



## DEVELOPING WRITING-READING ABILITIES THROUGH SEMI-GLOBAL METHODS

Cecilia Macri, Muşata Bocoş

**Abstract:** Through this research was intended to underline the importance of the semi-global strategies used within thematic projects for developing writing/reading abilities in the first grade pupils. Four different coordinates were chosen to be the main variables of this research: the level of phonological awareness, the degree in which writing-reading elements are identified, the degree on understanding the functions-role of writing-reading, enriching vocabulary and improving the comprehension level. This research is a pedagogical experiment having as main phases the pretest, intervention, posttest stages.

**Key words:** writing-reading competence, semi-global strategies, thematic projects, phonological awareness, text comprehension, vocabulary volume.

### 1. Theoretical background

#### 1.1. Factors that influence writing/reading abilities

Within education framework, primary education level represents the key element in building human being personality. Regarding this aspect, the first schooling years focuses on developing children's instrumental abilities, mainly the acquisition of reading-writing abilities [1]. Thus, during primary education period the main characteristic for language development is given by the fact that language turns into a subject matter, it starting to be acquired in a systematical and intentional way focusing in language main components: phonology, lexicology, grammar, stylistics etc. In the beginning the little pupils learn to cut off different unities from the whole verbal emission corpus (shapes, words, sentences, phrases). Then they tend to acquire grammatical rules for using language. But in order the little pupils to be able to access the whole curricular areas in an efficient way they have to prove reading and writing abilities at least in an operational level.

Having into consideration the fact that written language has two main components (the reception and the production of grapheme signs), the pupil has to be able to acquire reading abilities, on one hand, and writing abilities, on the other hand, these abilities being in connection with grammatical knowledge, orthography, orthoepy, stylistics [2].

In fact written language development starts with acquiring reading abilities, as reading implies the decoding, the passing from the graphical code (based on letters or graphemes), to auditory code (sounds or phonemes). Thus, writing-reading abilities must me continuously developed, it being dependent on a series of important factors: neuropsychological ones, psycho/motor ones, sensorial ones, cognitive ones and also unknown factors [3].

A distinct category of factors which can influence writing-reading abilities (which are addressed through this research) is also represented by instructive/educative process features, related with improving developing these intellectual working instruments. Shortly presented, these factors [4] are:

- Reading's place within schooling schedule;
- The diversity of the reading support materials, of the didactical materials;
- The variety of the reading abilities and strategies that children are asked to use;

- Using different strategies for determining the children to express proper assumption in relation with the read texts;
- Functional school and classes libraries ;
- Possibility to use computers and to access internet;
- Using educational software in order to develop reading competences;
- Missing classes;
- Family`s attitude towards reading.

### **1.2. Didactical methods used in teaching reading-writing abilities**

A series of methods through which reading and writing abilities can be developed are listed by specialized literature. Among these methods we mention [3]: phonetically-analytical-synthetically method, semi-global method, integral linguistic method, natural method (Freinet), Montessori method, Decroly method. All these methods bring a different perspective on linguistic act, valorizing aspects such as:

- A slow progression in writing area stops acquiring reading techniques;
- The child reads the word identifying each letter, focusing on the shape aspect and not on understanding its meaning;
- Letters by hand are learned in the same time with the print letters, this making more difficult acquiring reading abilities;
- Enriching vocabulary;
- Phonematic analyze correlated with understanding the meaning;
- Text comprehension;
- Using stories;
- Multi-sensorial stimulation;
- Sensorial integration;

### **1.3. Thematic projects**

Projects method as new educational strategy underlines itself as a global method, with interdisciplinary features, being able to ensure adequate stimulation and simultaneous development of the cognitive processes that are still in developing period phase.

This method changes in a significant manner the perspective on the didactical activity as from object the child turns himself into a partner, initiator within instructive-educative process. By using this method the child takes part in the educational dialogues, plays an active role and can participate in his own development. Didactic activity turns into an interrelation process, within which as a personal experience, the child is all the time able to choose, independent regarding his activities content [3].

## **2. Research methodology**

### **2.1 General objective**

Through this research was focused on proving the importance of semi-global strategies used within thematic projects, with the aim of developing reading-writing abilities.

### **2.2 Participants in the research**

All the participants in the research attend a public regular school from Bucharest. The selection criterion was that of the schooling level. Experimental classes were selected at random, by drawing lots, these being I B, I C and I D. Class I A was the control group taken in this research.

