated them to read the text on schemata, as well as in mind maps, clustering, and context clues. They could briefly summarize the text by arranging it according to schemes.

### **CONCLUSIONS AND PROSPECTS FOR FURTHER RESEARCH / ВИСНОВКИ ТА ПЕРСПЕКТИВИ ПОДАЛЬШИХ ДОСЛІДЖЕНЬ**

Thus, the research summarizes the following results as below:

- Improving students' reading comprehension skills remains a priority for many researchers and teachers, and this article identifies directions that can increase students' reading achievement in various contexts.

- Reading achievement of V–VI students is a critical condition for academic performance. It reveals reading comprehension is a long process that requires time and more attention.

- Adapting cognitive strategies in reading, students can use their previous experience and knowledge to gain rich vocabulary skills and have comprehensive speech.

- Cognitive reading comprehension activates students' prior knowledge through prediction and inquiry strategies, creates a mental picture of text content through visualization strategies, and explains information in great detail on graphic tables and graphs.

- Teachers can make students active and effective readers by properly structuring instruction based on reading strategies.

- Achieving good results in English reading comprehension, teachers and students will use these strategies.

- This research article will be the most successful guide for teachers and learners of English to use reading strategies to achieve academic performance.

**Prospects for further research in this direction.** The results of this study suggest that students have a better memory for the temporal relationships between events and can reconstruct a text's plot more easily than screen readers. Students are eager to read electronically as it promotes greater retention and comprehension, especially for lengthy texts, in order to receive better support. Reading comprehension cognitively helps students be better personal and professional lives because they are more productive at work. Students will do well in school because comprehension of the material and the ability to respond to questions about it are essential for academic advancement.


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## ВИКОРИСТАННЯ СТРАТЕГІЇ КОГНІТИВНОГО ЧИТАННЯ У ВИКЛАДАННІ АНГЛІЙСЬКОЇ МОВИ

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**Анотація.** У статті представлено впровадження когнітивних стратегій для покращення навичок розуміння прочитаного англійською мовою у загальноосвітніх закладах. Дослідження спрямоване на краще розуміння когнітивних стратегій, які мотивують учнів читати та розуміти англійську мову. Стаття охоплює п'ять когнітивних технік: прогнозування, запитання під час читання, візуалізацію під час читання, використання графічних схем для підсумовування історії та відповіді на запитання щодо розуміння після читання. Розуміння прочитаного учнями завдяки застосуванню когнітивних стратегій є найважливішим очікуванням у процесі викладання англійської мови. Вони мають інтерпретувати короткі історії англійською мовою, використовуючи когнітивні стратегії під час читання. Крім того, спостереження доводять, що учні мають проблеми з розумінням текстів і участю в різних інтерактивних заходах під час читання. Для досягнення поставлених цілей до участі у дослідженні залучаються двадцять п'ять учнів V–VI класів (15 дівчат і 10 хлопців). Дані було зібрано на основі опитувальника результатів до та після дослідження. Аналіз показав, що учасники не знали про когнітивні стратегії. Тим не менш, учасники зрештою записали цінні ідеї щодо корисності когнітивних стратегій. Результати дослідження показали, що застосування когнітивних навичок для розуміння прочитаного допомагає читачам зрозуміти тексти та на короткий час активує їхню здатність візуалізувати їх. Розуміння прочитаного також підвищує бажання учасників ставити цілі читання та отримувати нові значення з тексту. У статті наведено покроковий опис етапів і активностей когнітивних стратегій. Вчителі також зазначили, що адаптація сучасних методів до когнітивних стратегій не є проблемою. Таким чином, дослідницька робота є джерелом даних, які допомагають виявити труднощі учнів з читанням англійською мовою.

**Ключові слова:** когнітивна стратегія; прогнозування; візуалізація; опитування; підведення підсумків.

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