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SECTION 1. EDUCATION, EQUALITY AND DEVELOPMENT

UDC 740

Zak A. Ways to solve problems for younger students

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Abstract. *The article presents a study related to the study of ways to solve problems in younger students. A total of 145 second, third, and fourth grade students participated in the study's group experiments. Children solved the problems of the author's modification of the "Game of Five" methodology in a visual-figurative form. It was shown that with age, by a statistically significant amount, the number of children solving problems in a general (meaningful) way increases, and the number of children solving problems in a private (formal) way decreases less significantly.*

Keywords: *second graders, third graders, fourth graders, technique "Game of five", general and particular ways of solving problems.*

1. Introduction.

According to the provisions of the new Federal State Educational Standard for Primary General Education [7], the mastering of the main educational program by children in the primary grades of school should lead not only to the achievement of subject educational results based on the assimilation of the content of programs of specific academic disciplines, but also to the achievement of meta-subject results that reflect, in in particular, the formation of cognitive competencies.

The subject of our study was the cognitive competence associated with the development of ways to solve problems of a search nature. The purpose of the study was to develop a methodology that allows determining the formation of the named cognitive competence in primary school students, and then, on the basis of experiments with this methodology, to characterize the ways of solving search problems by younger students.

In understanding the characteristics of ways to solve problems of a search nature, we relied on the ideas of two types of cognitive activity developed in the dialectical theory of knowledge (see, for example, [6]) and experimentally implemented in the works of V.V. Davydov (see, for example, [2]) and his collaborators [1], [3], [4], [5].

According to these ideas, a person's knowledge of the surrounding world can be aimed at reflecting the internal connections of objects and phenomena. In this case, knowledge will be theoretical, meaningful, reasonable. At the same time, human cognition can also be aimed at reflecting the external relations of objects and phenomena. In this case, knowledge will be empirical, formal, rational.

In the first case, human cognitive activity will be effective, since its result is an understanding of the grounds, causes and patterns of change in objects of knowledge. In the second case, cognitive

activity will be ineffective, since its result is only a description and ordering of the observed features of changes in cognizable objects.

Based on these ideas about the two types of cognition, it was accepted (see, for example, [1], [2], [3], [5]) that the development by a person of ways to solve problems of a search nature in one case involves the allocation of significant relations in conditions for achieving the desired result, otherwise such development is not related to the disclosure of significant relationships. In the first case, the applied methods of solving the problem can be characterized as meaningful, in the second case - as formal.

Achieving a cognitive meta-subject result associated with the development by schoolchildren in the course of learning how to solve problems of a search nature involves the formation of a mental action of analysis, which is associated with the analysis of conditions for obtaining the desired result.

In some cases, such an analysis is implemented as a formal analysis, which only divides the proposed conditions into separate data - this is typical for a non-generalized, empirical method of solving problems of a search nature (see, for example, [1], [2], [3], [5]) .

In other cases, the analysis of conditions is connected not only with the selection of data and their relationships, but also, most importantly, with the clarification of their role in a successful decision: which of them is essential and necessary, and which is insignificant and accidental. This is a meaningful, clarifying analysis, serving as a condition for a generalized, meaningful way to solve search problems.

The development of generalized ways to achieve the desired result is characterized by the ability to carry out a meaningful analysis of the proposed conditions, associated with the allocation of significant data relationships. As a result, all problems of this class are successfully solved. The fact of unsuccessful solution of one or more of them indicates the absence of a meaningful analysis and, therefore, the presence of a non-generalized way to solve the proposed problems.

The purpose of our study was to characterize the ways in which younger students solve problems of a search nature. In achieving this goal, we relied on the above provisions, revealing the characteristics of theoretical and empirical thinking,

2.Materials and methods.

2.1. Methodology "Game of Five"

On the basis of ideas about the originality of different approaches to the analysis of the conditions of the proposed problems related to the same class, and the different ways of solving them associated with these approaches, requirements were developed for an experimental situation designed to determine the nature (generalized or non-generalized) of the method of action when achieving the required result.

First, the subject must be offered not one, but several problems to solve.

Secondly, these problems must have a common principle of solution. Thirdly, their conditions must differ in external, directly observable features.

Compliance with the noted requirements for the experimental situation, aimed at determining the nature of the method for solving the proposed problems, makes it possible to determine when children use meaningful analysis when solving tasks of the same type and when children use formal analysis. As a result, favorable opportunities are created in order to determine the formation of cognitive meta-subject competence associated with the development of ways to solve search problems.

The material for the development of the technique was the well-known puzzle "The Game of Fifteen", invented in the 19th century in the United States. The puzzle is a set of 15 identical square tiles with numbers printed on them, lying in a square box. The length of each side of the box is four times the length of the side of the knuckle. As a result, one square field, equal in area to one bone, remains unfilled in the box. The goal of the game is to arrange the tiles in ascending order by moving them around inside the box. Here it is necessary to note an important game point, which is that. that it is necessary to make the minimum possible number of movements of the knuckles.