**Table 1.** *Describing the group of participants in the research*

<b>Class</b>	<b>Number of participants</b>
Class I A	23 children
Class I B	25 children
Class I C	23 children
Class I D	26 children

### 2.3 Procedure

The assessment of these strategies efficiency was done by developing an experimental phase during 2011/2012 school years. During this experimental phase the four classes considered within the research participants group went through a training period based on six thematic projects. In the case of the experimental classes were used the semi-global methods. After a half period of time from the beginning of the experimental phase participants in the research was assessed for establishing if there are any changes upon the dependent variables. In the end of the experimental phase the participants in the research were also assessed, this allowing the researchers to draw general conclusions.

### 2.4 Research hypothesis

In first grade classes by using in a systematical way the thematic projects which are design by integrating curriculum and are based on semi-global methods can lead to significant development of the writing-reading fundamental abilities, more exactly to improving the phonological awareness, increasing the degree in which children are able to identify and to use reading-writing features, increasing children`s ability to understand reading-writing functions/roles, enriching, in a rapid way, children`s vocabulary, improving children`s ability in text comprehension tasks.

### 2.5 Research variables

- Independent variable: Implementing thematic projects which promote semi-global strategies in learning writing-reading abilities, in first grades classes.

- Dependent variables:

V.D.<sub>1</sub>. – the level of phonological awareness, the degree in which writing-reading elements are identified;

V.D.<sub>2</sub> – the degree on understanding the functions-role of writing-reading;

V.D.<sub>3</sub> – children`s vocabulary;

V.D.<sub>4</sub> – the degree of text comprehension.

<b>Dependent variables</b>	<b>Observational indicators</b>
V.D. <sub>1</sub> . – the level of phonological awareness, the degree in which writing-reading elements are identified;	The child is: <ul style="list-style-type: none"> <li>- able to identify in a spontaneous manner words that do not fit into a certain category or are able to elaborate rhymes ;</li> <li>- able to identify the syllables from the given words and the sounds from the given words;</li> <li>- able to differentiate the sounds that are similar in sonority;</li> <li>- able to understand the instructions that are given in the class, the words used during teaching activities (sentence, phrase, word);</li> </ul>

	<ul style="list-style-type: none"> <li>- able to use the words sentence, word, syllable and prove the understanding of their meanings;</li> <li>- able to differentiate between line – sentence, paragraph – phrase, letter– sound;</li> <li>- able to fit their writing within the given lines, space, pages.</li> </ul>
V.D. <sub>2</sub> – the degree on understanding the functions-role of writing-reading;	<p>The child can;</p> <ul style="list-style-type: none"> <li>- recognize that some words are more often used, and they can enumerate them;</li> <li>- differentiate among the different types of writings;</li> <li>- differentiate between the different writing types (pencil-paper, electronic etc)</li> <li>- differentiate among the reading functions (they are aware when they read by pleasure, to get informed, to study a certain thing, to learn instructions for using a certain object, to have fun, to be able to communicate);</li> <li>- identify solutions when facing difficulties while reading a certain material (for ex. look in a dictionary a certain word or ask the answer from an adult);</li> </ul>
V.D. <sub>3</sub> – vocabulary volume	<ul style="list-style-type: none"> <li>- children identify and differentiate paronyms;</li> <li>- children are able to write the given paronyms;</li> <li>- children can define a new word in the absence of a context.</li> </ul>
V.D. <sub>4</sub> – the degree of text comprehension	<ul style="list-style-type: none"> <li>- based on an adult reading, children can complete by writing, the missing words/word from a sentence;</li> <li>- can identify a well known word in a given text;</li> <li>- children can read and understand a short text, at first sight, when it contains well known words;</li> <li>- make connections between the pieces of information when reading a text;</li> <li>- give definition for a new word based on its meaning from the context;</li> <li>- independently read and are able to understand an instruction, a request;</li> <li>- read a well known text with intonation;</li> <li>- read derivative words (plurals, dative) or different verbal moods (gerund).</li> <li>- are able to use the context (sentence meaning, images) to be able to explain a new word;</li> <li>- elaborate short texts using the given well known words.</li> </ul>

## 2.6 Research design

The intervention phase implied using while implementing thematic projects, semi/global strategies with the aim of developing writing-reading abilities. During the school year 2011-2012, for experimental classes IB, IC, ID were implemented the following thematic projects: “TIME AND

