# PROSPECTIVE ELEMENTARY SCHOOL TEACHERS' READING COMPREHENSION

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Abstract: The aim of the present study is to measure prospective elementary school teachers' level of written text comprehension, given the fact that one of the main tasks of educators teaching at elementary level is to develop students' reading ability, text comprehension and use appropriate methods in text processing. Based on the research results has been observed that prospective teachers' level of understanding written text show similar trends to those of students in 4<sup>th</sup> grade: participants performed well in questions that measured the ability to retrieve information from a text when it is explicitly stated or easy to locate, while they performed poorly in questions focusing on the ability of critical reading.

Keywords: elementary school, prospective teachers, reading comprehension, non-literary text, comprehension processes

#### Introduction

Written text comprehension is part of one of the eight key competences communication in the mother tongue – for lifelong learning adopted by the Recommendation 2006/962/EC of the European Parliament and of the Council of 18 December 2006 on key competences for lifelong learning. Its importance is supported by the fact that international surveys (PISA, PIRLS) examine the level of reading literacy of 10-15-year-old students starting from the year 2000. The results of both surveys show that Romanian students do not excel in reading. The average result of 15-year-old Romanian students in reading was 438 points compared to the OECD average level of 496 points (this results rank Romania in the 50<sup>th</sup> place out of 65). The IEA Progress in International Reading Literacy Study (PIRLS) measures trends in reading literacy achievement in primary school. In the latest, 2011 PIRLS measurements Romania performed slightly above the PIRLS average (Romanian 4<sup>th</sup> graders gained an average of 502 points). Romanian 4<sup>th</sup> grade students' achievement in the interpreting-integrating-evaluating reading processes is slightly above the average (average scale score: 503). The 2013/2014 school year was the first year when 2<sup>nd</sup>, 4<sup>th</sup> and 6<sup>th</sup> grade students' reading performance was assessed at national level. The Romanian Ministry of Education stresses that the measurements carried out at the end of 2<sup>nd</sup>, 4<sup>th</sup> and 6<sup>th</sup> grades follow the pattern of international tests, introducing, in fact, a system of preparation of students, getting accustomed them to the exam at the end of secondary school.

After scoring poorly on international assessments we must seek the causes standing behind the low results. These reasons include the fact that Romanian curricula change successively, the quality of elementary school teachers' professional competence, but also that students are not used to answer question- and task-types present in international assessments. For example, reading tasks in Hungarian language textbooks used in Hungarian primary schools in Romania mainly ask students to focus on and retrieve explicitly stated information, an there are less tasks which actuate high-level comprehension processes like interpreting, integrating, evaluating, forming personal opinion. There are only a few tasks

which go beyond the primer level of understanding the text and develop students' ability to make inferences, or their critical reading ability. (Szántó, 2013).

## The definition of reading comprehension

One of the most comprehensive reading model is the ability model of Nagy (2006) which interprets the components of reading as a system. In Nagy's perception reading ability is a specific psychic system, in which the routines, skills, abilities, knowledge and motifs are organized as fundamental components. Reading ability contains the following: the knowledge of written signs, the transformation of these into linguistic signs (reading skill), creating the information structure laying behind these signs in the mind of the reader (text comprehension) making different operations, transformations on these information structure (text interpretation) (Nagy, 2006). Obviously, in order for the reading ability to function well, it is necessary that each skill and ability composing the system works optimally, respectively the optimal working of the skills, abilities located at the bottom of the hierarchy (e. g. reading skill) presupposes the well-functioning of the skills, abilities (e. g. text comprehension, text interpretation) located at a higher level in the system.

Research regarding reading comprehension was defined for a long time by a behavioral concept of reading which conceives reading as decoding, in the course of which we transform visually coded information into ideas and/or vocal language, i. e. we reproduce meaning. The process of comprehension is conducted by the text and the key of its success is the automation of the basic skills. Accordingly, the focus of reading research based on a behaviorist perspective was the analyses of decoding skills, letter and word recognition. The definition of reading has changed basically in the past few decades, influenced primarily by cognitive science. According to the cognitive definition of reading, the reader is not a passive receiver any more, s/he does not merely understands but s/he actively constructs meaning on the basis of his/her previous knowledge and experience. In the course of constructing meaning the reader formulates hypothesis regarding the possible continuation of the text, s/he concludes, presumes temporary meanings, follows their validity, makes corrections if needed, overcomes the obstacles of understanding (tries to guess the meaning of an unknown word from the context), that is to say s/he solves problems by using his/her experience, knowledge of the world. The definition of reading in a cognitive approach, understanding is an active and productive process, in which the reader's prior knowledge plays a key role (Czachesz, 1999).

