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**TÍTULO:** Apoyo didáctico para la formación de habilidades de autocontrol en libros de texto extranjeros: enfoques alternativos.

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RESUMEN: El documento estudia enfoques didácticos para crear unidades de autoevaluación en los libros de texto. Los autores definen enfoques de los libros de texto publicados en Kirguistán, Kazajstán, Rusia, los Países Bajos, Alemania, Francia y Grecia en alfabetos cirílico, latino y griego para la organización del autocontrol basado en el contenido y la estructura. El análisis de contenido ayudó a los autores a identificar los cinco grupos de selección múltiple o única de objetos y cosas, tareas y ejercicios, reproducción de letras previamente estudiadas, secuenciación, correlación y diseño. El documento muestra las similitudes y diferencias en la implementación de la formación de habilidades de autocontrol en varias ediciones de libros de texto.

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PALABRAS CLAVES: Didáctica, autocontrol, libro de texto, prueba, ilustración, logro educativo.

TITLE: Didactic support for the formation of self-control skills in foreign textbooks: alternative

approaches.

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**ABSTRACT:** The paper studies didactic approaches used to create self-test units in textbooks. The

system of self-control skills formation is considered on the example of textbooks on reading. The

authors define the approaches of textbooks published in Kyrgyzstan, Kazakhstan, Russia, the

Netherlands, Germany, France and Greece in Cyrillic, Latin and Greek alphabets to the organization

of self-control based on the content and structure. The content analysis helped the authors in

identifying the five groups of multiple or single selection of objects and things tasks and exercises,

reproduction of previously studied letters, sequencing, correlation, and design. The paper shows the

similarities and differences in the implementation of self-control skills formation in various editions

of textbooks.

**KEY WORDS:** Didactics, self-control, textbook, test, illustration, educational achievement.

### INTRODUCTION.

Typical of the modern approach to the training organization is the increasing attention of theorists to the problems of activating the cognitive activity and support the desire for self-testing of knowledge and control of personal educational achievements.

The introduced and widely used term "self-regulated learning" fixes the desire for independence in the choice of educational strategies and tactics of their implementation. It also fixes the mastering of the strategic actions including planning, design, monitoring the success of achieving the goals, as well as an adequate assessment of the degree of personal progress compared with other participants of the learning process. The problems of self-regulated education are the object of study of humanities. In Psychology, the researchers associate the desire for self-efficacy with the positive experience of learning in school, obtained by performing special didactic exercises aimed at self-control, which is reflected in the works of Pintrich Dale Schunk, Judith L. Meece, Paul R. (2014) [1], Zimmerman, B. J. (1990) [2], Boekaerts, M., Corno, L. (2005) [3]. The current research process considers the problems of measuring the efficiency of self-regulated learning (Butler, D. L. & Winne, P. H., 1995 [4], Winne, P. H. & Perry, N. E., 2000 [5]), developing theoretical models of self-regulated learning (Panadero, E., 2017 [6]), establishing the extent and limits of theoretical models applicability to educational practice (Paris, Scott G. & Paris, Alison H., 2001 [7]).

The practice uses the strategies such as peer learning (mutual learning), project-based learning, and open tasks to develop the skills that students of all typological groups need. Self-regulated learning, which implies active interaction with other participants of the educational process, and the use of a variety of sources and means, allows organizing personal cognitive activity without radically breaking the existing approaches and learning patterns. Students solve new problems within the existing patterns, and if this pattern is not suitable, they feel free to develop their own position.

Despite the different theoretical and substantive positions of the different scholarly traditions, they have common recognition of the need to master the elements of self-regulated education in primary school. It is in primary school that lays the foundations of cognitive actions related to the development of thinking and memory controlled by the schoolchildren themselves.

The studies by Lee Towler and Patricia Broadfoot [8] show that primary school students are capable of implementing strategies for self-regulating learning in line with their achievement age. However, they need a system of pedagogical influence, which is aimed at developing motivation for self-control and self-assessment of the results of educational activities. The researchers proved that the primary school student can make reasoned judgments regarding the content of the training program as a whole, as well as the assessment that they receive from the teacher for the task assignment.

The self-control ability should be developed through the formation of self-assessment skills, including a special training material, which is a sample of properly completed tasks and allows the students to independently check their own task or, if necessary, to see the possible solution. The fact that pattern matching aids mastering the skills of self-regulated learning in young children, is justified by the works by Karabourniotis D., Evaggelinou C., Tzetzis G., and Kourtessis T. [9], Allan Darcey M., Allan Nicholas P., and Lerner Matthew D. [10].

The teacher, who is interested in stimulating the actions, included in the learning activity in every way, plays a great role in this process. In addition, the teacher implements the educational programs of elementary schools, in which special attention is drawn to teaching reading as an academic subject, developing a shared cognitive activities, operations, and methods of logical thinking. analysis, synthesis, comparison, summing up in a concept, drawing out the consequences, methods of proof, classification, etc. The traditional approach implies that the teacher controls the learning process step by step and assesses academic achievements. This allows the teacher to judge both the level of acquisition of learning material, and the features of the formation of common methods of thinking.

