

AGNIESZKA HORODECKA

Maria Curie-Skłodowska University in Lublin
Logopedics with Audiology Student

Spelling and punctuation efficiency of first and second grade students of primary school. Evaluation of rewritten texts

SUMMARY

This article presents the results of studies aimed at assessing the efficiency of spelling and punctuation among primary school students of first and second grade. The research materials were derived from empirical research conducted by A. Domagała and U. Mirecka, used in terms of efficiency in the graphomotor monograph entitled *Grafomotoryka u dzieci w wieku 7–13 lat* (2010). For the purpose of this study the author has analyzed the available materials – 200 texts in total, obtained from the students (two samples from each child). In this case, the study was conducted on a group of 100 students (50 children from each level of education, equal groups of girls and boys). Analysis of the gathered materials allowed the identification of the spelling level of each student as well as the entire population, within the typology of errors in writing and after making characteristics of the comparative performance of students with level of education and gender of the tested subjects. As a result, the scale of writing problems of students in grades I–II of primary school was shown, achieved on the basis of the rewritten texts. The results of this study indicate a higher level of writing skills in girls and less severe errors in attempts to rewrite the texts in second grade pupils.

Keywords: spelling, punctuation, errors in writing, dyslexia risks

INTRODUCTION

Writing is a form of language communication, associated with verbal communication system (Bogdanowicz 1989). However, in Polish translating the content of the word of mouth to its written form is not homogeneous, E. Górniewicz (1998) pays close attention to this aspect. The author, alleging B. Roślowski,

writes that in Polish there are 32 single letters, 13 digraphs and 3 trigraphs, what in total make up 48 graphemes. However, only 38 phonemes correspond to those graphemes, thus there are discrepancies between speaking and writing, and this in turn gives rise to many spelling difficulties.¹ At the same time, the researcher emphasizes that in case of written mistakes caused by phonetic-graphic discrepancies that are not associated with a visual memory and/or perceptual-motor malfunctions cannot immediately be classified as the occurrence of dysorthographia. The author recommends that the diagnostic process of dysorthographia and dysgraphia should assess students' skills during three trials – rewriting, listening-writing and writing from memory. With regard to rewriting trial, E. Górniewicz recorded two strategies used by students. The first is the strategy of rewriting a single letter or several letters at a time, students are focused on the precise shape of each of them. Students do not focus on the meaning and sound of the text, but treat it as a graphic task to copy. In the case of second strategy students read the text and try to write it from memory, without any additional visual inspection (reaching back to their memory) although they can use it during the entire study period. In this strategy the rewriting is based on two modalities, visual memory and auditory memory – in this respect, the second strategy shows similarities to writing from memory.

While tracing the spelling problem in the literature, it should be noted that this difficulty can be widely understood. In some classifications, punctuation errors are included in the spelling errors, in others they are considered as a separate errors category (in the presented analysis I suggest separation of spelling and punctuation errors). I. Pietras made a review of the errors typology (2007, 2008). The author presents the position of researchers from various fields of science, inter alia: linguistics (L. Kaczmarek, E. Polański, R. Starz), logopaedics (I. Styczek) and psychology (H. Spionek, J. Mickiewicz, I. Pietras). Moreover, linguistic classification of error was also suggested by A. Markowski (2005), he calls for the division of gross errors, common errors and language mistakes. Pedagogical approach to the problem is found in the works of E. Górniewicz (1998). The position regarding the discussed issue has also been taken by the Teaching Commission of Polish Language Council, which on 21st February 2005 has announced the arrangements for the spelling errors categorization. The base of the proposed typology are the spelling rules. Spelling errors were divided into gross errors and secondary errors. Additionally, A. Domagała and U. Mirecka (2010b, 2010/2011) distinguished so-called alleged spelling errors, which are in fact graphical errors, while taking into account their formal aspect they tend to be categorized as spelling mistakes.

¹ E. Górniewicz In: *Pedagogiczna diagnoza specyficznych trudności w czytaniu i pisaniu* alleging B. Raclawski lists all discrepancies between letters and their phonic realizations.