In our study, the puzzle under consideration has undergone a certain modification. This modification consisted in the fact that instead of fifteen chips moving around a sixteen-cell playing field, only five chips were used moving around a six-cell playing field. As in the original puzzle "Game of fifteen", in our modification of this game there was one free cell and chips that moved across the playing field (to an empty place) in any direction by moving the rook to an empty place.

So, in order to transform the initial order of chips into the required order in six moves, you need to move the following chips sequentially to an empty place: 1, 2, 3, 5, 4 and 1 (see Fig. 1).

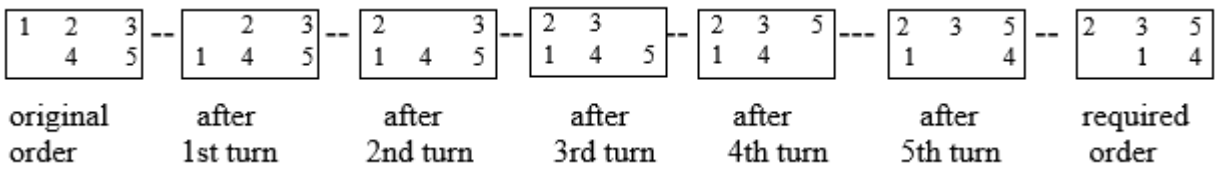

Fig. 1. Solving the problem "Game of Five" in six moves.

An important feature of the “Game of Five” is the ability to develop equivalent problem situations on its basis. In this case, if the tokens are numbered differently, the tasks have the same number of moves and the identical route of the tokens' movement in the process of transforming the initial situation into the required one.

For example, problem 1 is equivalent to problem 2, since both problems are solved by performing six actions to move chips and the route of movement in both problems is the same.

Fig. 2. Equivalent problems.

In a series of preliminary experiments carried out on an individual basis, primary school students, in particular, those studying in the third grade, solved the problems of the "Game of Five". Each child solved eight equivalent tasks in a visual-active form, in which eight movements had to be performed for a successful solution. The solution of the problems was organized as follows: the child moved cardboard chips with his hand along a wooden board, on which a six-cell field was marked.

An important feature of these experiments was that the optimal number of moves was not given to the subjects. This approach created favorable conditions in order to establish on which problem the child can find the principle of solving all equivalent problems, which was the optimal (i.e., the shortest) route for moving chips for all problems in order to transform the initial situation into the required one in eight moves.

At the same time, it was believed that the method of solving problems would be general, meaningful if the child found this principle (ie, the shortest route) quickly, after solving one or two problems. In the event that the child was not able to find the optimal route after a series of unsuccessful attempts (i.e., after solving five or six problems), but found routes where more than eight moves had to be completed (ten - twelve, etc.) , then this method of solving was qualified as a private, formal, empirical one, since this method was found only after a lot of trial and error.

Thus, in these experiments it was shown that the result of solving the problem may not be related to the method of obtaining it: the correct solution (obtaining the required arrangement of chips) can be provided by moving chips both along the shortest route and in more than required number of moves .

In our main experiments, an attempt was made to connect the indicated moments in such a way that a successful solution could be achieved only by finding the shortest route. For this purpose, it was necessary to build such a methodology (based on the “Game of Five” material) so that the correct solution of the problem, i.e., obtaining the required arrangement of chips, presupposed a meaningful, theoretical method of solving the problem, associated with the abstraction of essential relations from non-essential relations in the conditions of the problem .

And vice versa, an incorrect solution of the problem should indicate an empirical method of solution, in which significant dependencies in the condition of the problem are not distinguished, as a result of which the problem is solved in more than eight moves.

In addition, it was required to modify the variant of the "Game of Five" methodology used in the preliminary experiments into such a variant that could correspond to the conditions of group work in the classroom.

In this case, the child solves problems not in a visual-effective form, as in an individual experiment, but mentally, in a visual-figurative form. This means that the solution of the problem is carried out not by moving the chip by hand across the playing field, but by mentally moving the number to a free cell of the playing field.

For convenience of location on a sheet of paper, the playing fields were deployed along the length of the sheet (vertically), - see Fig.3.

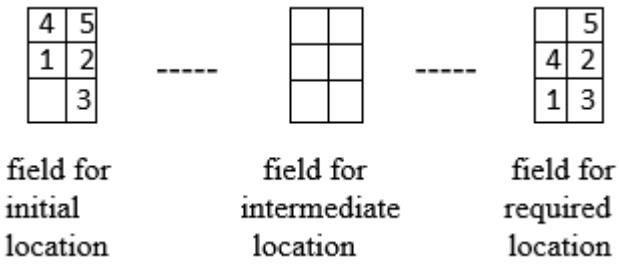

Figure 3. Playing fields in vertical orientation.

