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READING SKILLS IN RELATION TO READING PRACTICE METHODS

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Abstract

This paper deals with the topic of reading comprehension related to the method of reading practice in the early literacy reading period. It introduces reading methods used in school practice in the Czech Republic. The research results focus on readers' performance parameters, i.e. the manner in which pupils at the end of 1st and 2nd year of primary school read and comprehend texts taught by different reading methods. The research was undertaken between 2016 – 2017, where in addition to loud reading, silent reading and listening texts were used. The research design was quantitative where data was collected from the comparison of sample readers'reading skills based on the differenct methods as well as from the sample's responses to a questionnaire. This research is part of a two year research project undertaken by the main author of this paper published in an article entitled *Reading Literacy and Methods of Improving Reading* (Kosek Bartošová et al., 2016). From the results obtained, it can be concluded that a general conclusion on precisely the most effective method is still elusive, but the results do give more insights into the issue.

Keywords: Methods of reading practice, analytic-synthetic method, genetic method, method of flowing reading. .

1. Introduction

In recent years the Czech Republic has been intensively engaged in changes of teaching elementary reading and development of reading literacy of first grade primary school pupils. One of the most important skills needed for further learning which can be acquired within primary education, is to master techniques of reading with consequent comprehension. (Kosek Bartošová, 2016). This process is carried out using a reading practice method. The Analytic-Synthetic method (hereinafter AS), taught by about 70% of teachers, represents the basic and the most applied method in this country. The Genetic method represents the second most widespread method, used by probably 12% of teachers. The youngest purely Czech method - the Sfumato used by 6% of teachers. All of these methods have been subjected to research testing with 1st and 2nd primary class pupils. In this paper, the authors attempt to provide more insight and focus into areas, which have not been investigated yet.

Individual methods differ both in the introduction process with letters, and by the reading method itself and also quality of texts (Bartošová, 2016).

The Analytic-Synthetic (AS) method is based on acquiring spoken speech from early childhood, starting with well-known words (mother, father etc.) the first sounds are drawn and then transformed into syllables and words. At first, children are introduced to the letter in all four forms at the same time. As soon as the child acquires graphemes of the simplest consonants and vowels (s, p, l, m, … / a, e, i, …), s/he links them into syllables and words, which s/he learns to read (Bartošová et al., 2016).

In contrast with the Genetic method, the children meet with the letter shape first, a capital letter (e.g. A), which is assigned to the drawn vowel. This method palces a higher demand on auditory memory and phonetic sense of hearing. The child first spells the word and then says it based on auditory synthesis as a whole (e.g.: m-o-t-h-e-r → mother). Currently, research is being conducted in this area, *monitoring reading literacy with the use of eye tracking method* (Košek Bartošová et al., 2016)

The Genetic method is the latest method, which is based on the previosu with the difference, that to one phoneme (speech sound), two forms are supplied simultaneously (big and small form of a capital letter). Children are introduced to the shapes of writing letters later, when they memorize the shapes of capital letters. Preparation for writing is implemented by a form of grapho-motor practice (Gejgušová, Labischová, & Metelková Svobodová, 2015).

In terms of flowing reading - the Sfumato - pupils acquire knowledge of all 4 ways of a letter, similar to the AS method. The so-called legato or slide reading is specific for this method. Eyes fix on the phonemes consecutively, children say them out loud, uninterrupted by intake of breadth and tonal changes. Eye fixation on the letter is important. The aim of this method is to avoid double reading; the eye movement progressive and does not go back. There is a connection of senses, where organs of vision, voice and hearing contribute to the learning process (Kosek Bartošová, 2017).

Kosek Bartošová (2017) mentions that authors Kucharská, Burešová & Rabenhauptová (2010, 2011, 2012) are engaged in investigating problematic reading skills among 1st and 2nd primary class pupils in a project called *Reading comprehension – typical development and its pitfalls*. One of the aims of this research was to create a new testing battery for reading diagnostics that would facilitate the identification of the level of mastering reading technique and at the same time to take into consideration the possibilities of pupils' differences taught by different early reading methods (Kucharská et al., 2015).