Despite visible differences in the spelling errors classification, spelling rules remain the same (E. Polański, *Nowy słownik ortograficzny PWN z zasadami pisowni i interpunkcji*, 1996). Bearing in mind the punctuation problem, it is necessary to highlight their importance in written tests – these issues are discussed by J. Podracki.² Misapplied signs or lack thereof, affect the recipient's correct interpretation of the text – the statement is devoid of expressive characteristics (Makarewicz 2007). As we read in the work of L. Kaczmarek, the letter is a segmental plane of the text and punctuation – suprasegmental (1977). Not respecting the spelling rules and/or punctuation in the case of student may result in e.g. lower grades from written exams and essays. Unfortunately, many students experience various difficulties with writing – some of them in the course of school education are recognized as specific – developmental dyslexia – M. Bogdanowicz describes its multifaceted nature (1989, 1999, 2002, 2011). To prevent possible learning problems in later levels of education, it is advisable to observe children and detect, as soon as possible, the risk symptoms of dyslexia (Bogdanowicz 2012). The researcher, while explaining the concept of risk of dyslexia, draws attention to a group of children which it relates to and gives inclusion criteria: “Term *risk of dyslexia* is applied to younger children with selective disturbances in psychomotor development, which may cause the occurrence of specific difficulties in reading and writing. This term is also used in relation to pupils who encounter the first, but strong, learning difficulties, despite average intelligence, well-functioning sense organs, proper educational and teaching care at home and at school” (Bogdanowicz 2002: 43). Due to the problem of the risk of dyslexia it is essential to carefully observe students at the stage of primary education, in particular, whether they freely acquire basic academic skills – reading and writing.

ISSUES AND RESEARCH MATERIALS

Writing skills were the main subject of the research, whereas the main objective was to test the degree of spelling and punctuation accuracy texts rewritten by first and second grade students. The main problem has become a motive for conducting a detailed research on the relationship between the efficiency level in spelling and punctuation and: a) the level of students' education; b) sex of tested individuals. Research has been aimed at making a quantitative and qualitative characteristic of spelling and punctuation errors, determining what type of errors are significant to the chosen form of writing, that is – rewriting texts.

² Web source, J. Podracki, *Klasyfikacja błędów interpunkcyjnych*, http://www.rjp.pan.pl/in dex.php?option=com_content&view=article&id=1100:klasyfikacja-bdowinterpunkcyjnych &catid=54:zespo-dydaktyczny&Itemid=66

Research material that was used in the study has been collected by A. Domagała and U. Mirecka for the purpose of the research project titled: *Zaburzenia komunikacji pisemnej. Profil sprawności gramatycznych jako technika diagnozowania dzieci w wieku 7–13 lat. Rozwój grafomotoryki – ryzyko dysgrafii* (Project nr N N 106 1885 33 MNiSW; Project manager – dr hab. Urszula Mirecka), the result of the implementation of the experimental studies aimed at evaluating the graphomotor efficiency of I–VI grade students – the results of studies conducted in this area are discussed in the monograph devoted to the subject of graphomotor (Domagała, Mirecka 2010b) and other publications (Domagała, Mirecka 2009, 2012a, 2012b et al.). For the purpose of this study I used the available research material – a total of 200 students’ texts (two samples from each of one hundred children from first and second grade).

In this case, test group consisted of 100 students (50 students from each level of education, equal groups of boys and girls). Tested children were chosen randomly, they were first and second grade students of public primary schools located in a big city.³

With regard to the analyzed material, it is important that students had the opportunity to familiarize themselves with the text prior to the start of the test. At the same time, throughout the duration of the study, students had the access to the model text (all students had their own copies of the text in front of them, the task was to rewrite the text). There was no time pressure, students were given a command to work at their own pace. After each test, materials were collected. During the test, students used their own writing tools, which they were accustomed to.

Below is the text used in empirical research (Domagała, Mirecka 2010b), to which I will refer in further course of my study.

Trial 1. Text on the card without screen ruling:

Sprytna myszka

Myszka Hipi znalazła duży kawał żółtego sera. I co zrobiła? Wygryzła w nim dziurę, a później powiedziała: „Będę teraz miała fajne i smaczne mieszkancko”.

Trial 2. Text on the card with screen ruling:

Przyjaciele

Franuś i jego pies Łatek lubili się ścigać. Goniąc po wąskiej ścieżce, powpadali na siebie. Ojej! Teraz chłopiec głaszcze psa, a ten liże jego ręce.