The work on the development of logical thinking is not always systematic in each individual student. This leads to the fact that students do not acquire the basic methods of thinking even in high school, which complicates, and sometimes makes it impossible to complete the acquisition of learning material. The theorists agree that different textbooks reflect the state of didactic thought of a certain period [11, 12, 13]. Their contents form the attitude to the world sometimes through unique didactic solutions and live memorable recognizable illustrations [14, 15, 16]. However, in any approach to forming the content of the textbook, the knowledge would be deeply ingrained if due attention is paid to the formation of the full range of learning activities. At the same time, the most benevolent control coming from teacher is insufficient. The students should themselves be included in the activities of self-control over their academic achievements. The form of introducing the self-test unit to the structure of the textbook is fully aware of this trend and implements it in practice.

The problem of the study is to find how the didactic support of the formation of skills of self-control over the academic achievements in children learning to read is realized in the pedagogical systems of different countries.

#### **DEVELOPMENT.**

The study was conducted in several stages, the sequence of which was predetermined by the following hypotheses.

# Hypotheses.

This study is based on the following assumptions:

The qualitative distinction of the didactic support for the development of self-control skills in children learning to read is possible if

- The analysis considers the textbooks for basic training in reading from different countries published in different alphabets Cyrillic, Latin.
- The textbooks, which have the units for self-test or have the opportunity of self-test without any

special units, will be distinguished from the all studied alphabet books;

- The content analysis will be applied to systematize the types and sequence of the studied learning and testing tasks used to organize self-monitoring of academic achievements of children who learn how to read.

### Materials.

The following materials has formed the empirical basis for the study:

- 1. Reading textbooks printed in the Cyrillic alphabet, including the ones published in Kyrgyzstan, Kazakhstan and the Russian Federation [17, 18, 19, 20];
- 2. Reading textbooks published in the Latin alphabet in the Federal Republic of Germany, the Netherlands and France [21, 22, 23, 24, 25].
- 3. Reading textbooks published in Greek alphabet [26, 27, 28, 29].

All these are made for use in the pre-literacy period, when the illustration only introduces the letters and starts the formation of reading and writing skills. The types and elements of didactic illustrations used by the authors vary. They may be photographs, drawings, story illustrations, alphabetic charts, vignettes, diagrams, drawings, pictures to color, etc.

### Methodology.

During the study, the authors implemented a sequence of hypotheses. The study was conducted in three stages, each of which solved a specific problem. The work included the detection of textbooks with the self-test units or their separate components, then it studied the ways the materials recommended for beginner readers was presented for self-control of their knowledge. The paper describes the methodology of supporting the original didactic texts offered for independent test of knowledge performed by younger schoolchildren.

The content analysis of special self-test units in reading textbooks was carried out. Based on the comparison of results, the authors drew the conclusions on the specificity of various approaches to

making test tasks for students and recommendations for teachers and parents.

The research methods were analysis, synthesis, content analysis, cluster analysis, interpretation, comparative analysis, and generalization. The content analysis will be described in detail applied to the various stages of the study in the context of a specific research task. When presenting the features of using content analysis, the analysis category and unit of account were introduced. Microsoft Excel was used for the graphical presentation of the results in diagrams: the authors visualized the the data obtained during the content analysis.

### Results and discussions.

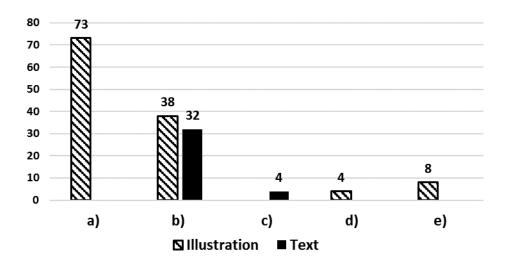
The first stage of research was to determine the list of textbooks with units for self-test or elements that allow to classify them as such. The authors have found that most foreign textbooks in Latin script ignore the organization of self-control of beginner readers. Thus, a number of alphabet kooks published in the Netherlands [23, 24] and France [25] do not contain units with any kind of self-control. Control over the correctness of the exercises and tasks is assigned to the teacher. The Kyrgyz alphabet book "Alippe" [17] and the Kazakh alphabet book [20], published in Cyrillic contain tasks and questions, but they still miss the materials for self-test. The textbooks for Russian-speaking students [19, 20] have the materials that students can use for self-control. Some textbooks published in Greek also have a wide range of tasks aimed at monitoring the correctness of the exercises for the development of the letters of the alphabet [26, 27, 28, 29]. Only one textbook has materials for self-examination [29].

The content analysis of textbooks published in the Latin, Cyrillic and Greek alphabets showed that five of them had the materials for self-test or contain test (verification) tasks [18, 19, 21, 22, 29]. These publications have become the objects of analysis.

It should be noted that after classification and selection of textbooks into two groups (those with test tasks for self-control for schoolchildren and those without them), it was found that they could be

divided into two typological groups according to the criterion of attitude to religious knowledge. Four of five textbooks [18, 19, 21, 22] do not contain any information with religious content. The Greek alphabet book [29] is an educational book for students of strictly religious orientation. It introduces letters and teaches reading skills on the basis of topics related to the Orthodox religion. It determines the peculiarity of the illustrations and vocabulary intended for schoolchildren acquisition.

An important point of further research was the specification of the hypothesis, according to which it is necessary to determine the qualitative distinction of the materials in textbooks for teaching reading and self-test of the correctness of exercises and/or tests. The work used the method of content analysis. The category of content analysis was the form of presentation of test tasks. Test task was the unit of account. The results are shown in Figure 1.



