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Original article

## HIGHER-ORDER THINKING STRATEGY IMPLEMENTATION WHILE READING AUTHENTIC TEXTS

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**Abstract.** Productive reading is the key component of the productive linguodidactic technology system. One of the important professional competences that college undergraduates are supposed to acquire is a skill to reflect critically on what they read. They have to learn how to analyze and interpret large flows of information from various sources including those from the foreign media. The important skill of interpretating the value and the meaning of the text in terms of ideas and author's intentions can be built through productive linguistic reading. The effective application of the text structure strategy can be seen as one of the ways to implement a productive reading approach.

This article focuses on the ways used to engage students in higher order thinking activities while reading articles and other authentic texts on various topics. Identifying the main ideas and logical relationships between them, providing background information, and generating inferences enhance undergraduates' skills to form and articulate an informed and well-grounded opinion on different issues.

Key words: productive linguistic reading, text structure strategy.

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# РЕАЛИЗАЦИЯ СТРАТЕГИИ МЫШЛЕНИЯ ВЫСОКОГО УРОВНЯ ПРИ ЧТЕНИИ АУТЕНТИЧНЫХ ТЕКСТОВ

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Аннотация. Продуктивное чтение – ключевой компонент системы продуктивных лингводидактических технологий. Одной из важных профессиональных компетенций, которую должны приобрести студенты старших курсов университетов, является способность критически осмысливать прочитанное, анализировать и интерпретировать большие объемы информации из различных источников, в том числе из зарубежных СМИ. Важный навык интерпретации значения и смысла текста с точки зрения представленных в нем идей и намерений автора может быть сформирован в результате применения технологии продуктивного лингвистического чтения. Применение стратегии структурирования текста – это один из способов реализации подхода продуктивного чтения.

Данная работа посвящена способам, используемым для вовлечения учащихся в мыслительную деятельность более высокого уровня при чтении статей и других аутентичных текстов на различные темы на английском языке. Выявление основных идей, представленных в тексте, и логических связей между ними, а также актуализация имплицитных умозаключений развивают навыки студентов формировать и формулировать аргументированное мнение по различным вопросам.

Ключевые слова: продуктивное чтение, стратегия структурирования текста.

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Productive reading is one of the key components of the productive linguodidactic technology system. As defined by M.B. Uspensky, being the general theory of language teaching, linguodidactics also includes both general laws and more specific aspects, such as the specificity of content, methods and tools for teaching a particular language, depending on didactic goals, objectives and conditions, the nature of the material being taught, stages of learning and the level of intellectual and verbal development of the learners. According to M.B. Uspensky, the topical issues of linguodidactics also cover a wide range of problems from the problem of unifying language teaching content under similar conditions and determining rational relations between language theory and speech practice to continuity between language teaching stages and the rational use of visual and technical means [1, p. 504].

One of the important professional competences that university undergraduates who major in different fields are supposed to acquire is their ability not only to read, but also to reflect critically on what they read. They have to be able to analyze and interpret large flows of information they get from

foreign sources. The skill to interpret the value and meaning of the text in terms of ideas and author's intentions can be formed through productive reading. One of the effective ways to implement productive reading approach is the text structure strategy. Since 1971 Meyer and her colleagues have studied text structures and readers' abilities to use them. Readers who use a "structure strategy" seek to identify and use the author's structure to organize their own understanding. Meyer et al. found that reading ability was associated with the number of ideas recalled, as well as the organization of recalls. Readers identified as good readers recalled more ideas and more frequently used the authors' structure to organize their recalls [3, p. 132].

This article focuses on text-structure strategy used to engage university students in higher order thinking activities while reading articles and other authentic texts. Identifying the main ideas and logical relationships between them, providing background information and generating inferences enhance undergraduates' skills to form and articulate an informed and well-grounded opinion on different issues.

Productive reading comprehension involves actively constructing new understandings by building relationships among the parts of the text and between the text and one's pre-existing knowledge. Good readers build coherent mental representations of what they read by understanding different text structures, generating inferences, monitoring their understanding, and using multiple strategies to construct meaning. Using of the text structure to understand how the important ideas of a text are interrelated increases readers' meaning making. Readers who use the text structure can mentally examine how ideas in text are interrelated through the use of such relationships as sequence, comparison, causation, or problem and solution. The text structure strategy facilitates comprehension by helping the reader to organize concepts based on the explicit or implied relationships that are communicated by the text [3, p. 128].