Common practice for checking spelling and punctuation skills in schools is a test in a form of listening-writing exercise (dictation), while the chosen form – rewriting – is less frequently used. However, it has a high diagnostic value,

³ Information on the research are published in the monograph *Grafomotoryka dzieci w wieku 7–13 lat* A. Domagała and U. Mirecka (2010b, II extended publication – 2015).

in standards of speech therapy it is indicated as obligatory (Domagała, Mirecka 2008, 2015). I based the analysis of the I–II grade students' work on hitherto unpublished findings of A. Domagała and U. Mirecka (the developed typology of errors in writing). Researchers, while classifying writing errors take into account any deviation from the correct spelling, highlighting spelling and punctuation errors. This study has been prepared within the framework of research conducted under the direction of dr hab. A. Domagała on MA seminar.⁴

RESEARCH RESULTS

1. The results of qualitative and quantitative analysis.

General information

The overall results of quantitative analysis are presented in Tables 1–2. Tables show data on the number of correctly rewritten texts in terms of spelling and/or punctuation, and the total number of errors made by the students.

Table 1. Spelling and punctuation errors in rewritten texts. Overall results for the examined population of students

CATEGORY	FREQUENCY OF ERROR OCCURRENCE IN THE STUDIED POPULATION (% OF STUDENTS)
Correctly rewritten texts in terms of spelling and punctuation	17%
Correctly rewritten texts in terms of spelling	23%
Correctly rewritten texts in terms of punctuation	46.5%

Of 200 analyzed texts, only 34 were correct in terms of both, spelling and punctuation. 17% of respondents correctly rewrote at least one text. The other texts contained mostly spelling errors, to a lesser extent punctuation errors. Spelling in comparison to punctuation appeared to be more problematic for students in tested population.

⁴ I presented my work: *Sprawność ortograficzna i interpunkcyjna uczniów klasy I szkoły podstawowej* during the First National Logopaedics Symposium *Interdyscyplinarność i samodzielność* (11–12.06.2016, Lublin). Partial results of the research were supported by the samples collected from students' work.

Table 2. Quantitative characteristic of spelling and punctuation errors – overall data for the examined population of students

CATEGORY	NUMBER	FREQUENCY OF ERROR OCCURRENCE IN THE STUDIED POPULATION (% OF STUDENTS)
Spelling and/or punctuation errors	610	83%
Spelling errors	393	77%
Punctuation errors	217	53.5%

1.1. Errors registry

Analysis of the research material collected from the students helped to prepare a register of spelling and punctuation difficulties – with the reference to the typology proposed by A. Domagała and U. Mirecka. The register includes the following categories of errors, occurring in the studied population:

1) Addition (letters, words), e.g.:

– adding letters:

“*Oojej*” instead of “*Ojej*” [3/Ie]

“*powpadaqli*” instead of “*powpadali*” [17/IIId]

– adding words:

“*a ten lirze ego po ręce*” instead of “*a ten liże jego ręce*” [15/Id]

“*a ten pies liże jego ręce*” instead of “*a ten liże jego ręce*” [8/IIa]

This category refers to letter or words (the problem of doubling letters or adding a single word), however, there were no errors involving enrichment of a word’s structure with an extra syllable.

2) Replacement (letters, words) e.g.:

– replacing capital letter with small letter:

“*wygryzła w nim dziurę...*” instead of “*Wygryzła w nim dziurę...*” [15/Ie]

“*pies latek*” instead of “*pies Łatek*” [2/Ie]

– replacing small letter with capital letter:

“*Goniąc Po wąskiej ścieżce*” instead of “*Goniąc po wąskiej ścieżce*” [II/Ie]

“*luBili*” instead of “*lubili*” [2/Ie]

“*SPrytna*” instead of “*sprytna*” [7/IIb]

Capital letters at the beginning of a sentence or in proper names were replaced with small letters, both at the beginning of a word in the middle of a sentence and within an expression.

