

### The use of the method of analogy and generalization in teaching mathematics in grades 5-6

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#### Abstract

The article discusses one of the important methods used in the educational process - the method of analogy and generalization. It was noted that this method plays an important role in the formation of logical thinking of students, and the known method requires a special talent and will. The views of a number of teachers and psychologists on the method of analogy and generalization are presented. It was noted that the use of the method under consideration is general. It can be widely used in teaching mathematics, geography, history and other subjects. It was noted that in addition to the advantages of each method, the analogy method also has disadvantages. Thus, sometimes the wrong result is obtained when applying the analogy method. Similar examples are given according to the topics of textbooks for grades 5-6. It was also emphasized that, despite some shortcomings, many discoveries were made precisely as a result of these errors. Finally, specific examples of the practical application of the analogy and generalization method were given, emphasizing its importance for the educational process.

*Keywords:* method; analogy and generalization; logical methods; teaching mathematics.

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### DEVELOPMENT OF READING SKILLS IN TEACHING ENGLISH

#### Abstract

The article describes the relevance and significance of developing reading skills in the modern world as a tool for transmission and obtaining of information. The author introduces the algorithms and stages of working with the texts and their implementation at the English language lessons. In this article, the main focus is on using such kinds of reading strategies: in-depth reading, skimming, and scanning in language classes. The article also identifies the importance of using strategies for any kind of the purpose of reading. To successfully understand the text, the learner must master a set of techniques and strategies. The use of strategies is individual, but to choose what strategy applies, the learner must be aware of them. In this case, the questionnaire about using reading strategies at the lesson, to understand the general awareness among 24 8th grade students was proposed. This article is written as additional component for final diploma project.

*Keywords:* reading skills; reading strategies; scanning; skimming; in-depth reading; reading process; reading stages.

**Introduction.** In the modern world, in a dynamically developing society, where people are experienced in using new technologies, strengthen critical thinking, reading skills are becoming more essential, therefore the content of teaching reading and its helpful potential needs to be discussed.

In the methodology and practice of FLT (foreign language teaching), considerable attention is paid to reading as a type of speech activity that predetermines perfect language proficiency.

Being one of the most important communicative and cognitive processes, the

development of reading skills is a significant part of life.

Having proficient reading skills is necessary for academic success. Students with low level of reading skills face difficulties in academic areas and encounter behavioral and social difficulties [1]. Today, proficient reading skills demonstrate a huge success in many aspects of our life, especially in education.

According to C.E.Snow, S.M.Burns, P.Griffin, reading is regarded as “a cognitive psycholinguistic activity and a social activity” [2] is influenced by a variety of approaches, techniques, and strategies, which make assignments of reading development challenging, but critical for learners’ academic progress.

This type of speech activity has been investigated from earliest times, and was always important for the acquisition of knowledge [3]. B.Oberholzer [4] describes it as a basic life skill and a major key for a successful learner both at school and throughout life and also states, that reading has a crucial role in the life of a learner, therefore, deficiency of reading causes problems of learning in any field of study.

The role of this type of speech activity is indisputable. It is well known that reading is one of the main means of obtaining information. Through reading, due to which we extract information from the text, the experience acquired by humankind in a wide variety of social, labor, and cultural activities can be transmitted and appropriated [5; 6].

The goal of teaching reading is to teach how to extract information from what is read. There are different approaches to teaching reading concerning reading techniques, which depend on the degree of penetration into the content [7, P.75].

One of the requirements for foreign language learners is that they make use of effective reading strategies to improve their reading comprehension. Strategies are the techniques used to enhance reading comprehension [8]. That is why the practical component of teaching reading in a foreign

language involves the development of students’ skills to read texts based on different strategies, depending on the respective level of understanding of the information contained in it:

- understanding of the main content (reading for gist or skimming);
- full understanding of the content (in-depth reading);
- extraction of necessary, meaningful information (scanning).

Reading the text can be used for various reasons, so different strategies could be implemented for different purposes of reading [9].

According to existing data, the most commonly practiced types of reading strategies are skimming, scanning, in-depth reading. It should be noticed that the number of strategies distinguished by the researchers varies both as to the number, and to their types from the aforementioned [10].