SPACE”; BOOK’S GIFT”; “AUTUMN”; “WINTER”; “SPRING”; and “SUMMER”. Every thematic project was developed during a 6 weeks period of time. For the same experimental classes, while implementing the thematic projects within the object matter “Romanian language and literature”, the following didactical strategies were used:

- for I B class- traditional strategies were used in order to facilitate writing-reading acquisition (FAS method and strategies mainly focus on descriptions);
- for I C class- global strategies were used in order to facilitate acquiring writing-reading abilities;
- for I D- semi-global strategies were used in order to facilitate writing-reading acquisition (these strategies implies, according to the context and to the main objective of the activity requirements to access specific strategies such as FAS method and global methods).

Thematic projects were implemented along 2011/2012 school year period, following the schedule:

Thematic Project	Period Of Time	Class
<i>Autumn</i>	20 September – 1 November	I (B,C,D)
<i>Winter</i>	2 November – 13 December	I (B,C,D)
<i>Book’S Ghift</i>	9 January – 20 February	I (B,C,D)
<i>Spring</i>	27 February – 2 April	I (B,C,D)
<i>Time And Space</i>	23 April – 21 May	I (B,C,D)
<i>Summer</i>	22 May – 19 June	I (B,C,D)

In the case of the I A class, thematic projects were not used in teaching the subject matters within “Language and communication” curricular area. In this case FAS method was implemented (phonetically-analytical-synthetically method) in order to facilitate future comparisons among the classes reunited within the group of participants in this research, this also providing the researcher the possibility of collecting more objectives data due to the control group of participants.

All the categories of strategies used with the aim of facilitating acquiring writing-reading abilities are described and are exemplified as follows:

I B class: the pattern of phonetically-analytical-synthetically method implied the following steps:

*During the pre-alphabetic/pre-graphemic period*

Initial phonetically-analytical analyze (partial)

- segmenting a certain sentence from the speech flow-segmenting a certain sentence by decoding a certain picture;
- graphic representation of a sentence;
- segmenting a sentence in its constituent words;
- graphic representation of the words within a sentence;
- separating the words containing a new target;
- graphic representation of the words containing the new target sound;
- separating the syllables within the words containing the new target sound;
- approximating the syllable which contains the new target sound.

Final phonetic analyze

- separating the new target sound, identifying its position within the syllable (beginning/medial/final);

- graphic representation of the new target sound by using different symbols for vowels and consonants.

#### Synthetically phonetic analyze

- recomposing the syllables from the words containing the new target sound;
- graphic representation of the syllable containing the new target sound;
- recomposing the words containing the new target sound;
- approximating the words containing the new target sound;
- recomposing the sentence using its given words;
- approximating the words contained within a certain sentence;

#### *During the alphabetic/graphemic period*

#### Initial phonetically-analytical analyze (partial)

- separating the sentence from the speech flow;
- segmenting the sentence in words;
- segmenting the words containing the new target sound;
- segmenting the syllables within the words containing the new target sound;

#### Final analyze

- separating/analyzing the new target sound, identifying its position within the syllable;

#### Phonetically synthetically analyze

- analyzing the print letter/identifying the letter and associating it with the corresponding sound;
- writing the elements based on which the letter written by hand is composed;
- composing syllables by using the letters from alphabet;
- writing syllables using hand written letters-linking the hand written letters;
- composing words by using detachable letters and reading them;
- writing words using hand written letters- linking the syllables;
- writing the sentences by using hand written letters- identifying the blank space between words, writing with capitalized letters the first word in a sentence, placing the full stop in the end.

#### Techniques and specific procedures corresponding to semi-global method

Semi-global learning strategies were used, during the experimental period of time, while using thematic projects in I D class activities. Thus, the following aspects were implemented:

- Activities developed with the aim of raising children`s awareness regarding writing-reading functions/aims;
- Activities developed with the aim of ensuring knowledge/representations referring to the writing-reading learning process;
- Activities developed with the aim of building knowledge related with written materials and their functions (for getting information, for pleasure, for communication skills);
- Exercises aiming knowledge regarding the alphabet, the vocabulary, sentence components, segmenting words in syllables, segmenting syllables in sounds;
- Identifying familiar words;
- Reading aloud;
- Writing and understanding several verbally expressed requests;

- Interpreting some moralizing stories.