2. Problem Statement

This research is part of a two-year research aimed at comparing reading skills (primarily reading comprehension) of pupils during 1st and 2nd class of primary school by the means of different teaching methods of reading practice in the Czech Republic. This research was undertaken to provide extensive insights into the area of early literacy as this is the foundation of reading skills for the future. Good reading skills are crucial for a child's intellectual and social development especially with the educational area of the child's future endeavours. This research was undertaken to compare between the available reading methods used in Czech schools and to find out if there is one best method.

3. Research Questions

The amin aim of the research was focused on mastering techniques and reading comprehension using various reading methods. This paper focused only on comparison of results from the end of 1st and 2nd class (that is 2nd and 4th assessment at the end of school years of 2016 and 2017), where answers are provided for the following questions:

1. From the available methods used, which seems to be as the most effective in terms of reading literacy while reading aloud?

2. How do the children perceive themselves as readers?

4. Purpose of the Study

The aim of this study is to provide results focused on the quality of reading comprehension as shown in the manner of reading – intonation in the most frequently used reading methods at primary schools in the Czech Republic. The intention of the authors is to evaluate the quality of the reading skills of pupils at the end of primary school 1st and 2nd classes taught by different methods of reading practice and to compare the results of both assessments. Furthermore, we marginally focus on the relationship of pupils towards reading and assessment of perception of themselves as a reader based on a set of questions. investigations were done in two years. The first measurement was made in one half of the 1st primary class where the connection between the method and reading comprehension was statistically proven ($p=0.002$). Then, three surveys followed; their intention was to compare reading comprehension skills of pupil also in other periods of early reading literacy and to find out if the method of reading practice would have an influence on reading comprehension. In this paper, we focus only on comparison of pupils' reading skills at the end of 1st and 2nd primary classes and to a lesser extent, the perception of the children of themselves as readers.

5. Research Methods

5.1. Data collection methods

Data collection was implemented according to set goals by a quantitative method with the focus mainly on reading comprehension (complementary tasks and questions). For the purpose of this research, a non-standard text (4 sentences with 47 words) created for primary school pupils at the end of 1st class. Children had to read out loud and then complete two tasks. First, they had to put five pictures in order.

Then they had to read three questions, for which they had to choose the correct answer from three possibilities (gap fill – words into a sentence).

At the end of the 2nd class, the pupils worked with a text titled "Hedgehog" while reading aloud. The material is used for development and reading literacy assessment for pupils of 2nd class of primary school, and is freely available for pupils, parents and teachers.

Two more partial tests were used as part of the final assessment; silent reading and listening, but this is not reported in this paper. The entire survey was closed by a questionnaire, where pupils answered questions according to their relationship to reading, evaluation of oneself as a reader. We have selected from the most interesting ones, which can have a connection with the research.

5.2. Research sample

Six primary school classes (126 pupils) homogeneous in gender representations made up the research sample for the 2nd assessment.

6. Findings

The research was done during two school years. The monitored methods were: the Analytic-synthetic method (AS), Genetic (GW and GR) and the Sfumato method (SF). The qualitative features were mainly monitored (the way and reading techniques together with reading comprehension), but also a quantitative feature (reading speed).

The focus in this paper is on comparison from the 2nd and 4th assessment in these following fields: a way of reading (intonation) and comprehension (loud reading) in addition to the answers from the questionnaire, which was a part of a final assessment.

6.1. Results of the reading diagnostic test

(Table 01) shows the overview of the pupils' performance according to the different methods.

Table 01. Overview of assessed pupils during 2nd reading assessment

Method	Girls (number)	Boys (number)	Summa
Analytic-synthetic method (AS)	23	18	41
Genetic method GW)	11	9	20
Genetic method (GR)	14	7	21
SFUMATO method (SF)	19	25	44

The research sample for the 4th assessment (Table 02) comprised six primary school classes (120 pupils). Even though the research was processed in the same primary school classes, numbers of individual assessments might slightly differ due to the absence of pupils in the classrooms.