To successfully understand the text, the learner must master a set of techniques and strategies. The use of strategies is individual, but to choose what strategy applies, the learner must be aware of them.

**Main body.** Reading as an educational act is used as a teaching tool, and implemented in the process of forming reading mechanisms, operations, and actions that make up the processes of perception and understanding [11]. Reading is closely associated with the following types of speech activity (table 1).

As regards defining the term speech activity – it is an active, purposeful, mediated by the language system and conditioned by the communication situation, the process of transmitting and receiving a message [12, P.60].

As regards defining the term speech activity – it is an active, purposeful, mediated by the language system and conditioned by the communication situation, the process of transmitting and receiving a message [12, P.60].

Consequently, reading, undoubtedly, is one of the main ways of learning language, but it necessary to learn languages with a combination of the aforementioned types of speech activity [13].

Table 1

**Connections with other types of speech activity**

<b>Writing</b>	<b>Listening</b>	<b>Speaking</b>
– since both use the same graphics system. Hence it follows that it is necessary to develop these types of speech activity in interconnection	– since both are based on perceptual mental activity associated with perception, analysis, synthesis. When listening - the perception of what was heard, and when reading - what was seen. Anticipation is of great importance for both types of speech activity	– since loud reading is “controlled speaking”, reading to oneself is inner listening plus inner speaking

o consider the types of reading, which are identified by scholars as the main, we can rely to classification of W. M. Rivers [7, P.75]. According to his classification, the main ways of reading are as follows:

Skimming: running one’s eyes over a text to get the gist of it.

Scanning: going through a text to find a particular piece of information.

In-depth reading: reading the whole texts, to extract specific information. This is

more an accuracy activity involving reading for detail.

These different ways of reading are not mutually exclusive. For instance, one often skims through a passage to see what it is about before deciding whether it is worth scanning a particular paragraph for the information one is looking for.

Here is the table 2, with the description of these strategies

Table 2

**Reading strategies**

<b>Skimming</b>	<b>Detailed reading</b>	<b>Scanning</b>
<i>Purpose:</i> defined as to looking only for the general or main ideas, images. Readers can notice: - graphs, charts, pictures, Analyzing: - subheadings, headings, among other	<i>Purpose:</i> this type of reading is complete and accurate understanding of all the major and minor facts contained in the text	<i>Purpose:</i> it refers to identify specific information in the text quickly, by trying to find the answer using the clues. Student can read a passage to look for specific information, for example names, the dates

It must be added, that the selection of texts is complex work, because each text, as an exceptional speech element with the information contained in it, has its own set of text categories and properties [14].

**Methods.** The objectives of this study are to find out if students are aware of reading strategies, to present algorithms of working with the text to be applied at the lessons, with help of the teacher or independently.

The author made a questionnaire to investigate the general awareness among the students of his class. Following the design

of a survey method, the study was mainly based on quantitative data.

The research was carried out with 24 Kazakhstani 8th grade students of Gymnasium #8. The participants voluntarily took part in the study. The questionnaire was administered to the students in English with Russian translation, as there would be some questions students would not comprehend. The survey aims to answer:

1. Do you use reading strategies during your study / Do you aware of it?
2. Are the reading strategies helpful and useful in developing reading skills?

3. Which of the reading strategies do you use more?

**Results.** After the survey proposed, the author found out that only five students out of 24 aware of reading strategies. Then, after the three weeks of practice of reading strategies at the lesson, the general awareness was increased among the students. Students gave their attitudes towards the use of the reading strategies during the classes and answered the question “Are the reading strategies helpful and useful?”; 22 students answered “Yes”, 0 students answered “No”, and 2 students answered, “I am not sure”. Then, the survey showed that students used all three reading strategies, but in some rare cases, students have used only one or two strategies during their classes.

Guidelines for reading at the lessons were presented, and you can familiarize with it below. As mentioned before, it must be clarified that teaching reading will be structured in the same way as teaching other speech activities, i.e., as a step-by-step process, and will include a pre-reading phase: motivation, reading preparation, while-reading, and after-reading phases. The final phase involves reprocessing, comprehending the information received, and verifying that it is understood correctly. Thus, strategic reading includes three stages, namely [15]:

The pre-reading stage is considered as a preparation for reading. It is an important part of the reading process - it enables learners to activate the familiarization with the topic by predicting and using prior knowledge. Teachers can encourage learners to read by asking some relevant questions about the topic of the text. Then, such kinds of tasks as previewing the headings, titles, and pictures on the text can raise their interest. Pre-reading tasks are aimed at modeling background knowledge.

