

# FORMS OF THE DIFFERENTIATION OF WORK WITH TEXTS IN PRIMARY SCHOOLS

**Larysa Shevchuk**

Institute of Pedagogy of the National Academy of Educational Sciences of Ukraine, Ukraine

**Abstract.** *This article justifies the importance and relevance of the use of differentiated work with texts starting with primary school. Results of the analysis of scientific and methodological literature, modern teaching practice on the reflection of the issue of using various forms and kinds of differentiation are described. It is underlined that differentiation of learning is based on discovering and reckoning with the individual characteristics of students and their differences. Individualization of teaching is interpreted as the highest stage of differentiation. Described ways and kinds of differentiation are the most adequate for the effective differentiated work with texts. Such criteria as the level of a student's autonomy in completing tasks and the complexity of an educational work are at the heart of this classification. Varying levels of autonomy in educational work are ensured by joint completion of tasks, independent work, playing the role of a consultant. The difficulty of tasks is provided by various ways of formulating tasks and the variation in their content. One more regulator of the tasks' difficulty is the volume and the level of difficulty of texts. As a result of effectiveness checks of the use of aforementioned forms and ways of differentiation of primary school students with educational texts significant positive effect was found.*

**Keywords:** *differentiation of students' learning; forms of learning differentiation; differentiated work with texts; tasks of different levels; teaching primary school students; ways of application of differentiated learning; works with texts.*

## Introduction

An orientation towards creating optimal conditions for the development of an active, mobile, creative personality capable of searching and processing necessary text information and creating their own texts is of utmost importance for contemporary education. Development of such a personality should begin in primary school. We believe that it is possible to achieve best results using text differentiation in the students' learning process. For students it is advisable to use differentiated learning starting with primary school to take into account the specifics of perception and processing of educational texts, since differentiated learning is the method which is characterized by the creation of such unique

opportunities as taking into consideration individual characteristics of every child and teaching groups at the same time, which allows to save the educational time. However, differentiation of learning can be based on using different educational materials, requiring different levels of support, etc. This makes it expedient to consider the types of primary school students' differentiated work with texts in detail.

The aim of this article is to consider the forms and ways of text differentiation work in primary schools.

To achieve this aim it is necessary to outline the following tasks: consideration of theoretical principles, elucidation of the analysis results of teachers' and students' responses to questionnaires and interviews, description of the author's own developments concerning the main topic of the article.

In conducting this research such methods as analysis of the reference, scientific, methodological literature and comparison of found thoughts, statements, classifications; analysis of educational programs and textbooks, practice of applying the differentiation approach to the work with texts in primary school; pedagogical experiment (ascertaining and formative stages); observation; questionnaires and interviews of teachers; analysis of spoken answers and written works of students were used.

### **Literature review**

For the optimal consideration of the kinds of differentiation of work with texts for the primary schools' students it is first advisable to consider the term "learning differentiation".

In reference textbooks V. Iaremenko (Yaremenko & Slipushko, 1998), M. Kolomiets and L. Moldova (Kolomiets & Moldova, 1998), V. Busel (2003) provide the following definitions for the term "differentiation" ("to differentiate", "differentiated"): Separation, separation into heterogeneous (uneven) elements, different parts, forms, functions, etc.

Modern scientists and methodologists interpret this in different ways, particularly as a:

- process of education (Dychkivska, 2004; Vaskivska, 2018; Zhovtan, 2001);
- form of organization of students' learning activities (Sikorskyi, 1998).

H. Vaskivska (2018) outlines the term "learning differentiation" as a learning process which is characterised by work of student groups different in form and approach; P. Sikorskyi (1998) – as a form of class organization with groups of

students composed on the basis of individual characteristics of children according to different plans and programs.

We consider the above mentioned necessary to take into consideration during the lesson. At the same time it is important to take into account the research results on forms and ways of differentiating the students' learning. Forms and ways of differentiation were described by M. Bönsch (2014), R. de Groot (1994), H. Vaskivska (2018), V. Kyzenko et al. (Kyzenko, Vaskivska, Korsakova, Lypova, Trubacheva, Baranovska, Bondar, & Osadchuk, 2012), O. Savchenko (2012), A. Tereshchuk (2015).

R. de Groot (1994) writes about the following levels of learning differentiation:

- macro level - creation of different schools;
- meso level - creation of different classes, groups;
- micro level - application of differentiation in teaching the students.

Differentiation on the level of education system or school is called external, and on the level of class or group – internal.