Table 02. Overview of assessed pupils during 4th reading assessment

Method	Girls (number)	Boys (number)	Summa

Analytic-synthetic method (AS)	19	22	41
Genetic method GW)	10	9	19
Genetic method (GR)	13	7	20
SFUMATO method (SF)	19	21	40

6.2. A way of reading text

Intonation was one of the monitored aspects during loud reading (Table 03) that is closely related to reading comprehension. From the table is clear that significant improvement is found with the AS and the Sfumato methods. The results for the GR and GW methods were not very good. However, it does not mean that the cause is the method, but it could be tiredness itself, the difficulty level of the text, current pupil´s state, nervousness and other phenomena. There were two categories linked in the assessment – effort to intonate and reading with intonation (Bartošová, 2017).

Table 03. Way of reading text – intonation (%)

Method	2nd testing (1st class)	4th testing (2nd class)
Analytic-synthetic (AS)	32	**74**
Genetic method (GR)	39	58
Genetic method GW)	**74**	57
SFUMATO method (SF)	49	63

6.3. Comparison of reading comprehension (loud reading)

Comprehension is part of the most important apects of literacy in reading. Comparison of both assessments during reading aloud with comprehension is listed in Table 4.

The task for pupils, at the end of their first class (second assessment), was to put pictures in order according to the main plot. The second task was focused on text comprehension, in order to fill words from three possible questions.

The overall comprehension results are balanced; the Genetic method achieved the best result (the first column of Table 4). The biggest difficulty was having pupils regardless the method with the first question.

The text "Hedgehog" was read by pupils in 4th assessment, i.e. at the end of 2nd class (second column of Table 04). After loud reading they answered onto 7 given questions and 1 optional bonus. The results are similar. The Analytic-synthetic method came out the best, with the difference of 1.7 % from the method of flowing reading. Here, again, we must not forget the pupils' individuality in each class, conditions and other unknown factors, which would affect the research results. Research results aimed at the "Hedgehog" text´s characteristics (question No. 5) and other questions related to elaboration and test deduction coincide with the results of the international research PIRLS, which testify that pupils reach lower results in those fields.

Table 04. Comparison of reading comprehension – loud reading in 2nd and 4th assessment (%)

Method	Summa 2nd testing	Summa 4th testing

Analytic-synthetic (AS)	56.9	65.6
Genetic method (GR)	66.7	64
Genetic method GW)	58.3	64.3
SFUMATO method (SF)	57.6	63.9

The most significant progress (Table 04) between 2nd and 4th testing is seen at the analytic-synthetic method, while improvement was also found in the genetic method and the Sfumato method. The genetic method showed a decrease at 2.7 % in the 4th testing.

6.4. Selected questionnaire responses

The questionnaire, which was a minor part of the assessment at the end of 2nd class, contained 16 items with two open questions. The pupils could choose one response from close answers, and only in two items, they could tick more answers. A few of the responses are provided here.

The first item (Table 5) was focused on self-assessment of pupils as readers. We assumed that pupils mainly took fluency and reading technique into an account more likely than comprehension. A suprising finding is with the AS method were pupils responded quite unambigously (100%). With all participating methods, there is a positive self-assessment of pupils, when the YES responses were collated. On the other hand, the lowest perception is from pupils who read using the Genetic method collated by the NO responses. The influence of self-concept of pupils can be due to many factors: such as teacher´s feedback, parents, classmates´ demands and text choice.

Table 05. 1. Pupil´s self-assessment as a reader (responses in %)

Method	YES I belong to the best readers in the class	YES I belong to the class average	NO reading causes me minor problems	NO reading causes me major problems	I do not know
AS	**100**	0	0	0	0
GR	26	53	5	0	16
GW	37	32	**26**	0	5
SF	28	38	18	3	15

The second question (Table 6) monitors whether the pupils are aware of text understanding. It was again focused on self-assessment, with specification on reading comprehension. The highest reading is found with pupils who read by the Sfumato method. However, 3 pupils who used the same method felt that theyhad not acquired the reading technique. Almost all the pupils involved overwhelmingly agreed that they understood the texts.