In the second stage, the while-reading involves solving the communicative task posed at the previous stage, and, accordingly, reading with different depths of understanding and accuracy of penetration into the text.

The activities suggested in this stage aim

to develop special abilities to help learners become active readers, such as predicting text content, taking notes, guessing word meanings by using the context, skimming, scanning, use the dictionary effectively.

The post-reading stage provides deeper analysis and comprehension of the text, is a process that contributes to learners to make compounds of the new information with prior knowledge. Post-reading activities help examine the reader’s comprehension and enable readers to explore much better the text content, through activities as cloze exercises, making comprehension questions, thinking aloud, role-playing, concluding, and so on.

Speaking about reading comprehension, we should take into consideration that reading is understood as a three-process that leads to comprehension, and here it is relevant to identify the strategies that students can use in their reading processes.

To understand which of the reading strategies are most suitable for increasing the students’ reading comprehension, it is necessary to clarify what a strategy is. As we have pointed out in earlier paragraphs, a strategy is defined as an accurate plan or method for achieving a learning aims during a study. Therefore, it is essential to know what exactly the purpose of the reading text is to identify the right way to achieve it.

In accordance with the context and the features of students, all the specific techniques are explicitly used for applying it in one of the stages of the reading process.

*As they are described below:*

In the pre-reading stage, techniques such as activating prior knowledge, visualization, scanning, and making predictions will enable students to contextualize the reading text and find a perception of what they read.

In the while-reading stage, making inferences, and confirming predictions through literal and inferential questions will permit students to relate ideas and understand specific situations step by step in this level.

Finally, in the post-reading stage, summarizing and questioning the text will be useful to determine and conceptualize what it is

supposed students understand from the text. All these techniques may internalize appropriately the text to the students, and understand beyond the text itself.

Teaching reading should be as close to real-life conditions as possible, in which students may need to scan, skim, and in-depth read. Tasks and exercises for the text should also be adequate to the skills being developed.

When reading, communicative and cognitive activity is aimed at extracting information from a written text. All practical work on teaching this type of speech activity is aimed at developing the skills to cope with tasks for texts, depending on the type of reading. The selection and organization of reading texts are important both in terms of their content and linguistic form.

Different types of reading can be applied to different texts: scanning, skimming and in-depth reading. The teacher uses texts that carry methodological and educational value, selects texts that are accessible in form and content, various methods of working in the process of mastering reading, develops their cognitive interest in the subject.

In accordance with the aforementioned information, the author would like to introduce the algorithms and stages of working with the text to be applied at the lesson.

#### *Algorithm for using in-depth reading*

1. Read the title of the text and try to identify its main theme.

2. Read paragraph by paragraph, noting sentences in each passage that maintain information. To find main information, highlight keywords.

3. Determine the importance of the paragraphs. Mark the paragraphs that contain more important information, and paragraphs that contain secondary valued information.

4. Summarize the semantic information expressed in paragraphs into a whole.

5. Make «compression» of the text by keywords.

Stages of working with text and types of exercises

#### *Pre-reading*

When teaching a pre-reading tasks the following types of exercises are offered:

- exercises for understanding the lexico-thematic basis of the text;

- exercises to identify the binding means of the text;

- exercises to understand sentences containing unfamiliar words;

- exercises for the selection and understanding of structural and semantic components text exercises for predicting the content of the text.

#### *While-reading*

At the while-reading stage, the following types of exercises can be distinguished:

- exercises for highlighting semantic milestones in the text and understanding single facts;

- exercises to establish a semantic connection between individual facts of the text;

- exercises to combine separate facts of the text into a semantic whole.

#### *Post-reading*

At the post-reading stage, you can perform exercises such as:

- exercises to control the comprehension of the main content of the reading text;

- exercises to determine the communicative intention of the author and the main function of the text;

- exercises to develop the ability to express value judgments about what you read.