They wrote about the external and internal differentiation of education R. de Groot (1994), H.-U. Grunder (2009), W. Klafki & H. Stöcker (1976), F. Kuhne (2013), Yu. Oleksin (2013), V. Kyzenko (Kyzenko et al., 2012), A. Tereshchuk (2015), A. Wegner (2018).

V. Kyzenko et al. (Kyzenko et al., 2012; Kyzenko, 2018) and H. Vaskivska (2012) consider the internal differentiation a form of level differentiation, with a proper application of which the students can absorb the learning materials on different levels.

M. Bönsch (2014), T. Deinichenko (2006), F. Hofmann & H.-P. Gottein (2011), O. Kuzmina (2001), B. Wisher (2008) write about working in groups, using materials and tasks of different complexity, requiring different amounts of time.

Review of scientific research regarding the application of learning differentiation in primary schools can be found in the book by S. Grzegorzewska (2009), who believes learning differentiation to be “a way to organize work in class the use of which foresees students' engagement in the completion of tasks which are interesting and valuable from their point of view”.

O. Savchenko (2012) described the application of the external learning differentiation in primary schools as the change of organizational type, classes' or groups' status, duration of studying. The implementation of the internal learning differentiation is realized through appropriate content and methods. Besides, the scientist counted the following ways of application for the differentiation depending on its forms:

- 1) external differentiation – creation of special classes, groups; learning process organized in line with the special educational programs;
- 2) internal differentiation – differentiated group work; taking into consideration the individual characteristics of schoolchildren; dosed teacher's help; different task quantities or a variety of tasks available for choosing.

Curricula (approved by the Ministry of Education and Science of Ukraine) lack the description of differentiated work with educational texts, and the same situation with the lack of relevant tasks can be observed in current textbooks.

Basic curriculum of primary education for classes (groups) with Ukrainian as the language of teaching, which can be found in the State Standard of Primary Education (Kabinet Ministriv Ukraini, 2018), contains the information on the invariant and variable components. Differentiation of primary school students' work with educational texts is used during the classes mean for studying such educational fields as language and literature (Ukrainian language and literature, foreign languages and literature) mathematics, natural sciences, social sphere and healthcare, civil and historical fields, technological, informational spheres, arts, (invariant component). At the same time, the differentiation of work with educational texts is realized during the classes on selective courses, individual consultations, during extracurricular activities.

Examples of tasks for differentiated work with texts of primary school students can be found in S. Lohachevska's textbook "Differentiation in an ordinary class" (Lohachevska 1998).

With that, scientific and methodological literature lacks a description of forms and ways of differentiation of work of primary school students with educational texts.

## **Methodology**

During this study, an online survey of primary school teachers was conducted. Thus, 139 primary teachers from from different regions of Ukraine were interviewed (Kyiv, Dnieper, Sumy, Chernyhiv and Cherkasy regions and the city of Kyiv) took part in the survey. The purpose of the survey is to find out how often teachers use differentiation of work with texts in primary school, what forms and types of differentiation they prefer, what factors (in their opinion) affect the effectiveness of differentiated work of the primary school students with the texts.

So, it was found out how often the teachers use differentiation of primary school students' work with the educational texts. To the question "How often do you use the differentiation of primary school students' work with texts?" primary

school teachers responded as follows: 52% – sometimes, 43% – most of the time, the rest – each lesson.

However, we have to admit to the fact that during the observation (if the teachers were not informed about the aim of the research, which is to find out the frequency of differentiated work with texts) it was found that the majority of teachers only used the differentiation occasionally. The observation was carried out selectively: 16 lessons conducted by different primary school teachers (one teacher – one lesson).

The questionnaires for primary school teachers included questions about the forms and types of learning differentiation they prefer. The responses about the preferable form and kind of differentiation were the following:

- 1) individual work with tasks of different levels (36% of respondents);
  - 2) organizing students into groups by their academic achievements and successful completion of tasks of different levels (31% of teachers);
  - 3) organizing students with different levels of academic achievements into groups, completion of tasks of the same level (22% of respondents);
  - 4) different paces of studying (9% of teachers).
- 2% of respondents had other convictions.

It was also found out which factors (in the opinion of primary school teachers) affect the effectiveness of differentiated work of primary school pupils with the texts. Among the factors that influence the differentiation of the primary school students' work with texts, teachers named:

- level of students' learning progress;
- specifics of the material and technical base;
- children's outlook and vocabulary, their individual qualities, inclinations, interests, abilities, desire to learn;
- students' reading competence level and skills necessary to work with the texts;
- specificity and volume of the texts.