Table 06. 2. self-assessment in reading comprehension (responses in %)

Method	YES-I understand everything	YES – but I sometimes do not understand	NO – I often need help	NO – I do not quite understand	I do not know
AS	36	54	3	0	8
GR	30	55	**5**	0	**10**
GW	**37**	53	**5**	0	5
SF	28	**65**	0	**3**	5

The third item (Table 7) looked for connections between the interest in reading and reading comprehension which can help us monitor their interest as to whether reading is fun enough to spend their free time on. The most free time spent on reading is mentioned by pupils who read by the AS method, followed by the GW, and the SF. In contrast, the least time spent is found in pupils who read by the Genetic method. It must noted that because the differences are not statistically significantly, it cannot be clearly identified if certain methods could actually motivate pupils to read.

Table 07. 3. interest in reading (responses in %)

Method	YES, I read regularly	YES, I read on and off	More likely NO	NO
AS	33	62	3	3
GR	**37**	42	**16**	5
GW	32	58	5	5
SF	23	**64**	5	**8**

The analysis shows that the AS method seems to be the preferred method both in terms of interest and level of comprehension of all the methods. As far as other methods of reading interest are concerned, the order seems to be: GW, SF, GR, while order of comprehension is: SF, GW, GR. It must be noted that in terms of interest in reading, the results can be affected by different pupils´interests, such as those who might tend to like sports and other activities more. Pupils might also have different possibilities to spend their leisure time (clubs, financial possibilities of parents

7. Conclusion

During comparison of pupils' reading skills quality at the end of the 1st and 2nd class, we were looking for answers to a question, which was the most effective method in term of researched methods based on reading aloud, focused on comprehension. The best results came from pupils who were taught by the *Genetic method, at the end of the first class*. Total results of other methods are equal. The results were similar during the fourth assessment where the best method was *the Analytic-synthetic method*, where 65.6 % of pupils understood the text. However, there is a slight difference of about 1.5% from other methods. The most significant progress between 2nd and 4th assessment was seen in the AS method (improvement of 8.7 %) while the Genetic method dropped by 2.7 %.

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We focused on the self-assessment of pupils using a questionnaire. The children responded to items aimed at getting an opinion on reading from the perspective of technique and comprehension. An interesting comparison was found in items where pupils answered that they are good readers if they could comprehend. A positive evaluation of all methods was found in both cases. The first item regarding the AS method gained a "YES" response by 100% of the pupils, compared to the SF method which only obtained 64%. However, values in the second question differ between 85 - 93 %, where the Sfumato pupils rate it the best method.

We can conclude that pupils consider reading technique as very important and based on that fact, they assess whether they are good readers or not. It cannot be clearly identified, if any method would motivate pupils to reading. Nevertheless, family background might have a certain influence; children's preference how they spend their free time and further activities and so on. Still, the results are interesting. Pupils who read using the Analytic-synthetic method (95%) tend to show the greatest interest in reading and, at the same time, they attained the highest level of comprehension. On the contrary, pupils who read using the Genetic method (79%) read the least.

The aim of this research was to compare reading skills of pupils in the Czech Republic according to methods of reading and, at the same time, to monitor the most progress between assessment at the end of 1st and 2nd class (i.e. 2nd and 4th assessment). The answers from the questionnaires are also helpful as they can be directly related to the research results.

While this study did not unambiguously determine the most effective reading method, there is empirical evidence that the *Analytic-synthetic method* and *Genetic* methods are valuable teaching methods to gain reading competence among 1st and 2nd primary classes. At the same time, it must be noted that the ideal of the reading method can differ for each pupil according to his/her abilities and a host of other socio-environmetal factors.

We believe, that the paper could provide a certain perspective into the issue, which shows different views of reading methods and brings interesting insights in terms of elementary reading and can broaden awareness of teachers about the existence of other reading valuable methods.

Acknowledgments

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