#### *Algorithm for teaching skimming reading*

During skimming reading, you should adhere to the following algorithm:

1. Carefully read the title of the text, trying to understand its meaning, define the main idea of the text.

2. Read the first sentence of the text. Compare its content with heading,

3. Read the first paragraph. Match its content with your idea of the main idea of the text,

4. Review all other paragraphs, comparing their content with understanding of the main idea of the text and pay special attention to the content of the first sentences of the paragraphs.

5. Formulate the answer to the question: «What is the story about?»

Stages of working with text and types of exercises

*Pre-reading.* When teaching skimming reading as pre-reading tasks the following types of exercises are offered:

- exercises in working with the title of the text;

- exercises for mastering structural and compositional features texts of different styles (newspaper materials, popular science texts and etc.);

*While-reading.* For the while-reading stage, you can consider exercises such as:

- exercises to determine the topic of the text;

- exercises for semantic forecasting of the content of the text;

*Post-reading.* At the post-reading stage, it is recommended to perform the following exercises:

- exercises to control reading comprehension (skimmed) text;

- an exercise to develop the ability to express value judgments.

*Algorithm for learning scanning reading:*

1) Determine the type of text.

2) Highlight information related to a specific topic/problem.

3) Find the facts you need (data, examples, arguments).

4) Select and group information according to certain criteria.

Try to predict the content of the text based on realities, terms, geographical names and proper names.

5. Do a cursory analysis of the sentences/paragraphs.

6. Find paragraphs/passages of text that require detailed study.

Stages of working with text and types of exercises.

*Pre-reading.* When teaching scanning reading as pre-reading tasks the following types of exercises are offered:

- exercises to familiarize yourself with the composition of the text;

- exercises for recognition of support signals that facilitate the search.

*While-reading.* For the while-reading stage, there are exercises such as:

- exercises for general perception of the text;

- exercises to identify parts of the text that are of interest with the reader's point of view.

*Post-reading.* At the post-reading stage, it is recommended to perform the following exercises: exercises that control the ability to find specific information.

**Discussion.** The results of the survey and author's personal experience showed that there was a lack of knowledge in the area of reading strategies at the lessons of his students at the beginning of the study. The students had a minimum, of awareness and practice in reading strategies however after a comprehensive study, there was an improvement. Students showed a great result in using reading strategies at the lessons.

**Conclusion.** In this article, we have substantiated the importance of reading in the modern world, gave recommendations on teaching reading and made a survey to understand the general awareness of reading strategies of 8th grade student. In the main part of the article, the author introduced the algorithms and stages of working with the text to be used in the teaching at the lessons of the English language.

#### References

[1] Song, K., Kwon, H. J., & Na, B. (2019). A comprehensive review of research on reading comprehension strategies of learners reading in English-as-an-additional language. *Educational Research Review*, 100308. [Electronic resource]: URL: <https://sci-hub.se/version/2020-07-11/10.1016/j.edurev.2019.100308#> (data of access: 15.03.2021).

[2] Snow, C. E., Burns, S. M., & Griffin, P. (Eds.). *Preventing reading difficulties in young children*. //Washington, DC: National Academy Press – 1998. – pp. [Electronic resource]: URL: <https://files.eric.ed.gov/fulltext/ED416465.pdf> (data of access: 25.03.2021).

[3] Okoye, P.U. & Ene, F. N. *Hand Book for the Revival of Reading Culture*. //Enugu, Nucik Publishers. – 2011. [Electronic resource]: URL: <http://eprints.gouni.edu.ng/1675/1/HANDBOOK%20ON%20THE%20REVIVAL%20OF%20READING%20CULTURE%20IN%20NIGERIA.pdf> (data of access: 15.03.2021).

[4] Oberholzer, B. The relationship between reading difficulties and academic performance among a group of Foundation Phase learners //Thesis. University of Zululand. Journal of Higher Education, Washington D.C. – 2005 – vol1.6 No.3 – 206 p. [Electronic resource]: URL: <http://uzspace.unizulu.ac.za/bitstream/handle/10530/238/The%20Relationship%20between%20Reading%20Difficulties%20%26%20Academic%20Performance%20-%20%20B%20Oberholzer.pdf?sequence=1&isAllowed=y> (data of access: 16.03.2021).