**Figure 1.** The ratio of different tasks in textbooks for beginner readers. a) - "Erfolgreich durch die Vorschule" [22]; b) – "Einfach lernen mit Rabe Linus" [21]; c) – "Development of letter-sound analysis" [19]; d) – "Preparing for the ABC" [18] e) "Το λφαβηταρι του ουρανου" [29].

Figure 1 clearly shows that the ratio of the number of test items in two German textbooks, as well as in Russian and Kyrgyz ones, is approximately the same. The comparison shows that the German editions contain much more tasks for self-control than the Russian and Kyrgyz ones. The Greek alphabet book [29], as well as the Russian one [18], does not contain textual tasks. The authors limited themselves to illustrations intended for self-control.

The analysis of the content showed that the studied textbooks place the materials for self-test in different parts. In the Kyrgyz book [18], they are found on the last page and induce the readers to test their knowledge. The book also offers the game tasks, for example, to find the letters that are encrypted in the drawings. However, there are no keys or clues, which rules out the possibility of self-test [8, p. 112].

The Russian book [19] contain a special section "Self-control and self-assessment of the work performed", which marked with a special symbol. It is proposed to use two types of self-control: self-control with verbal instruction and self-control with visual example. In the first case, the teacher should give a special task to children to circle an object on the picture. Children are also asked to draw a circle at the end of the page and to shade the task same as the traffic light colors – green (if done correctly), yellow (if there are some errors) or red (if the task is done incorrectly) depending on how the child evaluates the correctness. Then, it is offered to correct the made mistakes independently or under teacher's supervision. After the correction, it is recommended to proceed with the next tasks. In the second case, the teacher has to accomplish a task in the workbook (same as the children have) and to suggest comparing the correctness with the sample shown by the teacher.

The authors believe that in the textbook gives a certain instruction for a particular case. Further, there are references to the page with this instruction. This method of presenting the material is very difficult not only for a child (who does not yet have sufficient skills to read the instruction), but also for the teacher. At the same time, the didactic sense of exercises for self-control and self-assessment,

according to the author, is that the children learning to read could test their knowledge on their own, without the adults' assistance.

The German reading textbooks [21, 22] contain blocks for self-test, which are called "Solutions" (Lösungen). They consistently provide answers to all tasks in the form of illustrations or text fragments. Unlike textbooks with picture tests only or only the tests in the form of text, the "Einfach lernen mit Rabe Linus" [21] introduced both formats of the test tasks. The content analysis helped to identify the polygon of distributions of text and illustrative tasks. The results are shown in Figure 2.

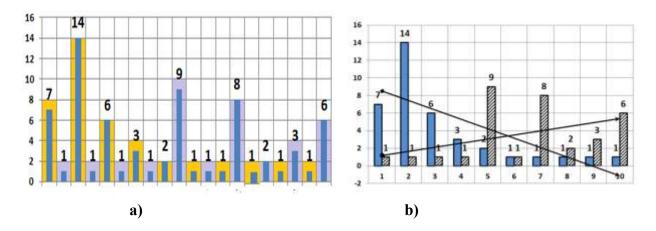


Figure 2. Distribution of illustrative and test tasks a) the ratio of illustrative (■) and textual (■) tasks in the sequence of their presentation in the textbook; C) trends that reflect the quantitative representation of tasks for self-control in text (☑) and illustrations (□) in the textbook "Einfach lernen mit Rabe Linus" [21].

Figure 2 reflects the common trend: at the beginning of the course of learning the letters, the test tasks that rely on a visual image prevail. As a result, the authors present the solutions of test tasks in the form of illustrations. Test tasks in text are actively used at a later stage of training and are objectified in the second half of the book. The result of the content analysis showed that, as children master the alphabetic composition of the German language, the number of illustrative tasks decrease, while the number of textual test tasks increase.

In the Greek alphabet books, the self-control tasks are found in the block "Λυσεισ ασκησεων" - "Exercises for solving". The study of the features of the illustrations in the Greek alphabet book [29] shows that the author places test tasks in different parts of the textbook (from 11 to 99 pages). However, the materials for self-control are strictly at the end of the book. Illustrations are quite large in size - in contrast to the German publications, in which the illustrative material is compact. The author of the Greek alphabet does aim at increasing the attention of students to the recognition of letters - this function is for the test tasks. More attention is drawn to the symbolism and the display of patterns of correct behavior or attitude to religious symbols.

The second stage of research was aimed at determining the direction of the test tasks in textbooks published in Germany and Greece.

## (A) Textbooks in German for beginner readers as an object of study.

The cluster analysis identified five clusters, which covered all the test tasks thematically. Among them are the choice, the knowledge reproduction, the ratio, sequence and design test tasks. Moreover, the researchers discovered a significant number of exercises for teaching writing and drawing, aimed at the development of fine motor skills. These tasks consisted in circling the contours of letters or geometric figures. The tasks were allocated in a separate cluster and were called "Exercises for the development of fine motor skills". One task [22] was to offer the children to create their own drawings. It was included in the position "Out of criteria". Since this type of exercise could be found in a single textbook, it was taken into account in its analysis, but it was not considered as a position for comparison with the contents of another books.