The development of writing-reading abilities from the perspective of the integrative approach, for the I D class was put into practice by using the following strategies:

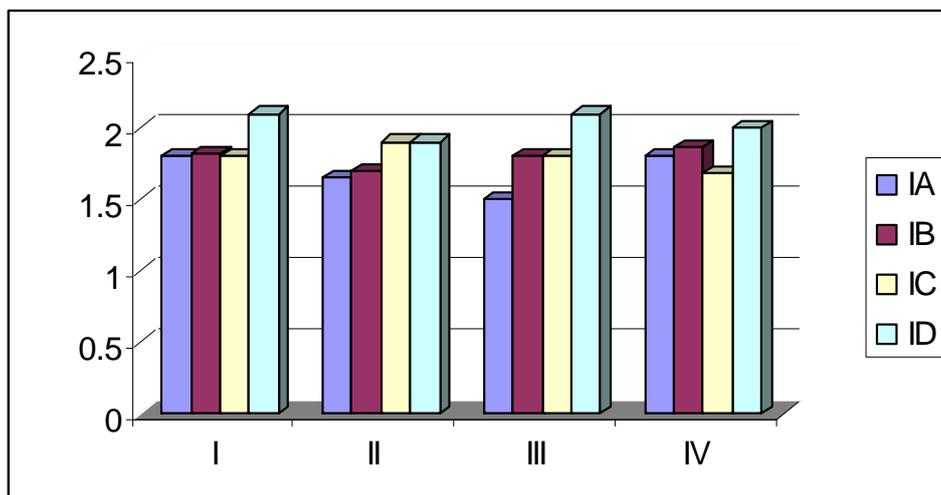
- I. Representing reading functions;
- II. Phonemic analyze correlated with understanding significance;
- III. Reading images;
- IV. Exercises – cross-words;
- V. Words segmentation exercises;
- VI. Rapid identification of the words;
- VII. Associating images with corresponding sentences based on their meaning relation;
- VIII. Integrative strategies for learning reading-writing used during the activities from I.C. class: the approach based on using language; group books` reading.

### 3. Analyzing and interpreting the obtained data

The analyzed and interpreted data are those collected during the final assessment. Within the next graphic every variable was coded as follows:

- I –the level of phonemic awareness, the degree in which writing/reading elements are identified and used;
- II – the degree of understanding reading-writing functions/roles;
- III – vocabulary volume;
- IV – the degree of text comprehension;

Every class part from the participants in the research group is represented by using a different color (see on the graphic legend in Figure 1).



**Figure 1.** Graphic representation of the means/variables (I classes)  
 \*\*\*the maximum score/items/variable – 2,5

**Table 1** *The scores obtained in the given tasks by the participants in the research*

	I A	I B	I C	I D	Total/Variable
<b>I Variable</b>	1.8	1.82	1.8	2.1	7.52
<b>II Variable</b>	1.65	1.7	1.9	1.9	7.15
<b>III Variable</b>	1.5	1.8	1.8	2.1	7.2
<b>IV Variable</b>	1.8	1.86	1.68	2	7.34
<i>Total score</i>	<i>6.75</i>	<i>7.18</i>	<i>7.18</i>	<i>8.1</i>	

ANOVA (variance analyze strategy) statistical method was used in order to compare simultaneously the four dependent variables/groups of participants. The results of the statistical analyze are compressed within the following tables:

**Table 2.** *The level of phonological awareness, the degree in which writing-reading elements are identified and used*

	Sum of squares	df	Mean squares	F	Sig.
Between group	1,166	3	0,389	6,041	0,001
Within groups	5,986	93	0,064		
Total	7,152	96			

**Table 3.** *The level of understanding reading-writing functions/roles*

	Sum of squares	df	Mean squares	F	Sig.
Between group	1,896	3	0,632	3,317	0,023
Within groups	17,717	93	0,191		
Total	19,613	96			

**Table 4.** *Vocabulary volume*

	Sum of squares	df	Mean squares	F	Sig.
Between group	4,176	3	1,392	4,593	0,005
Within group	28,185	93	0,303		
Total	32,361	96			

**Table 5.** *The degree of text comprehension*

	Suma of squares	df	Mean squares	F	Sig.
Between group	1,333	3	0,444	5,485	0,002
Within group	7,534	93	0,081		
Total	8,867	96			

By analyzing the above presented statistical results, significant differences are obtained for all dependent variables: phonological awareness, identifying and using writing-reading elements; the degree of understanding reading-writing functions/roles; vocabulary volume; the degree of text comprehension. Just for three dependent variables, the first, the third and the fourth the significance is on  $p < .01$ , this expressing a highly significant difference. Regarding the second variable, that referring

to the degree of understanding reading/writing functions-roles, the significance value is a little bit lower ( $p < .05$ ). This let us conclude that this aspect is the less dependent on the teaching/learning used strategies, it being an external aspect of writing-reading competence. The second variable is also the most abstract one, it comprising pragmatic and meta-cognition aspects regarding reading and writing, these being a possible explanation for the obtained results.