The international reading surveys conducted in the past years emphasize the functionality of reading: they consider reading ability instrumental knowledge, an instrument which is indispensable for learning success in school, and for everyday problem-solving. According to the OECD 2012 definition, reading literacy is understanding, using, reflecting on and engaging with written texts, in order to achieve one's goals, develop one's knowledge and potential, and participate in society (PISA, 2012). In the OECD study, "reading literacy" is intended to express the active, purposeful and functional application of reading in a range of situations and for various purposes.

For PIRLS, reading literacy is defined as the ability to understand and use those written language forms required by society and/or valued by the individual. Young readers can construct meaning from a variety of texts. They read to learn, to participate in

communities of readers in school and everyday life, and for enjoyment. Readers are regarded as actively constructing meaning and as knowing effective reading strategies and how to reflect on reading (Mullis et al., 2012, 11-12.). In the PIRLS definition of reading reflection is a key-concept, which means evaluation and the activation of personal experiences. Identifying the overall aim of the text, and recognizing the structure in which information is presented in the given text, is an important competence of those readers who can understand and interpret texts.

There can be differentiated three levels of reading according to the actuation of the two high-level component-skills and -abilities (the text-understanding, respectively text-interpreting ability) forming reading comprehension (Tóth, 2006):

- 1. Verbatim reading understanding verbatimly the ideas and information presented in the text.
- 2. Reading for interpretation understanding linguistic allusions, implications, understanding hidden ideas, denotative meaning, making inferences, understanding causality.
- 3. Critical reading observing inconsistencies, mistakes in the text, confronting information with the reader's experience or other sources, separating facts from opinion, evaluation, identifying the relation between the author and the theme, forming opinion and judgments.

The highest level of reading, creative reading can be added to the above mentioned forms and levels of reading comprehension. By reading creatively, readers form predictions and questions prior to reading the text, they correct mistakes present in the text, continue or change the text and so on so forth.

International studies of reading achievement (OECD-PISA, IEA-PIRLS) developed a task-typology based on the functionality of reading, to which there can be assigned the operation levels of reading (retrieving information, text-interpretation, reflection).

The concept of learning, particularly the concept of lifelong learning, has expanded the perception of reading literacy. Literacy is no longer considered to be an ability acquired only in childhood during the early years of schooling. Instead, it is viewed as an expanding set of knowledge, skills and strategies that individuals build on throughout life in various contexts, through interaction with their peers and the wider community (PISA, 2012, 2015).

### Participating students, data collection

The research was carried out in the 2013/2014 academic year, and prospective elementary school teachers studying at Babeş-Bolyai University, Preschool Pedagogy and the Pedagogy of Elementary School Education, Extension of Târgu Secuiesc took part in it (N=38) (1. table). The duration of the paper-based assessment was 50 minutes.

Year	Number of students	
I.	12	
II.	11	
III.	15	
Total	38	

Table 1. The number of students taking the test

### The structure of the survey instrument

The survey used an argumentative-dialogic non-literary text<sup>1</sup>, as well as questions and tasks connected to text reception which assessed three processes of comprehension. After reading the text, subjects answered questions that measured text comprehension (they had to retrieve explicitly stated information), questions that focused on interpreting the text (they had to interpret and integrate ideas and information), and questions that measured critical reading ability (they had to examine and evaluate content, language, and textual elements).

There were 11 questions in total in the reading test: 2 (18%) close-ended and 9 (82%) open-response questions. In the case of multiple-choice type tasks only one answer was correct, the others were wrong, but not unambiguously: among the options there were misleading answers which encumbered the solution of the task. In most cases the students had to formulate the answers to the questions with their own words, in the case of some questions they had to find the right quotes in the text.

The most questions in the test were meant to activate more complex processes of comprehension, like interpreting and integrating ideas or examining and evaluating the content, language and textual elements (*Table 2*.).

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	Processes of Comprehension			
Overtion	Focus on and Retrieve	Interpret and	Examine and Evaluate	
Question	<b>Explicitly Stated</b>	Integrate ideas	Content, Language, and	Total
types	Information	(Reading for	Textual Elements	
	(Verbatim reading)	interpretation)	(Critical reading)	
Close-	1	1	-	2
ended				
Open-	-	6	3	9
response				
Total	1	8	2	11

Table 2. Question types and processes of comprehension in the test

#### **Results**

The results are presented according to the processes of comprehension activated by the questions of the reading test. The least complex process of written text comprehension is retrieval of information that is explicitly stated in the text. Successful retrieval requires a fairly immediate or automatic understanding of the text. This process needs little or no inferring or interpreting. There are no "gaps" in meaning to be filled – the meaning is evident and stated in the text. The reader must, however, recognize the relevance of the information or idea in relation to the information sought. Focus on the text typically remains at the sentence or phrase level in this type of text processing. The process may require the reader to focus on and retrieve several pieces of information; but in each case the information is usually contained within a sentence or phrase (Mullis et al., 2012, 25). The results show that student had no difficulty in finding the explicitly stated information in the text (*Table 3*.).