The results of the content analysis of "Einfach lernen mit Rabe Linus» [21] are presented in Figure 3. The book retains the division into representing the information in illustrations and in text.

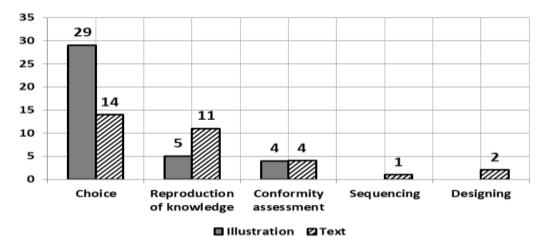


Figure 3. The polygon of different test tasks distribution in "Einfach lernen mit Rabe Linus" [21].

Figure 3 clearly shows the ratio of test tasks within the selected clusters. The greatest number of tasks falls on the "choice". The tasks presented as illustrations prevail, which is quite justified by the fact visual-figurative thinking plays a leading role in children who learn to read. It is quite natural that the authors introduce visual aids into the learning process, since they help the beginner readers to lean on external objects, models, and drawings. Children easily perceive eye-catching, emotionally impressive information. It should be noted that test tasks for the knowledge reproduction are presented mainly in textual form. This reflects the common trend to intellectualize thinking as the children move to new stages of learning. Figure 4 shows the results of the content-analysis of the book "Erfolgreich durch die Vorschule" [22].

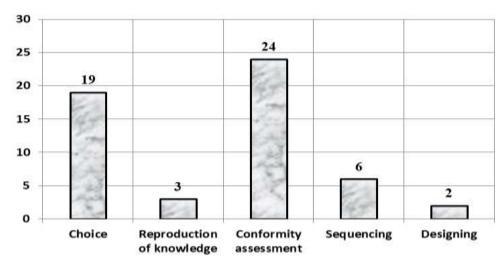
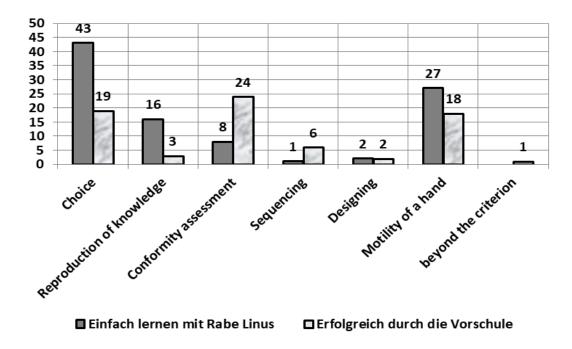


Figure 4. Polygon of different test tasks distribution in "Erfolgreich durch die Vorschule" [22].

The authors of this textbook rely on the test tasks, presenting all the information in illustrations. Tasks for establishing compliance and the choice of positions prevail in this textbook. The authors of this book are not focused on exercises that establish the sequence or reproducing the previously learned letters. The didactic system of "Einfach lernen mit Rabe Linus" pays much attention to the tasks that require the classification of the drawn subjects and their association on certain grounds. Available jobs matching both the subject and the symbolic objects. Tasks to establish the sequence reproduce the studied material and design are presented in smaller number.

The comparison of didactic positions, providing the self-test of tasks in the textbooks "Einfach lernen mit Rabe Linus "[21] and "Erfolgreich durch die Vorschule" [22] is presented in Fig. 5.



**Figure 5.** Comparison of quantitative values of the types of tests presented in the German textbooks "Einfach lernen mit Rabe Linus" [21] and "Erfolgreich durch die Vorschule" [22].

The authors usually use a single data presentation template for self-test; they demonstrate significant conceptual differences in understanding the forming effects of different tasks and their solutions in the self-test mode for children who learn to read. A complete match is observed only for one position – design tasks Comparison of data in Fig. 5 shows that there are different approaches in assessing the

need to solve the problems of choice, reproducing the acquired knowledge, and restoring the sequence. The combination of cursive writing worksheets (exercises for fine motor skills) and tasks in a single text book to develop reading skills is a new trend, new for books published in Cyrillic. As the figure shows, choice and fine motor skills tasks are presented in almost equal number. A significant number of exercises, evenly distributed throughout all stages of teaching reading, justifies that the authors support a high assessment of the forming effect of graphic exercises. This group of tasks improves hand-eye coordination and stimulates imagination. Analysis of the content of these tasks showed that the authors choose the exercise of two types for further self-control - "hatching", which requires graphic accuracy, and "finishing drawing", developing spatial imagination.

### B) Greek alphabet book as an object of research.

As noted above, "Το του ουρανου αλφαβηταρι" is a training book, which sees the task of teaching reading in introducing the basics of the Orthodox religion [29]. This determines the topic, style of illustrations, the nature and direction of test tasks for self-control. There are eight of them.

When introducing the letters of the Greek alphabet, the author uses the same sequence of letters that is already represented in modern Greek alphabet. It should be noted that this approach is quite rare, because in most other alphabet books, the authors introduce first the letters that allow to make as many words as possible from the initial stage of learning. Thus, the eleventh page has the first task for self-test, which is further presented in the self-control unit. The task is a maze consisting of two letters - the previously studied letter A and the introduced letter B. The student should accomplish a simple task to follow the images of the letter "B", to go through the maze, which ends with one of the attributes of the Orthodox church – a candlestick with candles. From a didactic point of view, the "maze" exercise is a task of choice between the two letters A and B. To make this choice, the author provides a preliminary exercise that consists in painting the letters that are outlined.