The power of teaching students the structure strategy is that it enables them to a) follow the logical structure of the text to understand how an author organized and emphasized ideas; b) use processes parallel to these structures to increase their own learning and thinking (e.g., comparing, finding causal relationships, looking for solutions to block causes of problems); and c) use these text structures to organize their own writing, such as written summaries, recalls, and essays.

Implementing a research-based text structure strategy infuses text structures at every step of reading comprehension instruction, beginning with the introduction of the lesson, previewing of text, selecting important ideas, writing a main idea, generating inferences, and monitoring comprehension.

According to the text structure strategy most texts fit into one or a combination of two or more of five specific text structures [3, p. 129]:

- 1. Comparison (compare/contrast) relates ideas by differences and/or similarities; complexity can be increased by the number and detail of issues compared. The main ideas are organized to provide a comparison, contrast, or alternative view (e.g., political speech).
- 2. Cause and effect (causation) relates ideas casually; complexity can be increased by embedded cause and effect paths and causal chains and reduced by similarity to familiar narratives. The main ideas are organized into cause and effect parts (e. g., directions, explanations, economic or science texts).
- 3. Problem and solution relates responding ideas; complexity can be increased by the identification of causes of the problems and ways to reduce them. The main ideas are organized in two parts: the problem (or question) part and the solution (or answer) part, which responds to the problem part (e. g., popular science articles, medical information).

- 4. Sequence (time ordered collection of events, ideas) relates ideas via time. The main ideas are the steps or history presented (e. g., recipe steps, history books, biographies).
- 5. Description (generalization, settings) relates ideas by elaboration of attributes, specifics, or setting information. The main idea is that aspects of a topic are presented (e.g., newspaper article).

Aids such as diagrams and charts (Visual or graphic organisers) are used to help learners remember and understand new information by making it visual. Visual organizers involve reading, writing down or drawing ideas then seeing or making connections. Organizers can be simple or complex but all of them have connecting parts.

We will show how the text structure strategy can be used to develop students' productive reading skills on the examples of a natural science article "Water pollution is a rising global crisis. Here's what you need to know" by Christina Nunez [4] and a political article "Can Sanctions Be Smart? The Costs and Benefits of Economic Coercion" by Justyna Gudzowska and John Prendergast [2].

The first step to apply the strategy is activating students' background knowledge on the subject.

Students are asked questions that can help them recollect background knowledge they have on the subject of the article. In Table 1 you can see the questions that students can be asked.

Table 1

"Water pollution is a rising global crisis. Here's	"Can Sanctions Be Smart? The Costs and Benefits
what you need to know"	of Economic Coercion"
1. What role does water play on the planet?	1. What tools of foreign policy do you know?
2. How important is the purity of water?	2. Which of them are more effective than others?
<i>3.</i> What do you think the main causes of water	Why?
pollution are?	3. Are sanctions an effective tool, in your opinion?
	Why?

### Questions to activate background knowledge

Then students read the article and after it some vocabulary that is essential for understanding of the ideas from the text is highlighted and discussed. Students are asked to explain how they understand the meaning of the phrases taken from the article. Table 2 shows the examples of the selected vocabulary.

In case of references to some events or examples students are asked to collect background information on the subject. It will help them to get a deeper understanding of the issue.

For example, students are asked to seek the information about the National Geographic grantee Africa Flores mentioned in the article "Water pollution is a rising global crisis. Here's what you need to know" [4], and Global Magnitsky Act mentioned in the article "Can Sanctions Be Smart? The Costs and Benefits of Economic Coercion" [2].

The next step is to define the main idea or the message of the article and supporting ideas. The category the text of the article falls into is to be defined. Sometimes an article doesn't have a clear cause-effect or problem-solution structure, and students are faced with the challenge to recognize and devise the structure themselves. They are taught to see the article as a logical entity with the number of ideas connected with each other. And they are encouraged to identify the structure that matches one or several categories offered by the structural method.