The results of the survey were taken into account during the development of experimental materials. In the context of the study of the application of various forms of education differentiation was carried out as part of an elective course for working of primary school students with texts "Read. Understand. Create". To conduct the research, the author's educational program "Read. Understand. Create" (Shevchuk, 2019), according to which the corresponding elective course was implemented in the Ukrainian schools for students of grades 2-4 (1-2).

In general, 6896 students took part in the experiment. Due to such a large number of participants (who showed interest and desire to work with the texts using the guides developed by the author of the article for the implementation of the

course “Read. Understand. Create” and the provided recommendations), difficulties arose with tracking the course of the experiment and the results. The war also had a negative impact (damage to school premises, relocation within Ukraine and departure of students and teachers abroad, etc.).

The application of differentiation according to the forms of students’ educational activity involved the following organization of learning process in a classroom:

- simultaneous use or alternation of individual and collective work;
- individual and group (pair) students’ work;
- independent work of students and semi-independent work (help was provided by another student).

In accordance with the above, preference was given to different ways of organizing differentiated work of the primary school students with the texts:

- students worked individually (each of them performed a task independently);
- one or more students worked individually, and the rest of the students worked in pairs or groups;
- one or more students worked individually, some students worked in groups, one or more students worked under a guidance of a teacher;
- part of a class worked with a text in pairs or groups, the rest of the students - under a guidance of a teacher.

Differentiation according to the pace of educational activities was also used, when each student had the opportunity to complete the tasks at his own pace and work on different texts. For this, the experimental materials were developed, which were printed on a printer, and later 14 manuals (2 manuals for the 1st grade, 4 manuals each for the 2nd, 3rd, and 4th grades). The students mostly worked individually, and at the same pace of learning (when the students were working on the same text), they had the opportunity to join pairs or groups for teamwork (such grouping of the students into a homogeneous group usually referred to the students with average or above average learning progress). With such organization of work, a teacher had the opportunity to work with one or more students with low learning progress. It also proved to be appropriate to involve students with a low level of learning progress in individual or group work under an indirect guidance of a teacher who observed the students’ work and provided assistance when necessary.

The grouping of the students into pairs and groups was mainly carried out by a teacher, taking into account their individual characteristics, the level of development of skills in working with texts, the level of difficulty of tasks, etc. Periodically, the students joined for cooperation at their own will. Taking into account the age of the students, in order to ensure effective work with the text,

priority was given to working in pairs, at the same time, and group work of the students was periodically used. In heterogeneous or homogeneous pairs, the roles performed by the students were different (teacher, consultant, co-performers, etc.). Depending on the cooperation model, different role-playing games were used. In practice, it looked like this:

- “Teacher – student” (one of the students played the role of a teacher);
- “Performer – observer” (a student with a higher level of learning progress observed another student and provided assistance if necessary);
- “Partners” (the students performed tasks together);
- “Money box” (each of the students performed a task independently, after which the results were checked).

Thus, work with the texts was carried out through the organization of students’ systematic individual work, periodic work in pairs and groups, fragmented frontal work of the students. The transition from frontal to individual work under a supervision of a teacher happened gradually. The joint activity of the students on the texts (together with another student or a teacher) was an important stage.

To increase the amount of independent work of the students, the following algorithm was used:

- 1) a student performed a task with the assistance of a teacher or another student;
- 2) a student performed a task independently (without any help or advice);
- 3) a student acted as a consultant or teacher.

Thus, there was a gradual decrease of assistance, and later it was not there at all. The above stages concerned students with a low level of learning progress, for students with an average level of learning progress, the first stage was used only if necessary, and students with a high level of learning progress immediately worked independently and, if possible, provided assistance to other students.

Differentiation by the level of difficulty of the tasks was also used. In particular, the following difficulty levels of tasks for elementary school students’ work with texts were determined and proposed:

first level

- a) finding sentences, words, etc. in the text;
- b) a choice of answers (from those offered) to questions based on the content of a text;
- c) finding answers to proposed questions in a text, formulating answers to questions;

second level

- a) reconstruction of a text with omissions;

- b) reconstruction of a deformed text;
- c) comparison of two texts;

third level

- a) construction of a text from the proposed elements;
- b) supplementing a text and other creative tasks;
- c) writing students' own texts.

The difficulty of a task was also adjusted with the help of additional materials: detailed instructions, an example of a completed task or a reference.

Another factor regulating the difficulty of a task was a text, its volume and difficulty for perception. For example, one of the simplest types of work for elementary school students is to work with a text of a fairy tale or story, and one of the more difficult types is to work with a text of a scientific article.