The idea of using maze as a didactic design is implemented while introducing the letter " $\Gamma/\gamma$ " [29, p. 15]. This letter is accompanied by the word " $\gamma\dot{\alpha}\mu\sigma\zeta$ " (wedding), beginning with " $\Gamma/\gamma$ ", and a picture of the wedding. Students should go through a maze in any direction; the starting points are the bride and groom. Here, the "maze" is an exercise to determine the sequence of steps (direction) and develops spatial imagination. It also has a preceding exercise on coloring the letters in their upper and lower cases. The "maze" is also used for the task with a self-test block when introducing the letter " $\Phi/\phi$ ". The word that is to solidify the letter is the noun " $\phi\omega\varsigma$ " (light). The road that students have to go through the maze is the road to the temple, on the way to which they meet obstacles.

The widespread use of mazes for didactic purposes is not accidental. The structure of the maze, which is an intricate plan of some structure, is a conceptual metaphor for a complex situation from which the students can find a way out, showing ingenuity. Mazes develop the ability to mentally lay the moves and find solutions, consciously going through all sorts of options, develop analytical skills and attention.

Introducing of "K/κ" [29, p. 43] is based on illustration that represents the churchware, beginning with a given letter. Students are offered an exercise on the ratio, where pictures of the churchware (κερί-candle; κηροπήγιο-candlestick; καμπάνα-bell; καντηλι-lampion, etc.) should be correlated with the words for these objects. A similar approach is observed while introdfucing the letter "M/μ". The students are asked to establish a correspondence between the images illustrating the various sacraments and their names.

Thematic pictures of the church are also used to introduce the letter " $\Lambda/\lambda$ ", and the task is to recognize the capital letter " $\Lambda$ " in the non-shaded outline in the picture. This letter is repeated many times both in the pictures of objects beginning with this letter (for example,  $\Lambda \acute{\alpha} \mu \pi a - lamp$ ), and those that have no relation with the letter " $\Lambda$ ". This test is a choice exercise. It develops attention and analytical skills in students.

The sequencing task appears when introducing the letter "P/ $\rho$ " [29, p. 71]. The author proposes to make an exercise that consists in reproducing the contour of the rose, which, together with the word  $\rho\alpha\sigma\alpha$  (cowl) is used to solidify the graphics of the letter. The complexity of the task lies in the need to find the right way to move the pencil without taking it off the sheet of paper.

The eighth task, presented in the self-control unit, is used to introduce the letter " $\Omega/\omega$ ". The key word here is the noun  $\Omega\delta\alpha\nu\alpha$  (hosanna).

The task can be found on the last page 99 of the textbook (the introduction of letters). Therefore, the exercise, which can be used for self-control, is quite difficult. Its basis is the idea of coloring the drawn puzzles, the center of which has all the letters of the Greek alphabet. Students should select and color the puzzles with the letter  $\Omega$ . When the task is performed correctly, they see the image of praying kneeling boy.

It should be noted that when introducing any letter of the Greek alphabet, the author also introduces the writing elements to train the writing skills. A feature of the introduction of writing elements is that the student is offered to consistently work out the skill of writing the elements of letters, taking into account the graphic capabilities of each letter. In order to do the work on the development of fine motor skills and not to be bored with it, the authors offer funny illustrations of letters, which are stylized images of animals.

The analysis of the self-control exercises naturally leads to the need to clarify, what is the sequence of exercises, as students master their reading skills. It is necessary to conduct a special study aimed at identifying the frequency of the proposed exercises and target orientation.

### The concept of the study is described in this section.

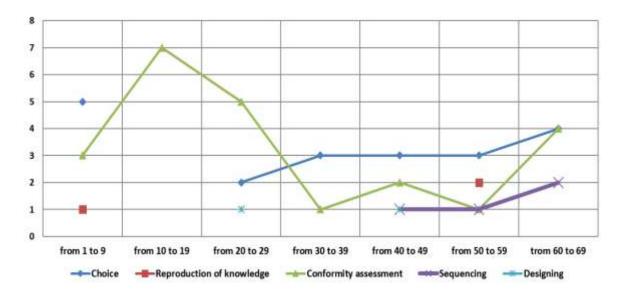
As it was noted earlier, the correct answers to self-test tasks are found at the end of the textbooks. The number of these tasks is different: the German textbooks have dozens of them, while there are eight tasks in the Greek alphabet books. Therefore, setting the task to determine the dynamics of

presenting various types of tasks with self-control unit, in the first case, the tactics of "compression" of information will be applied. In the second case, the number of units included in the group of tasks will not be so large. The preservation of task grouping is necessary to compare the approaches in the alphabet books from different countries. According to the dynamics of the appearance of different exercises in textbooks, it is possible to conclude about the tasks the editors consider the most useful for the self-control formation.