- replacing letters corresponding to vowels:
 “*Przyjacio*” instead of “*Przyjaciele*” [10/Ic]
 “*smaczn*” instead of “*smaczne*” [19/IIb]

Problems concerning nasal vowels spelling were separately distinguished. Misspelling errors occur mostly in accordance with pronunciation (phonetics), often diacritics are skipped, e.g.:

- “*Gononc*” instead of “*Goniąc*” [10/Ib]
- “*Bende” instead of “*Bede” [10/Ib]**
- “*dziure*” instead of “*dziurę*” [16/Ie]
- “*Goniac*” instead of “*Goniąc*” [12/IIe]
- “*rece*” instead of “*ręce*” [6/Ie]

Letters corresponding to nasal vowels were also recorded instead of letters corresponding to oral vowels, e.g.:

- “*rece” instead of “*ręce*” [8/Ie]*

With regard to the letters corresponding to the vowels, students also showed problems with the scope of the use of the letters *u/ó*, they wrote *u* instead of *ó* and vice versa, e.g.:

- “*zultego*” instead of “*zóltego*” [7/Ib]
- “*puźniej*” instead of “*później*” [12/IIb]
- “*doży*” instead of “*duzy*” [3/Ib]
- “*dziore*” instead of “*dziurę*” [5/IIa]

- replacing letters corresponding to consonants:
 “*Lranuś*” instead of “*Franuś*” [1/IIb]
 “*Fatek*” instead of “*Latek*” [1/IIb]
 “*ludili*” instead of “*lubili*” [15/Ie]

Problems with writing letters of low frequency of use (*F* and *L*) were noted. Visually similar letters were also often confused.

A separate division was proposed to spelling of soft consonants and voiced/unvoiced consonants.

Letters corresponding to soft consonants were replaced with letters corresponding to the hard consonants. Furthermore, students also broke other spelling rules related to the position of the soft consonants in the word, e.g.:

- “*dzure” instead of “*dziurę*” [13/IIa]*
- “*ścigaci*” instead of “*ścigac*” [13/Ie]

Letters corresponding to voiced and unvoiced consonants were interchanged within a word. Students mainly relied on the phonetic realization of words, they wrote in accordance to the pronunciation (only two students demonstrated the reverse process), e.g.:

“*ścieszce*” instead of “*ścieżce*” [14/Id]

“*wązkiej*” instead of “*wąskiej*” [25/IIb]

With regard to the letters corresponding to consonants, students also showed problems with the scope of use of *rz/ż* and *ch/h* letters, e.g.:

“*lirze*” instead of “*liże*” [12/Ic]

“*hłopiec*” instead of “*chłopiec*” [13/Id]

– replacing words:

“*złotego*” instead of “*zółtego*” [20/Ie]

“*powiadali*” instead of “*powpadali*” [21/Ie]

“*piesek*” instead of “*pies*” [4/Ie]

“*miasteczko*” instead of “*mieszkanko*” [20/IIb]

Some words were converted into other words, characterized by similarity in meaning and/or form. Students also changed the grammatical form of a word (grammatical gender or number).

Category of errors related to replacement (letters, words) in the tested population, was the most comprehensive and most diverse category. Interpretation of those phenomena could be of multidirectional nature.

3) Omission (letters, words), e.g.:

– letter omission (one letter or more thereof):

“*ściać*” instead of “*ścigać*” [4/Ie]

“*Przyjele*” instead of “*Przyjaciele*” [15/Ie]

– words omission (one word or more thereof):

“*znalazła duży sera*” instead of “*znalazła duży kawał żółtego sera*” [3/IIb]

“*powpadali na siebie*” instead of “*Goniąc po wąskiej ścieżce, powpadali na siebie*” [17/Ie]

While rewriting texts, students neglected structurally smallest elements – letters as well as single words or whole word sequences.

4) Contaminations, e.g.:

“*fajne i smaczne mieszkaczone mieszkanko*” instead of “*fajne i smaczne mieszkanko*” [15/Id]

“*duży kawał dółtego sera*” instead of “*duży kawał żółtego sera*” [14/IIb]

In case of this category of errors an important factor is represented by context in which the wrong record occurs – the most likely mechanism of errors here is

contamination of the adjacent words in the text (see above: *mieszkaczne* = *miesz-kanko* + *smaczne*). What is important, under the influence of the adjacent words, replacement of letters in a word structure may occur (see above: *dóźego* = *duży* / word previously recorded correctly by the student/ + *zóltego*).