[5] Gal'skova N.D. Sovremennaya metodika obucheniya inostrannym yazykam. Posobie dlya uchitelya. – M.: ARKTI, 2004. – 192 s. [Electronic resource]: URL: <http://learnteachweb.ru/articles/galskova.pdf> (data of access: 16.03.2021).

[6] Lyahovickij M.V. Metodika prepodavaniya inostrannyh yazykov. Metodicheskoe posobie. – M.: Drofa, 2006. – 369 s. [Electronic resource]: URL: <https://lib.vsu.by/jspui/bitstream/123456789/2238/5/.pdf> (data of access: 10.03.2021).

[7] Pavlova I.P. Problemy obucheniya studentov-nefilologov chteniyu i audirovaniyu inoyazychnyh tekstov s professional'noj napravlennost'yu //Vestnik MGLU. Obrazovanie i pedagogicheskie nauki. – 2017. – Vyp.4 (775). – S.73-87.

[8] Milovanova L.A. Obuchenie strategiyam inoyazychnogo chteniya //Izvestiya VGPU. Pedagogicheskie nauki. – 2015. – № 1(96). – S.63-67 [Electronic resource]: URL: <http://izvestia.vspu.ru/files/publics/96/63-67.pdf> (data of access: 16.01.2021).

[9] Lie, J. & Cecilia. Effects of learning strategies on students reading literacy performance. The Reading Matrix, 2012. – Vol.12 (1) – 30-38 p. [Electronic resource]: URL: [https://readingmatrix.com/articles/april\\_2012/li\\_chun.pdf/](https://readingmatrix.com/articles/april_2012/li_chun.pdf/) (data of access: 25.03.2021).

[10] Smetannikova N.N. Strategial'nyj podhod k obucheniyu professional'no-specializirovannomu chteniyu // Vysshee obrazovaniye segodnya. – 2018. – № 9. – S.54-59 [Electronic resource]: URL: <https://elibrary.ru/item.asp?id=35553007> (data of access: 24.03.2021).

[11] Abisheva S., Polyak Z., Asylbekova M., Sabirova D., Abaeva M. Issledovaniya sformirovannosti navykov chteniya u mladshih shkol'nikov russkoyazychnyh shkol goroda Almaty //Pedagogika i psihologiya. – 2020. – № 4(45). – S.160–169; DOI: 10.51889/2020-4.2077-6861.20 [Electronic resource]: URL: <https://journal-pedpsy.kaznpu.kz/index.php/ped/article/view/134> (data of access: 17.03.2021)

[12] Bredihina I. A. Metodika prepodavaniya inostrannyh yazykov: Obuchenie osnovnym vidam rechevoj deyatel'nosti: ucheb. posobie /I.A.Bredihina; M-vo obrazovaniya i nauki Ros. Federacii, Ural. feder. un-t. – Ekaterinburg: Ural. un-ta, 2018. – 104 s.

[13] Dorohov R.S. Rol', sodержanie i specifika obucheniya chteniyu na zanyatiyah po anglijskomu yazyku // Uchenye zapiski. Elektronnyj nauchnyj zhurnal Kurskogo gosudarstvennogo universiteta. – 2018. – № 4(48) [Electronic resource]: URL: <http://scientific-notes.ru/#new-number?id=53> (data of access: 25.03.2021).

[14] Kurmanbayeva T., Shaibakova D. Lexico-stylistic features of scientific terminology in technical texts: lingvodidactic aspect //Pedagogy and Psychology. – 2020. – № 2(43). – S.20–29; DOI: 10.51889/2020-2.2077-6861.03 [Electronic resource]: URL: <https://journal-pedpsy.kaznpu.kz/index.php/ped/article/view/48> (data of access: 21.03.2021)

[15] Noli, M.N. & Sabariah, M.R. (2011). Reading strategies of English as a second language (ESL) high and low achievers. English Language Journal, 2011. – Vol 4 – 49-66 p. [Electronic resource]: URL: [https://readingmatrix.com/articles/april\\_2012/li\\_chun.pdf/](https://readingmatrix.com/articles/april_2012/li_chun.pdf/) (data of access: 25.03.2021).