The total number of tasks for self-control in two German textbooks "Einfach lernen mit Rabe Linus" [21] and "Erfolgreich durch die Vorschule" [22] is approximately the same, and does not exceed 70 test tasks. The exercises for the development of fine motor skills were excluded. For the convenience of analysis and graphical presentation of the results, the total number of correct answers on self-control tasks is divided into groups and marked accordingly as it increases. It reflects the progress in learning letters and the improvement of reading skills (for example, from 1 to 9, from 10 to 19, etc.). Within each group of answers, the sequence of different tasks made by the authors is defined (correlation, choice, knowledge reproduction, sequencing, and design). The category of content analysis is the concept "type of task", and the unit of account is the reference (correct) answer to the task presented at the end of each textbook.

The results of the content analysis were recorded in EXCEL encoding tables for further visualization and analysis.

Let us consider the results of counting the sequence of presentation of different types of tasks for self-control in the textbook "Erfolgreich durch die Vorschule" [22] (Figure 6).



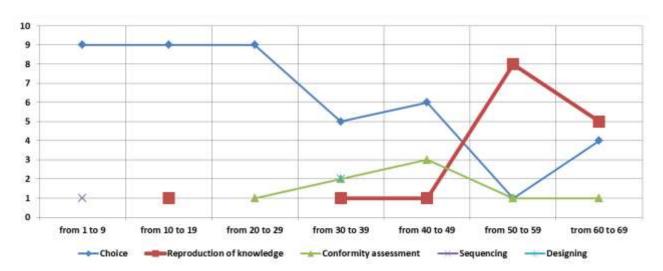
**Figure 6.** Polygon of different self-test task distribution in their sequence in the textbook "Erfolgreich durch die Vorschule" [22].

Figure 6 shows that at the beginning of learning to read, the self-control tasks are mainly correlation tasks, which are to establish a logical or mathematical relation between objects, features, objects, letters and words beginning with this letter. In the middle of training, the number of tasks of this type is reduced, but in the final part of the textbook they increase in number again. A weak upward trend is seen in the richness of the educational benefits of the tasks on reproduction and sequencing. At the same time, sequencing tasks are quite difficult for the younger schoolchildren, because they focus on a critical assessment of the order of actions necessary to achieve a certain result, which should be mentally presented in the form of a model. They take the schoolchildren closest possible to understanding the concept of algorithm, fixing the reliably established, appropriate, consistent implementation of some simple steps.

A small number of design tasks is surprising, because at the preliminary stage of the development of sensory standards and perceptual action exercises and didactic games, developing the ability to design, are presented in a quite large number. In pre-school age, Lego, LOGEO, TASTMAX, construction of building material, cardboard geometric shapes, and counting sticks, etc. are widely

used. These types of modeling have always been included in didactic games for preschoolers that have developed spatial and logical thinking [30].

Let us consider the features of implementing the theoretical approaches to the formation of skills and abilities of self-control in students presented in the textbook "Einfach lernen mit Rabe Linus" [21]. The results of the content analysis are shown in Figure 7.



**Figure 7.** Distribution of different self-test tasks in their sequence in the textbook "Einfach lernen mit Rabe Linus" [21].

Content analysis shows that in the early stages of learning to read, the authors of this manual paid great attention to choose tasks. As the younger student proceeds with learning letters, the number of such tasks decreases. Correlation tasks are introduced in the second third and are present in the rest of the book, showing a slight downward trend. A special role is given to the test tasks for reproduction. This is the only position that has an upward trend and that reflects the qualitative peculiarity of the process of mastering reading skills for younger school students. The task to establish the sequence is given only once at the initial stage of training – despite the fact that this type of task is the most difficult for younger students. Design tasks are also few. This type of test tasks is found only once in the middle of the course.

Figure 8 shows the comparison of the positions reflecting the sequence of introducing different test tasks for self-control of various types.

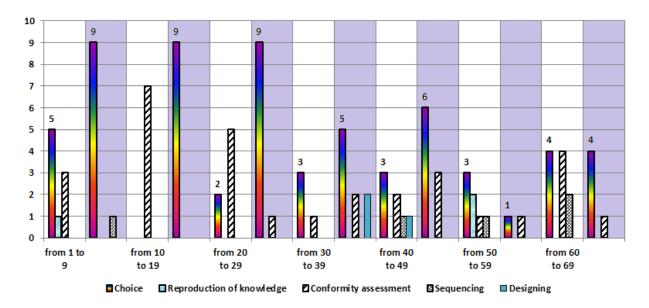
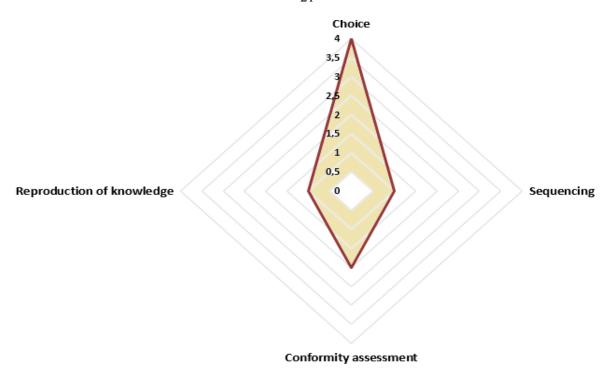


Figure 8. Comparison of the number and types of training and test tasks for self-control presented in the textbooks "Einfach lernen mit Rabe Linus" ( ) [21] and "Erfolgreich durch die Vorschule" ( ) [22]

The bar graph clearly shows that both textbooks differ in all stages of learning to read and presenting the tasks for self-test. The differences relate to both the intensity of the number of tasks and their focus on the development of certain mental actions in younger school students. The similarity is that the total number of self-test tasks for self-control over academic achievements is the same and does not exceed 70 tasks for the entire course.