- 5) Mistakes with regard to words written as one word or two words, e.g.:
 "ścigo ci" instead of "ścigać" [14/Ic]
 "sera. Ico zrobiła?" instead of "sera. I co zrobiła?" [12/IIId]

Problem of writing words as one or two words mainly relates to the issue of recording words as one word, that in fact should be written separately. Only in one case there was a separation of the letters in a word (see above: "ścigo ci").

- 6) Hyphenation errors, e.g.:
 "Wygryzła w nim dziurę, a póż-
 źniej" instead of "Wygryzła w nim dziurę, a póź-
 niej" [7/Ic]
 "smaczne mieszkanko" instead of "smaczne mieszkanko" [18/2d]

Exceptions referred mainly to the wrong hyphenation. The study also reported cases of rewriting the letter during the hyphenation (see above: *póż-źniej*), adding the initial link in the following verse, that is second part of a transferred word, improperly located link.

- 7) Adding punctuation, e.g.:
 "Goniać po wąskiej ścieżce" instead of "Goniać po wąskiej ścieżce" [21/Ie]

Adding punctuation was a unit error – a full stop used by a student at the end of a line, in the middle of a sentence.

- 8) Omission of punctuation, e.g.:
 "franuś i jego pies latek lubili się ściać goniać po wąskiej ścieżce, powpadali na siebie ojej teraz chłopiec głaszczce psa a ten liże jego ręce." instead of "Franuś i jego pies Łatek lubili się ścigać. Goniać po wąskiej ścieżce, powpadali na siebie. Ojej! Teraz chłopiec głaszczce psa, ten liże jego ręce." [4/Ic]

This category of errors included all punctuation marks that can be found in the texts given to the students. Sometimes student made such an error once, occasionally, and sometimes notoriously (as in the example presented above).

- 9) Improper positioning of punctuation, e.g.:
 "powiedziła :., Będę teraz miała fajne i smaczne mieszkanko".
 instead of "powiedziła: „Będę teraz miała fajne i smaczne mieszkanko”. [17/IIId]

In this category there are cases when a punctuation mark begins a verse, it was too far away from the word in the verse or it was written too high or too low in relation to neighboring words.

1.2. Quantitative characteristic of errors

Quantitative characteristic of errors is presented in Table 3.

Table 3. Spelling errors – quantitative characteristic (frequency of error occurrence in the tested population of students)

CATEGORY	FREQUENCY OF ERROR OCCURRENCE IN THE STUDIED POPULATION (% OF STUDENTS)
Addition (letters, words)	8%
Replacement (letters, words)	85%
Omission (letters, words)	28%
Contaminations	3%
Mistakes with regard to words written as one word or two words	16%
Hyphenation errors	6%
Adding punctuation	1%
Omission of punctuation	44%
Improper positioning of punctuation	54%

Data presented in Table 3 clearly show that the main spelling problem was reflected in the form of replacement (primarily letters, less frequently words). Another error, in terms of frequency was omission (letters, words) – students mostly omitted words. It can be assumed that children have applied the second strategy of rewriting texts distinguished by E. Górniewicz (1998), (here: student, not being able to correctly memorize all the content of the text, ignore some of its elements, the use of this strategy resembles dictation and common errors can also be similar, E. Górniewicz recalls that issue in her work). 16% of respondents had difficulties with whether to write something as one word or two words. It should be noted that such an error was generally not a result of too small spacing between words. Only occasionally, it was associated with jamming the words in a verse (such cases should be considered as so called alleged spelling errors) Domagała, Mirecka 2010b, 2010/2011. Other categories of spelling errors were definitely less frequent, occurred only occasionally. While taking into account the correct

punctuation of texts, error most frequently made by children, was mainly related to the location of punctuation in the wrong place or omitting it in the text. Error of adding punctuation occurred individually.

2. THE RESULTS OF COMPARATIVE ANALYSIS WITH REFERENCE TO THE LEVEL OF EDUCATION

The results of comparative analysis in I and II grade students is presented in Tables 4 and 5.