### **Research results**

As a result of the observation and analysis of students' works it was found that the use of the above mentioned forms and ways of differentiation of students' work with educational texts leads to the following ponderable positive results:

- 1) reading techniques indicators' growth, improvement of the indicators of the depth and completeness of understanding, memorization of the texts read by students;
- 2) improvement of interpersonal relationships, improvement of teamwork skills.

In particular, the following indicators of the reading technique have been noticed to improve:

- way of reading (going from letter-by-letter to syllabic reading, reading whole words and groups of words in the 1st grade, transitioning from reading aloud to silent reading in the 1st and the 2nd grades).
- reading speed;
- quantity of mistakes;
- expressiveness of reading.

For a high level, the following reading aloud speed indicators at the end of the school year were indicative: 1st grade – 35 words per minute, 2nd grade – 50-60 words, 3rd grade – 75-80 words, 4th grade – 90-95 words; for reading silently: 3rd grade – from 90 words, 4th grade – from 110 words. The temperament of the students was also taken into account.

In comparison with the indicators found in control classes the indicators of reading technique in experimental classes were the following (table 1).

**Table 1 The indicators of reading technique (the 2th grade students) (made by author)**

Levels → Classes ↓	Beginner's level	Medium level	Sufficient level	High level
Experimental classes	4%	14%	39%	43%
Control classes	6%	39%	36%	19%

Positive changes could also be observed in the indicators of text understanding. The found results differed from the control classes in the following way the 4th grade students (table 2).

**Table 2 The indicators of text understanding (the 4th grade students) (made by author)**

Task → Levels (experimental classes) ↓	Work on tests based on the content of various texts	Phrasing answers to questions that reflect the main idea of the text	Restoring the right sequence of plan items	Expressing opinions about the read material	Finding the differences and similarities in texts
High level	+23%	+17%	+12%	+28%	+11%
Sufficient level	+29%	+19%	+21%	+26%	+26%
Medium level	-16%	-8%	-7%	-12%	-8%

It was also found that interpersonal relations between the students improved (due to the use of the sociometric method, an increase in the number of choices, a decrease in the number of students who are ignored). As a result of the online survey of the primary school teachers, it was also found that the skills of teamwork have improved: planning tasks, distributing assignments, making joint decisions, providing assistance, etc.

### **Conclusions**

The results of the conducted study prove that the appropriate criteria for distinguishing the forms and types of differentiation of elementary school students' work with educational texts are the level of independence in educational activities and the pace, complexity of educational tasks. Application of the described forms of differentiation in the educational process is accompanied by the following:

- implementation of individual educational activities in the conditions of students' individual, groups (pairs) or frontal work; collective activity – in the conditions of group or frontal work;
- creating conditions to ensure students' work with texts at their own pace;
- providing participants of the educational process with educational tasks of different levels.

The age and individual characteristics of each student and the specifics of the text affect a teacher's choice. At the same time, for the optimal application in primary school practice of various forms and types of differentiation of education, it is advisable to reduce the number of students in classes, improve the provision of schools, and familiarize teachers with the relevant methodical manuals.