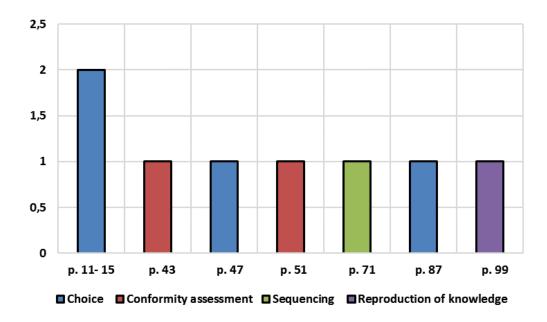
The paper considers the features of presenting the exercises and tasks included in the self-control unit in the Greek alphabet book. To systematize the information, the authors allocated the tasks that have solutions in a special unit for self-testing. Figure 9 shows the data on the distribution of exercises included in the self-test unit by types of test tasks.



**Figure 9.** Quantitative distribution of the exercises included in the alphabet book "Το αλφαβηταρι του ουρανου" [29], according to the task type.

Figure 9 clearly shows that the tasks that aim the younger students to choose, to make a decision on the compliance of the selected position with the initial data prescribed in the task, prevail. This type forms analytical thinking and will, stimulates the appeal to comparison. It can be assumed that the author of the textbook is fully confident in the positive forming effect, which a situation of resolving uncertainty in the presence of multiple solutions makes.

Then the distribution of different tasks in the logic and dynamics of learning the letters by the younger schoolchildren and training of the reading skills is considered. Figure 10 reflects the training and test tasks classified by types in the dynamics of their presentation in accordance with the logic of the learning process.



**Figure 10.** Distribution of different self-test tasks in their sequence in the textbook [29].

Figure 10 indicates that test tasks are presented at all stages of learning letters and learning to read. They are distributed quite evenly, but at the beginning of learning they are more presented. The conformity assessment tasks occupy the second place among all types of control and test tasks. Exercises aimed at checking the correctness of the sequence of actions appear at the end of the prealphabet period. A complex task aimed at reproducing the knowledge of all the letters already studied, completes the training cycle.

It is of interest to consider the question of how common are the positions of the authors of various textbooks in determining the appropriateness of the sequence of presentation of training and test tasks of various types, with an account of the dynamics of promoting younger students to learn letters and practice reading skills. Comparison of the sequence of types of training and test tasks in textbooks published in Germany and Greece shows a very mixed picture. Choice tasks are found in all educational books in the initial period of training. Control and test tasks aimed at knowledge reproduction are mainly referred to the final period of learning the alphabet. There are significant differences on the remaining issues, suggesting that the subject requires further research. The thematic field, which provides for the introduction and fortification of the letters, doesn't determines the

qualitative features of authors' views on establishing the order of training and testing tasks recommended to younger school students to use for self-test.

Thus, it is possible to preliminary conclude that within one pedagogical tradition in teaching reading on the basis of simultaneous presentation of a picture and a letter, with which the word for the painted subject begins, there are various didactic approaches to their inclusion in activity of schoolchildren on the self-test of results of personal academic achievements.

### CONCLUSIONS.

The study showed that the problem of didactic support of formation of self-control skills for academic achievements of schoolchildren is relevant. The authors of textbooks from different countries have different approaches the solution of this problem. Some textbooks have no blocks or series of test questions that help the student to check the correctness of tasks and exercises. In other alphabet books, there is a traditional formulation of tasks that, at first glance, aim the children at self-test. However, the absence of so-called "keys" (answers with a reference, correct solution) does not allow asserting that the authors of these textbooks achieve their goals. The analysis shows that there exists an approach, in which the task of self-control is complicated by the need in a teacher or adult's participation. Their work, performed on the same subject, is a reference model for comparison. In general, the idea of forming self-control skills is fully implemented only in German and Greek textbooks. The advantage of the used system of didactic support is the use of the visual analyzer. However, the authors of textbooks do not specify the peculiar ways of working with the image at didactic illustration, leaving this layer of educational work for free creative thinking of teachers or parents. Didactic approaches to preparing tests that have clear "keys", designed for self-test, are located in a separate block at the end of the alphabet book. They are focused on performing the traditional tasks in choice, the knowledge reproduction, sequencing, ratio, and design. At the same time, the authors of textbooks stick to different positions on the order of introducing this type of test

tasks. The authors of textbooks for beginner readers, published in Germany and Greece, fully take into account the peculiarities of visual thinking of children of primary school age. They created an original didactic system of test control, which corresponds to the age peculiarities of younger schoolchildren and their educational needs. Elements of this system is useful for the editors of the alphabet books, teachers and parents for developing the skills of self-control of knowledge of students of almost all ages.

### Conflict of interests.

The authors declare no conflict of interest.