Table 4. Spelling and punctuation errors in rewritten texts. Overall results for I and II grade students

CATEGORY	FREQUENCY OF ERROR OCCURRENCE IN I GRADE STUDENTS (% OF STUDENTS)	FREQUENCY OF ERROR OCCURRENCE IN II GRADE STUDENTS (% OF STUDENTS)
Correct texts in terms of spelling and punctuation	13%	21%
Correct texts in terms of spelling	17%	29%
Correct texts in terms of punctuation	36%	58%

Table 5. Quantitative characteristic of spelling and punctuation errors – data for I and II grade students

CATEGORY	GRADE I		GRADE II	
	Total number of errors	Frequency of error occurrence in the population (% of students)	Total number of errors	Frequency of error occurrence in the population (% of students)
Spelling and/or punctuation errors	376	87%	234	79%
Spelling errors	238	83%	155	71%
Punctuation errors	138	64%	79	42%

While analyzing the data presented in the table above, easy to notice is the increase of spelling and punctuation correctness among II grade students to I grade students. 21% of second grade students produced at least one correct work in terms of spelling and punctuation, and in the I grade it was only 13% of students. Moreover, a significant improvement is noted in terms of punctuation. More than

Table 6. Categories of errors – quantitative characteristic. The results of comparative analysis with reference to the level of education

CATEGORY	GRADE I		GRADE II	
	Total number of errors	Frequency of error occurrence in the population (% of students)	Total number of errors	Frequency of error occurrence in the population (% of students)
Addition (letters, words)	3	6%	5	10%
Replacement (letters, words)	194	92%	108	78%
Omission (letters, words)	29	30%	22	26%
Contaminations	2	4%	1	2%
Mistakes with regard to words written as one word or two words	8	16%	11	16%
Hyphenation errors	2	2%	8	10%
Adding punctuation	1	2%	0	0%
Omission of punctuation	98	64%	21	24%
Improper positioning of punctuation	39	52%	58	56%

half of the second grade students did not make any punctuation error, while the vast majority of I grade students experienced difficulties in this category.

Considering the results obtained in terms of quality, it is clear that at both levels of education (both first and second grade students) the main spelling problem refers to replacement (letters, words), omission (letters, words) and whether to write something as one word or two, however, generally the frequency of making these errors was higher in the case of first grade students (except for errors in writing something as one word or two). Almost in every specified category of errors I grade students would demonstrate more difficulties compared to their older colleagues. However, it must be noted that in case of addition (letters, words), writing as one word or two and hyphenation, second grade students made more errors. As a result, the problem of spelling errors is more varied among second grade students than first grade students, where the leading error is replacement (letter, words).

Analyzing the results characterizing quantitatively punctuation errors, the discrepancy between education levels can be noted. The main problem in I grade is omission of punctuation, whereas in II grade most common error is improper positioning of punctuation. Nevertheless, punctuation is far more difficult for first grade students, they made almost twice more errors than second grade students.

To sum up, with an increase in the level of education, an increase in accuracy of the work in both, punctuation and spelling, is visible.

3. THE RESULTS OF COMPARATIVE ANALYSIS IN RESPECT TO THE GENDER OF THE RESPONDENTS

The results of comparative analysis for girls and boys population are presented in Tables 7–9.

Table 7. The occurrence of spelling and punctuation errors in rewritten texts. Overall results for girls and boys population

CATEGORY	FREQUENCY OF ERROR OCCURRENCE IN GIRLS (% OF STUDENTS)	FREQUENCY OF ERROR OCCURRENCE IN BOYS (% OF STUDENTS)
Correct texts in terms of spelling and punctuation	22%	12%
Correct texts in terms of spelling	30%	16%
Correct texts in terms of punctuation	49%	45%

Table 8. Quantitative characteristic of spelling and punctuation errors – data for girls and boys population

CATEGORY	GIRLS		BOYS	
	Total number of errors	Frequency of error occurrence in the population (% of students)	Total number of errors	Frequency of error occurrence in the population (% of students)
Spelling and/or punctuation errors	255	78%	355	88%
Spelling errors	154	70%	239	84%
Punctuation errors	101	51%	116	55%

Summary of the results presented in the tables shows the scale of the spelling problems in a form of comparison of boys and girls. 12% of boys produced at least one correct text in terms of spelling and punctuation, in case of girls it was 22%. Twice as many girls in relation to boys did not make any spelling or punctuation error during both trials. Error level evens (there is only a slight majority of girls) in terms of correct punctuation.