#### Развитие навыков чтения в обучении английскому языку

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#### Аннотация

В статье описывается актуальность и значимость развития навыков чтения в современном мире как инструмента передачи и получения информации. Автор знакомит с алгоритмами и этапами работы с текстами и их реализацией на уроках английского языка. В этой статье основное внимание уделяется использованию таких видов стратегий чтения: углубленное чтение, скимминг и сканнинг в языковых классах. В статье также

указывается на важность использования стратегий для любых целей чтения. Чтобы успешно понимать текст, учащийся должен овладеть набором техник и стратегий. Стратегии используются индивидуально, но, чтобы выбрать подходящую стратегию, учащийся должен их знать. В данном случае была предложена анкета об использовании стратегий чтения на уроке, чтобы понять общую осведомленность среди 24 учеников 8-х классов. Эта статья написана как дополнительный компонент к выпускной дипломной работе.

*Ключевые слова:* навыки чтения; стратегии чтения; сканнинг; скимминг; углубленное чтение; процесс чтения; этапы чтения.

### Ағылшын тілін оқытуда оқу дағдыларын дамыту

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#### *Аңдатпа*

Мақалада ақпарат беру мен алу құралы ретінде қазіргі әлемде оқу дағдыларын дамытудың өзектілігі мен маңыздылығы сипатталған. Автор мәтіндермен жұмыс істеу алгоритмдері мен кезеңдерін және оларды ағылшын тілі сабағында енгізуді ұсынады. Бұл мақалада басты назар оқылымның осындай түрлерін қолдануға бағытталған: тілдік сабақтарда терең оқу, скимминг және сканнинг. Мақалада оқудың кез-келген түріне арналған стратегияларды қолданудың маңыздылығы анықталған. Мәтінді сәтті түсіну үшін білім алушы техникалар мен стратегиялардың жиынтығын игеруі керек. Стратегияны қолданудан бөлек, қандай стратегияны, стратегияның қолданылуын, мазмұның біліп тандау үшін оқушы жоғарыда айтылған нәрсені біліп, түсінуі қажет. Бұл жағдайда 8-сынып оқушылары арасындағы 24 хабардарлықты түсіну үшін сабақта оқу стратегиясын қолдану туралы сауалнама ұсынылды. Бұл мақала дипломдық жұмыстың қосымша компоненті ретінде жазылған.

*Түйін сөздер:* оқу дағдылары; оқу стратегиялары; сканнинг; скимминг; терең оқу; оқу процесі; оқу кезеңдері.

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### **МЕКТЕП ЖАСЫНА ДЕЙІНГІ БАЛАЛАРДЫҢ ШЫҒАРМАШЫЛЫҚ ҚАБІЛЕТТЕРІН ДАМЫТУДАҒЫ ЖОБАЛАУ ТЕХНОЛОГИЯСЫ**

#### *Аңдатпа*

Мақалада мектепке дейінгі балалардың шығармашылық қабілеттерін дамытуда жобалық қызмет технологиясын жүзеге асыру үдерісі қарастырылады. Жалпы білім беру мазмұнын жаңарту шеңберінде балалардың шығармашылық қабілеттерін дамытудың маңыздылығы анықталады. Теориялық талдау негізінде зерттеу тақырыбы бойынша «жобалау қызметінің технологиясы» және «шығармашылық» ұғымдарының негізгі анықтамалары беріледі. Автор өз зерттеулерінің контекстінде жобалық қызмет технологиясының ерекшеліктерін және мектепке дейінгі мекемеде ұйымдастырылған оқу іс-әрекеті барысында балалардың шығармашылық қабілеттерін дамытуда тәрбиешінің қолдану тиімділігін қарастырады. Сонымен қатар Л.С.Дышлевый мен Л.В.Яценко бойынша шығармашылық қызметтің бес белгісін, Т.Е.Сыздықова мен Ю.Б.Иманова бойынша белсенді топтық жұмыс арқылы мектепке дейінгі балалардың шығармашылық қызметін дамыту сапасының тиімділігін білдіреді. Сурет салуға, жапсыруға және жапсыруға шығармашылық сабақтар өткізудің практикалық мысалдары келтірілген.

*Түйін сөздер:* шығармашылық; қабілет; жобалау; технология; оқу іс әрекеті; дамыту; мектеп жасына дейінгі.