### BIBLIOGRAPHIC REFERENCES.

- 1. Pintrich, Dale H., Schunk, Judith L., Meece, Paul R. (2014). Motivation in education: theory, research, and applications (4th. ed.). Boston: Pearson. ISBN 0133017524.
- 2. Zimmerman, B. J. (1990). Self-regulated learning and academic achievement: An overview. Educational Psychologist, 25(1), 3-17.
  - DOI: https://doi.org/10.1207/s15326985ep2501\_2
- 3. Boekaerts, M. & Corno, L. (2005). Self-regulation in the classroom: A perspective on assessment and intervention. Applied Psychology: An International Review, 54(2), 199-231.
- 4. Butler, D.L. & Winne, P.H. (1995). Feedback and self-regulated learning: A theoretical synthesis. Review of Educational Research, 65(3), 245-281.
- 5. Winne, P.H. & Perry, N. E. (2000). Measuring self-regulated learning. Handbook of Self-Regulation, 531-566.
- 6. Panadero, E. (2017). A review of self-regulated learning: six models and four directions foe research. Frontiers in Psychology. 8 (442). DOI:10.3389/fpsyg.2017.00422.
- 7. Paris, Scott G. & Paris, Alison H. (June 2001). Classroom Applications of Research on Self-Regulated Learning. Educational Psychologist, 36 (2), 89–101.

- 8. Towler, L. & Broadfoot P. (2006). Self-assessment in the Primary School. Educational Review, 44 (2), 137-151.
- 9. Karabourniotis, D., Evaggelinou, C., Tzetzis, G. & Kourtessis, T.(2002). Curriculum enrichment with self-testing activities in development of fundamental movement skills of first-grade children in Greece. Perceptual and Motor Skills, 94 (3 PART 2), 1259-1270.
- 10. Allan, Darcey M., Allan, Nicholas P. & Lerner, Matthew D. (2015). Identifying unique components of preschool children's self-regulatory skills using executive function tasks. Early childhood research quarterly 32, 40-50.
- Ermakov, P. & Fedotova, O. (2015). Characteristics of Aggression Reflection in the Psychological Educational Books of the "Graphic Guide" Type. Procedia Social and Behavioral Sciences. Vol. 214, 876-881.
- 12. Bekasova, E.N. (2017) ABC-book as a key to understanding the world. Philological Class, v. 50, 4, 44-49.
- 13. Fedotova O.D., Latun V.V. & Okuneva I.A. (2017). Features of use of the structural components of a creolized text in an ABC-book: trends to conceptual inversion. 9th International Conference on Education and New Learning Technologies (EDULEARN 17): Conference proceedings. Eds. Gómez Chova, L., López Martínez, A., Candel Torres, I., 5269-5273.
- 14. Kazakova, L.P. (2017). Visual representation of realities with different ontological status in contemporary primers and ABC books. AI & SOCIETY, v. 32, SI, 79-87.
- Rangel, Cintia de Lima, de Assis Rangel, J.J. & do Nascimento, J.R. (2014). Discrete event simulation for didactic support resource. Winter Simulation Conference Proceedings, 3596-3607.

- Fedotova, O.D., Latun, V.V. & Okuneva, I.A. (2014). Visual image of the continent in Russian textbooks on geography (1825-2013). Procedia - Social and Behavioral Sciences, v. 141, 731-737.
- 17. Kubatalieva, B. & Abykanova, A. (2017). Alippe. Bishkek: Kutaalam. 111p.
- 18. Vetshanova, L., Biryusheva, O. & Arshinova, S. (2017). Preparing for the alphabet book [Podgotovka k bukvaryu]. Bishkek: Kutaalam, 112p.
- 19. Kolesnikova, E.V. (2016). Development of sound-letter analysis in 5-6 years old children [Razvitie zvuko-bukvennogo analiza u detey 5-6 let]. Moscow: Yuventa, 80p.
- 20. Kudaybergenova, A.M. (2009). Kazak tili. Textbook for the first class of general school with Russian language of instruction [Kazak tili. Uchebnik dlya pervogo klassa obshcheobrazovatel'noy shkoly s russkim yazykom obucheniya]. Almaty: Raritet, 76p.
- 21. Raab, D. (2018). Einfach lernen mit Rabe Linus. 1. Klasse. Deutsch. Lesen und schreiben. Berlin: Dudenverlag, 96.
- 22 Erfolgreich durch die Vorschule. Buchstaben. Schreiben. Konzentration. Bindlach: Loewe Verlag (2017), 105.
- 23 Maas, M. (2015). Bobbi. ABC. Alkmaar: Uitgeverij Kluitman, 20p.
- 24. Rom Pompom. ABC-boek for alla kleuters (2014). Antwerpen: Uitgeverij Zwijsen, 40p.
- 25. Grison, St. & Courtin Th. (2017). Le monde de T'choupi. Ecriture. Nathan, 31p.
- 26. Βαειλης Καραγιαννς. Το πρωτο μου αλφαβηταρτ (2018). Αθηνα: Εκδσξι Πατακη.
- 27. Γιαννη Σμυρνιωτακη. Μαθαιυω υα ΔΙΑβαξω (2017). Αθηνα: Σμυρνιωτακη.
- 28. Ανακαλυπω Γραμματα (2017). Αθηνα: Λαλουμη -Βιδαλη.
- 29. Φουρκα Πεγκυ. Το αλφαβηταρι του ουρανου. (2016). Αθηνα: ΨΥΧΟΓΙΟΣ, 2016.
- 30. https://www.spielen-lernen-bewegen.de/spiele/didaktikspiele/index.html#0000009d220cd3309

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