In terms of total number of errors, again boys surpass girls. For both, boys and girls, the main problem was connected with replacement (letters, words). Percentage frequency rate of such errors is similar for both sexes, however, taking into account the overall number of such errors, it is significantly higher for boys.

Table 9. Categories of errors – quantitative characteristic. The results of comparative analysis with reference to the gender

CATEGORY	GRADE I		GRADE II	
	Total number of errors	Frequency of error occurrence in the population (% of students)	Total number of errors	Frequency of error occurrence in the population (% of students)
Addition (letters, words)	3	6%	5	10%
Replacement (letters, words)	121	84%	183	86%
Omission (letters, words)	21	18%	30	38%
Contaminations	1	2%	2	4%
Mistakes with regard to words written as one word or two words	4	8%	15	24%
Hyphenation errors	4	4%	4	16%
Adding punctuation	1	2%	0	0%
Omission of punctuation	48	40%	71	24%
Improper positioning of punctuation	52	64%	45	44%

Additionally, spelling errors are more varied (due to the existence of other types of error) in case of boys, for girls with the exception of replacement (letters, words) and omission, other types of error appeared occasionally (less than 10% of girls).

Punctuation problem deserves a special attention. Although more girls omitted punctuation, the overall number of these errors was significantly higher in materials provided by boys. Also, despite the fact that most of the girls had difficulties with the correct position of punctuation, girls made a little more errors than boys.

To sum up, after data analysis, it can be said that, firstly boys have more spelling problems than girls and in case of boys this problem is more varied – it includes a greater degree of all listed types of spelling errors. Secondly, despite the fact that more girls had problems with punctuation, the overall number of punctuation errors was made by boys.

CONCLUSIONS

For children starting school and beginning learning their mother tongue, spelling is a major difficulty. Generally, difficulties in this area are associated with the occurrence of so-called common spelling errors (regarding the scope of

the use of the following letters: *u/ó, ź/rz or h/ch*, therefore they correspond to the same phone and their use in writing is conditional upon number of principles, that are not easy for students to learn). Conducted research shows how widely spelling and punctuation should be seen (in accordance with procedures described in logopaedics standards – Domagała, Mirecka 2015), because the problem of spelling and punctuation cannot only be focused around the difficulties classified as common errors. In research material those errors accounted only for a small percentage of all recorded errors. Conducted research also shows the importance of the punctuation problem at the early stages of school education.

The results illustrate the severity of spelling and punctuation difficulties in terms of first grade and second grade students as well as the comparison of boys and girls. The conducted analysis states that the problem of correct spelling and punctuation in the first grade is much more pronounced than in the second grade students. Moreover, the escalation of errors (mostly punctuation errors) is observed in rewritten texts without screen ruling (the type of sheet of paper, with or without screen ruling, in some cases might have been significant). It must be emphasized that errors that occur during the rewriting may be conditioned, in case of some students, by reading difficulties (just like during lesson, e.g. rewriting from the board).

Although, sometimes the number of girls and boys making the same error was comparable, it was in the work of boys that errors occurred more frequently. While working on the analysis of students' work, on several occasions I have encountered problems with error interpretation, it was due to the coexistence of graphomotor difficulties, hence – while conducting the assessment of students' work it is reasonable to pay special attention to the so-called alleged errors. In many cases difficulties in terms of spelling coexist with graphomotor disorders (and they can have common ground – Domagała, Mirecka 2010/2011) – this issue requires further detailed studies, which will take into account the results of the research and previous graphomotor studies in the studied group of children.

BIBLIOGRAPHY

- Bogdanowicz M., 1989, *Trudności w pisaniu u dzieci*, Gdańsk.
- Bogdanowicz M., 1999, *Specyficzne trudności w czytaniu i pisaniu*, [in:] T. Gałkowski, G. Jastrzębowska (eds.), *Logopedia. Pytania i odpowiedzi*, Opole, pp. 815–859.
- Bogdanowicz M., 2002, *Ryzyko dysleksji. Problem i diagnozowanie*, Gdańsk.
- Bogdanowicz M., 2011, *Ryzyko dysleksji, dysortografii i dysgrafii*, Gdańsk.
- Bogdanowicz M., 2012, *Dzieci ze specyficznymi problemami w uczeniu się w reformującej się szkole*, [in:] I. Pietras (ed.), *Trudności w czytaniu i pisaniu – rozważania teoretyczne i praktyczne*, Warszawa, pp. 42–70.