	Retrieve Explicitly Stated Information
Year	The number and percentage of correct answers
I.	12 (100%)

<sup>&</sup>lt;sup>1</sup>It's incomprehensible the reason why only girls read... (After the transcript of a radio-talk)(Horváth-Felvégi, 2006, 39).

II.	10 (91%)
III.	14 (93%)
Total	36 (94,73%)

*Table 3. Results – retrieving explicitly stated information* 

The second, more complex process of comprehension measured by the reading comprehension text was interpreting and integrating ideas. As readers interpret and integrate ideas and information in the text, they often need to draw on their understanding of the world. They are making connections that are not only implicit, but that may be open to some interpretation based on their own perspective. By engaging in this interpretive process, readers are attempting to construct a more specific or more complete understanding of the text by integrating personal knowledge and experience with meaning that resides in the text. For example, the reader may draw on experience to infer a character's underlying motive or to construct a mental image of the information conveyed (Mullis et al., 2012, 27). The test-questions connected to this process referred to discerning the overall message or theme of a text, comparing and contrasting text information. The results shown in *Table 4*. reveal that prospective elementary school teachers had lower achievement for the interpreting and integrating processes than for retrieving information.

	Interpret and Integrate Ideas			
Vaan	The number and percentage of correct answers			
Year	Discerning the	Comparing and Contrasting		
	Overall Message	Text Information		
I.	7 (58,33%)	8 (66,66%)		
II.	7 (63,63%)	8 (72,72%)		
III.	6 (40 %)	5 (30%)		
Total	20 (52,63%)	21 (55,26%)		

Table 4. Results – interpreting and integrating ideas

Students had difficulties in discerning the overall message, the aim of the text. Most of them formulated very general answers to the question: What is the aim of this text (radiotalk)? (e.g. to present scientific data and personal opinions, to draw attention to the importance of reading), and only a few of them succeeded in determining concretely, punctually the aim of the text (e. g. to describe the reasons why boys read less than girls). Students demonstrated higher achievement in reading when they had to compare and contrast text information: e. g. they had to compare the opinion of the people regarding to the reasons why girls are better readers than boys, they had to the sum up the overall message of the text.

The most complex process of text comprehension is the examination and evaluation of the content, language and elements of the text. As readers do these, the focus shifts from constructing meaning to critically considering the text itself. In terms of content, readers draw on their interpretations and weigh their understanding of the text against their understanding of the world – rejecting, accepting, or remaining neutral to the text's representation. For example, the reader may counter or confirm claims made in the text or make comparisons with ideas and information found in other sources. In reflecting on text elements, such as structure and language, readers examine how meaning is presented. In doing so, they draw upon their knowledge of text genre and structure, as well as their understanding of language conventions. They may also reflect on the author's devices for conveying meaning and judge

their adequacy, and question the author's purpose, perspective, or skill. The reader engaged in this process is standing apart from the text and examining or evaluating it. The text content, or meaning, may be examined from a very personal perspective or with a critical and objective view. Here the reader relies on knowledge about the world or on past reading (Mullis et al., 2012, 28).

In the reading tasks which activated this most complex text comprehension process, students had to decide if they agree with the arguments of those whose opinion is presented in the text regarding to the reading habits of girls and boys (formulating opinion), they had to determine the importance of the data the text refers to connected to reading habits (evaluation) and they had to decide whether the statements formulated in the task were facts or opinions presented in the text. They performed well when they had to state the importance the facts presented in the text, their achievement was lower when they had to formulate opinion based on the arguments of the text. They performed very poorly in the task of separating facts from the opinions presented in the text (*Table 5*.).

Examination and Evaluation of the Content, Language and					
	Elements of the Text				
Year	The number and percentage of correct answers				
	Separating	Formulating	Evaluation		
	facts/opinion	opinion			
I.	5 (41,66%)	7 (58,33%)	8 (72,72%)		
II.	5 (45,45%)	8 (72,72%)	9 (81,81%)		
III.	3 (20%)	5 (30%)	6 (40%)		
Total	13 (34,21%)	20 (52,63%)	23 (60,52%)		

Table 5. Results – Examination and Evaluation of the Content, Language and Elements of the

Text

## **Conclusions**

The aim of the survey was to measure the reading comprehension level of prospective elementary school teachers. The survey used a non-literary text and the reading tasks designed to measure reading comprehension referred to those types of comprehension processes that are used in the international reading literacy assessments. Across the assessment, a variety of comprehension questions, each dealing with one of the processes, enabled students to demonstrate a range of abilities and skills in constructing meaning from written texts. The results show that the level of reading comprehension of students show the same pattern as the results of 4<sup>th</sup> grade students: they perform poorly in the reading tasks assessing complex comprehension processes as integrating or evaluating information and data. It can be concluded that students do not acquire an appropriate level of reading comprehension by the end of obligatory education.

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