## References

- Bönsch, M. (2014). Heterogenität und Differenzierung. Gemeinsames und differenziertes Lernen in heterogenen Lerngruppen. *Grundlagen der Schulpädagogik, Band 67*. Baltmannsweiler: Schneider Hohengehren.
- Busel, V. (2003). *Velykyi tlumachnyi slovnyk ukrainskoi movy*. Irpin: Perun.
- de Groot, R. (1994). Differentsiatsiya v obuchenii. *Direktor shkolyi, 5*. Retrieved from: [http://ecsocman.hse.ru/data/376/913/1231/Differentsiatsiya\\_v\\_obrazovanii\\_x28De\\_Groot\\_R.x29.rtf](http://ecsocman.hse.ru/data/376/913/1231/Differentsiatsiya_v_obrazovanii_x28De_Groot_R.x29.rtf)
- Deinichenko, T. (2006). *Dyferentsiatsiia navchannia v protsesi hrupovoi formy yoho orhanizatsii (na prykladi predmetiv pryrodnycho-matematychnoho tsykladu)* (avtoref. dys. ... kand. ped. nauk). Kharkivskiy natsionalnyi pedahohichnyi un-t im. H. S. Skovorody. Kharkiv, Ukraina.
- Kabinet Ministriv Ukraini. (2018). Derzhavnyi standart pochatkovoi osvity. Retrieved from: <http://nus.org.ua/news/uryad-opublikuvav-novyj-derzhstandart-pochatkovoyi-osvity-dokument/>
- Dychkivska, I. (2004). *Innovatsiini tekhnolohii navchannia: navch. posib*. Kyiv: Akademvydav.
- Grzegorzewska, S. (2009). *Różnicowanie kształcenia w klasach początkowych*. Kraków: Impuls.
- Grunder, H. U. (2009) *Dynamiken von Integration und Ausschluss in der Schweiz*. Zürich: Seismo.
- Hofmann, F., & Gottein, H.-P. (2011). Zusammenhänge zwischen Persönlichkeitsmerkmalen und der Bereitschaft zur Individualisierung im Unterricht. *Zeitschrift für Bildungsforschung, 1*(1), 55-67.
- Yaremenko, V., & Slipushko, O. (1998). *Novyi tlumachnyi slovnyk ukrainskoi movy u chotyrokhtomakh / uporiad*. T. 4. Kyiv: Akonit.
- Klafki, W., & Stöcker H. Innere Differenzierung des Unterrichts. *Zeitschrift für Pädagogik, 22*(4), 497-523.
- Kolomiiets, M., & Moldova, L. (1998). *Slovnyk inshomovnykh sliv*. Kyiv: Osvita.
- Kuhne, F. (2013) *Differenzierung und Individualisierung im Fremdsprachenunterricht. Optimierung einer Lehrbucheinheit aus Puente 1*. Retrieved from: <https://www.grin.com/document/267817>

- Kyzenko, V., Vaskivska, H., Korsakova, O., Lypova, L., Trubacheva, S., Baranovska, O., Bondar, S., & Osadchuk, R. (2012). *Dydaktychni zasady dyferentsiatsii navchannia v osnovnii shkoli: monohrafiia*. Kyiv: Pedahohichna dumka.
- Kuzmina, O. V. (2001). *Dyferentsiiovane navchannia v umovakh hrupovoi formy navchalnoi diialnosti uchniv pochatkovoii shkoly* (avtoref dys. ... kand. ped. nauk). Slovianskyi derzh. pedahohichnyi in-t. Sloviansk, Ukraina.
- Lohachevska, S. (1998). *Dyferentsiatsiia u zvychainomu klasi*. Kyiv: Zapovit.
- Oleksin, Yu. (2013). Suchasni naukovy pidkhody do vyznachennia sutnosti dyferentsiatsii navchannia shkoliariv. *Psykhologo-pedahohichni problemy silskoi shkoly*, 46, 130-138.
- Savchenko, O. (2012) *Dydaktyka pochatkovoii osvity*. Kyiv: Hramota.
- Sikorskyi, P. (1998). *Teoretyko-metodolohichni osnovy dyferentsiiovanoho navchannia*. Lviv: Kameniar.
- Shevchuk, L. (2019). *Chytaemo. Rozumiemo. Tvorymo: navchalna prohrama kursu za vyborom. 2-4 (1-4 klasy)*. Retrieved from: <https://undip.org.ua/library/chytaemo-rozumiemo-tvorymo-2-4-klasy-1-4-klasy-navchalna-prohrama/>
- Tereshchuk, A. (2015). Sutnist ta osnovni zavdannia profilnoho navchannia u konteksti modernizatsii ukrainskoi osvity. *Naukovyi visnyk Kremenetskoii oblasnoi humanitarno-pedahohichnoi akademii im. Tarasa Shevchenka. Serii: Pedahohika*, 5, 116-122.
- Vaskivska, H. (2018). Geneza dyferentsiiovanoho navchannia: dydaktychnyi aspekt. *Dyferentsiatsiia u shkilnii osviti: istorychnyi dosvid i suchasni tekhnolohii: zbirnyk materialiv Vseukrainskoi naukovo-praktychnoi konferentsii, 16 travnia 2018 roku, m. Kyiv*. Kyiv: Instytut pedahohiky, 16–20.
- Wegner, A. (2018). *Individualisierung und Differenzierung im Unterricht. Welche Meinungen, Haltungen und subjektiven Wahrnehmungen vertreten Deutschlehrkräfte zur Umsetzung der individuellen Förderung besonders im Bereich Schreiben?* Retrieved from: <https://www.grin.com/document/461774>
- Zhovtan, L. (2001). *Dyferentsiatsiia navchannia uchniv 7-11 klasiv u protsesi pohlyblyenoho vyvchennia predmetiv pryrodnycho-matematychnoho tsykladu* (avtoref. dys. ... kand. ped. nauk). Kharkiv, Ukraina.