- Domagała A., Mirecka U., 2012a, *Analiza wytworów czynności grafomotorycznych dzieci w wieku 7–13 lat*, [in:] S. Milewski, K. Kaczorowska-Bray (eds.), *Logopedia. Wybrane aspekty historii, teorii i praktyki*, Gdańsk, pp. 337–345.
- Domagała A., Mirecka U., 2010/2011, *Diagnozowanie dysortografii u osób z zaburzeniami w sferze grafomotoryki*, "Logopedia", vol. 39/40, pp. 219–228.
- Domagała A., Mirecka U., 2010a, *Grafomotoryka a kształtowanie się sprawności ortograficznych. Problemy w edukacji szkolnej*, "Annales UMCS sectio FF Philologiae", XXVIII, 1, pp. 99–111.
- Domagała A., Mirecka U., 2010b, *Grafomotoryka u dzieci w wieku 7–13 lat*, Wydawnictwo UMCS (wyd. II, poszerzone – Lublin 2015), Lublin.
- Domagała A., Mirecka U., 2009, *Grafomotoryka w diagnozie logopedycznej*, "Logopedia", vol. 38, pp. 215–227.
- Domagała A., Mirecka U., 2015, *Postępowanie logopedyczne w przypadku dysleksji rozwojowej*. [in:] S. Grabias, T. Woźniak, J. Panasiuk (eds.), *Logopedia. Postępowanie logopedyczne. Standardy*, Wydawnictwo UMCS, Lublin, pp. 439–460.
- Domagała A., Mirecka U., 2008, *Standardy postępowania logopedycznego w przypadku dysleksji rozwojowej (Specyficznych trudności w czytaniu i pisaniu u dzieci)*, "Logopedia", vol. 37, pp. 116–125.
- Domagała A., Mirecka U., 2012b, *Trudności grafomotoryczne. Typologia zjawisk*, [in:] S. Grabias, M. Kurkowski (eds.), *Logopedia. Teoria zaburzeń mowy*, Lublin, pp. 195–209.
- Górniewicz E., 1998, *Pedagogiczna diagnoza specyficznych trudności w czytaniu i pisaniu*, Toruń.
- Kaczmarek L., 1977, *Nasze dziecko uczy się mowy*, Lublin.
- Makarewicz R., 2007, *Problemy ukształtowania tekstu w pracach pisemnych uczniów dyslektycznych*, [in:] M. Kostka-Szymańska, G. Krasowicz-Kupis (eds.), *Dysleksja. Problem znany czy nieznan?*, Lublin, pp. 109–125.
- Markowski A., 2005, *Kultura języka polskiego. Teoria. Zagadnienia leksykalne*, Warszawa.
- Pietras, I., 2007, *O klasyfikacji błędów w dysortografii*, [in:] M. Kostka-Szymańska, G. Krasowicz-Kupis (eds.), *Dysleksja. problem znany czy nieznan?*, Lublin, pp. 81–92.
- Pietras I. 2008, *Dysortografia – uwarunkowania psychologiczne*, Gdańsk.
- Polański E., 1996, *Nowy słownik ortograficzny PWN z zasadami pisowni i interpunkcji*, Warszawa.

INTERNET SOURCES

- Podracki J., Klasyfikacja błędów interpunkcyjnych, http://www.rjp.pan.pl/index.php?option=com_content&view=article&id=1100:klasyfikacja-bdow-interpunkcyjnych&catid=54:zespo-dydaktyczny&Itemid=66, accessed: 19.06.2016.
- Rada Języka Polskiego, Ustalenia dotyczące błędów ortograficznych, http://www.rjp.pan.pl/index.php?option=com_content&view=article&id=1101:ustalenia-dotyczce-bdow-ortograficznych&catid=54:zespo-dydaktyczny&Itemid=66, accessed: 19.06.2016.