"Water pollution is a rising global crisis. Here's		"Ca	"Can Sanctions Be Smart? The Costs and Benefits of	
what you need to know"		Economic Coercion"		
1.	Legal and illegal discharges from factories	1.	To be employed on a more surgical basis	
2.	Imperfect water treatment plants	2.	Collateral damage	
3.	Hydraulic fracturing (fracking) operations	3.	Indiscriminately withdraw from an entire	
4.	Nonpoint source pollution	national economy		
5.	Eroding tourism revenue	4.	To alert financial institutions to red flags	
6.	Blue baby syndrome	5.	Anti-money-laundering advisories	
7.	Exact a health toll	6.	To temper one's incentives to re-escalate the war	
8.	Artificial intelligence algorithm	7.	To bank with bad actors,	
9.	Water is not properly treated	8.	Shell companies etc.	
10.	Fuel algae blooms / dead zones	9.	Blacklisting	
		10.	To shut service providers out of the global	
		fina	ncial system	

Essential vocabulary

When asked to find the ideas that support the message of the article students are encouraged to recognize the combination of cause and effect and problem and solution categories the article falls into.

Both articles fall into cause and effect and problem and solution categories. It often happens that the problem is described in terms of cause-effect relations because of several reasons. And possible solutions can be presented too.

For example, in the article "Can Sanctions Be Smart? The Costs and Benefits of Economic Coercion" [2] the authors mention several reasons that account for the low effectiveness of sanctions. According to the authors, to enhance the effectiveness of the sanctions several solutions can be implemented.

Then students are asked to put the ideas they have found into a flow diagram. The diagrams they can make up can look like those presented below.

In Diagram 1 we can see several reasons that underlie the problem of water pollution. And several solutions are presented in the same diagram.

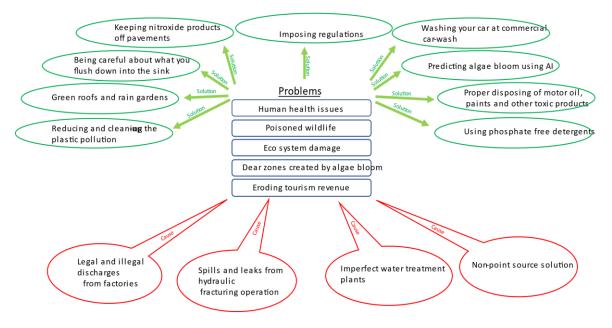
In Diagram 2 we can see several reasons that account for the low effectiveness of sanctions.

The building of the diagram facilitates comprehension by helping students to organize concepts based on the explicit or implied relationships that are communicated by the text.

Sometimes some parts of the structure can be missing, and students can be asked to think how these missing parts can be restored. See diagram 2. The authors of the article don't say why sanctions come with costs and why they can cause frictions with allies. Students have to think and speculate on possible reasons themselves.

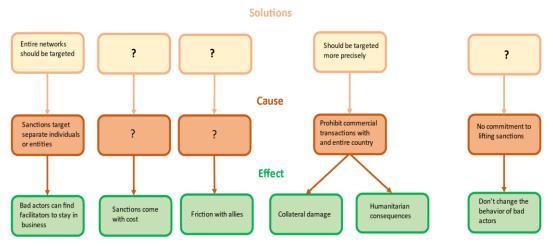
In the end students are asked to build and introduce coherent representation of what they have read relying on the visual organizer they have created. While speaking on the issue they are expected to make use of their background knowledge, concepts formed as a result of understanding the meanings of the key lexical segments and ideas presented in the diagram.

Being engaged in reading comprehension activities students are encouraged to think about and discuss different aspects of the issue. In our examples, students can concentrate on the reasons or solutions or assess effectiveness of the solutions offered by the author and come up with some other solutions.



#### WATER POLLUTION IS A RISING GLOBAL CRISIS

Diagram 1. "Water pollution is a rising global crisis"



#### THE REASONS FOR THE LOW EFFECTIVENESS OF SANCTIONS AND DIFFERENT WAYS THEY CAN BE DEALT WITH

*Diagram 2.* "The reasons for the low effectiveness of sanctions and different ways they can be dealt with"

As a conclusion, the article has shown empirically the importance of following and utilizing the TSS for developing higher order thinking skills of understanding and interpreting the author's ideas presented in different types of texts. We believe, the findings and text analysis procedures that we have shared can have important practical implications for educators teaching reading comprehension.

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