All in all, the most important aspect is that this research proves that the starting hypothesis is valid teaching semi-global strategies can highly influence reading-writing abilities both in the case of the experimental group, and in the case of the control one.

## Conclusions

Having into consideration the obtained results a series of recommendations can be made referring to teaching/learning writing-reading abilities in the primary education level. These recommendations can be addressed to the entire educational system: at macro-educational level; (the level of educational system as a whole), mezzo-educational (the level of the local school inspectorates) and micro-educational (at the level of education institutions). All these recommendations can turn into objectives for the entire didactical approach, objectives that have as main aim to reach the level of a functional writing-reading abilities. All these recommendations are to be found within the doctoral thesis below mentioned.

## References

- [1] Anca, M. (2007). Logopedie, reeditară, Presa Universitară Clujeană, Cluj-Napoca
- [2] Golu, P., Zlate, M., Verza, E. (1983) Psihologia copilului, București, Editura Didactică și Pedagogică R.A, 1983
- [3] Hațegan, C. (2011). Abordări structuralist integrate în terapia tulburărilor de limbaj și comunicare, Presa Universitară Clujeană, Cluj-Napoca.
- [4] [http://www.euractiv.ro/uniunea-europeana/articles|displayArticle/articleID\\_14822/Studiu-PIRLS-Educatia-in-Romania-sub-nivelul-mondial-al-mediocritatii.html](http://www.euractiv.ro/uniunea-europeana/articles|displayArticle/articleID_14822/Studiu-PIRLS-Educatia-in-Romania-sub-nivelul-mondial-al-mediocritatii.html) [2012]
- [5] Albușescu, I. (2009). Pragmatica predării. Activitatea profesorului între rutină și creativitate, Editura Paralela 45, Pitești.
- [6] Bocoș, M., Chiș V. (coordonatori), (2012). Abordarea integrată a conținuturilor curriculare, Editura Casa Cărții de Știință, Cluj- Napoca.
- [7] Bocoș. M.-D. (2013), Instruirea interactivă, Editura Polirom, Iași.
- [8] Chiș, V. (2005), Pedagogia contemporană – Pedagogia pentru competențe, Editura Casa Cărții de Știință, Cluj-Napoca.
- [9] Crețu, C. (2000), Teoria curriculum-ului și conținuturile educației, Editura Universității “Al.I.Cuza”, Iași.
- [10] Cucuș, C. (2002), Pedagogie. Ediția a II- a revăzută și adăugită, Editura Polirom, Iași.
- [11] D’Hainaut, L. (1981), Interdisciplinaritate și integrare//Programe de învățământ și educație permanentă, Editura Didactică și Pedagogică, București.
- [12] Ionescu, M. (2000), Demersuri creative în predare și învățare, Editura Presa Universitară Clujeană, Cluj-Napoca.
- [13] Macri, C. (2013). Dezvoltarea competențelor de citit-scris în ciclul primar prin utilizarea strategiilor semi-globale în cadrul proiectelor tematice, Teză de doctorat în lucru, Cluj-Napoca.
- [14] Molan V. (2010), Didactica disciplinei Limba și literatura română în învățământul primar, Editura Miniped, București.

### Authors

PhD Student **Cecilia Macri**, Babeş-Bolyai University, Cluj-Napoca, Romania, e-mail: [ceciliamacri@yahoo.com](mailto:ceciliamacri@yahoo.com)

PhD. Prof. Univ. **Muşata Bocoş**, Babeş-Bolyai University, Cluj-Napoca, Romania, e-mail: [musata.bocos@yahoo.com](mailto:musata.bocos@yahoo.com)

### Acknowledgement

This study is just a little part from a larger research, research developed within the doctoral thesis entitled “Developing writing-reading competences in primary education level by using semi/global strategies within thematic projects activities”, doctoral thesis written by Macri, C. under the scientific coordination of prof. Bocoş, M. (2010-2013).