With this orientation of the playing fields on the sheet, two numbers could be moved one time either up or down (as in this example, the numbers 1 and 4). After mentally moving the number, the resulting arrangement is recorded in the spaces specially left for this, unfilled with numbers, on the intermediate playing field, which is located between the initial (initial) and final (required) arrangements of numbers.

When developing a methodology based on the material of the "Game of Five", it was taken into account that there are two types of routes for moving chips around the playing field: movement along the "large circle" and along the "small circle". In the first case, the pieces move across six cells of the field, so that the direction of movement sometimes changes after two moves (see Fig. 4).

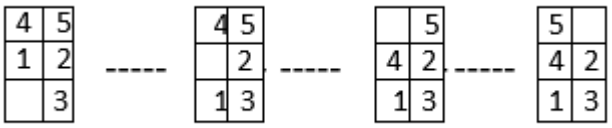

Fig. 4. Moving chips around the "big circle".

The above example shows that the numbers 2 and 3 remain in their places for all three moves, while the numbers 1, 4 and 5 move alternately to a free cell.

In the second case, the pieces move only over four (neighboring) cells, so the direction of movement of the pieces changes after each stroke (Fig. 5).

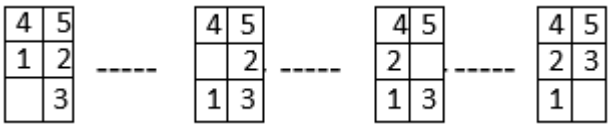

Fig. 5. Moving chips around the "small circle".

The above example shows that the numbers 4 and 5 all three moves remain in their places, and the numbers 1, 2, 3 move one after the other.

These features of the routes for moving pieces in the "game of five" problems were used in our methodology (see Blank).

2.2. Diagnostics of ways to solve problems

The diagnostic session proceeded as follows. First, the organizer of the lesson (psychologist or teacher) depicts the condition of the task on the blackboard (Fig. 6):

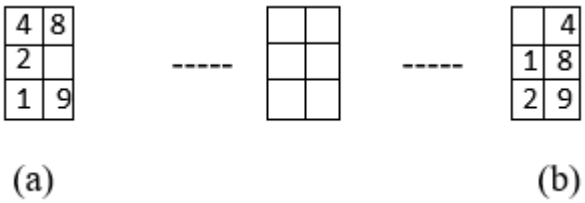

Fig. 6. First task on the chalkboard.

The children are told: “The left arrangement of numbers (a) is the initial, and the right (b) is the final, required. This location must be obtained in two steps. One action is the mental movement of any number to an empty space up, down or to the side.

In this problem, you need to do two such mental actions. First, mentally move the number 8 down, because it should not be at the top, but in the middle. Let's write the result of this mental action like this, "the teacher writes the number 8 in the middle of the playing field, and the remaining numbers are 4, 1, 2 and 9, - rewrites in the same places (Fig. 7).

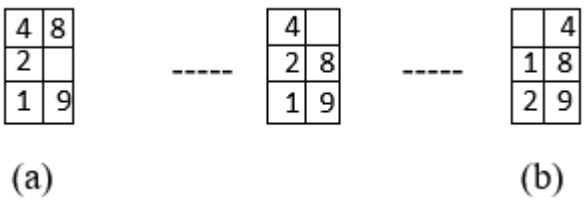

Fig. 7. Solution of the first problem on the blackboard.

"With the second mental action, we move the number 4 to the side. The result of this movement does not need to be recorded, because it is already in the problem statement. This is how the solution of problems for moving numbers in two actions is written".

The organizer of the lesson depicts the conditions of the second task, where the required location must be obtained from the initial one in three steps:

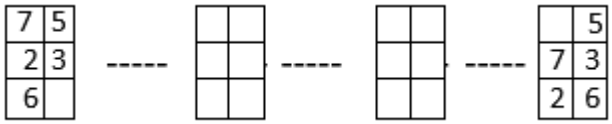

Fig. 8. Second task on the chalkboard.

The solution to this problem is collectively considered and the organizer writes down the results of the first and second actions on the board, since the result of the third action is already given in the required location:

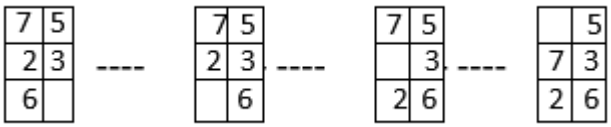

Fig. 9. Solution of the second problem on the chalkboard.

At the same time, the organizer of the lesson specifically draws the attention of the children to the fact that in one action only one digit changes place, and the rest are rewritten without changes.

After that, forms are distributed with three training (No. 1, 2, 3) and eight main tasks (No. 4, 5, 6, 7, 8, 9, 10, 11), – Fig. 10.

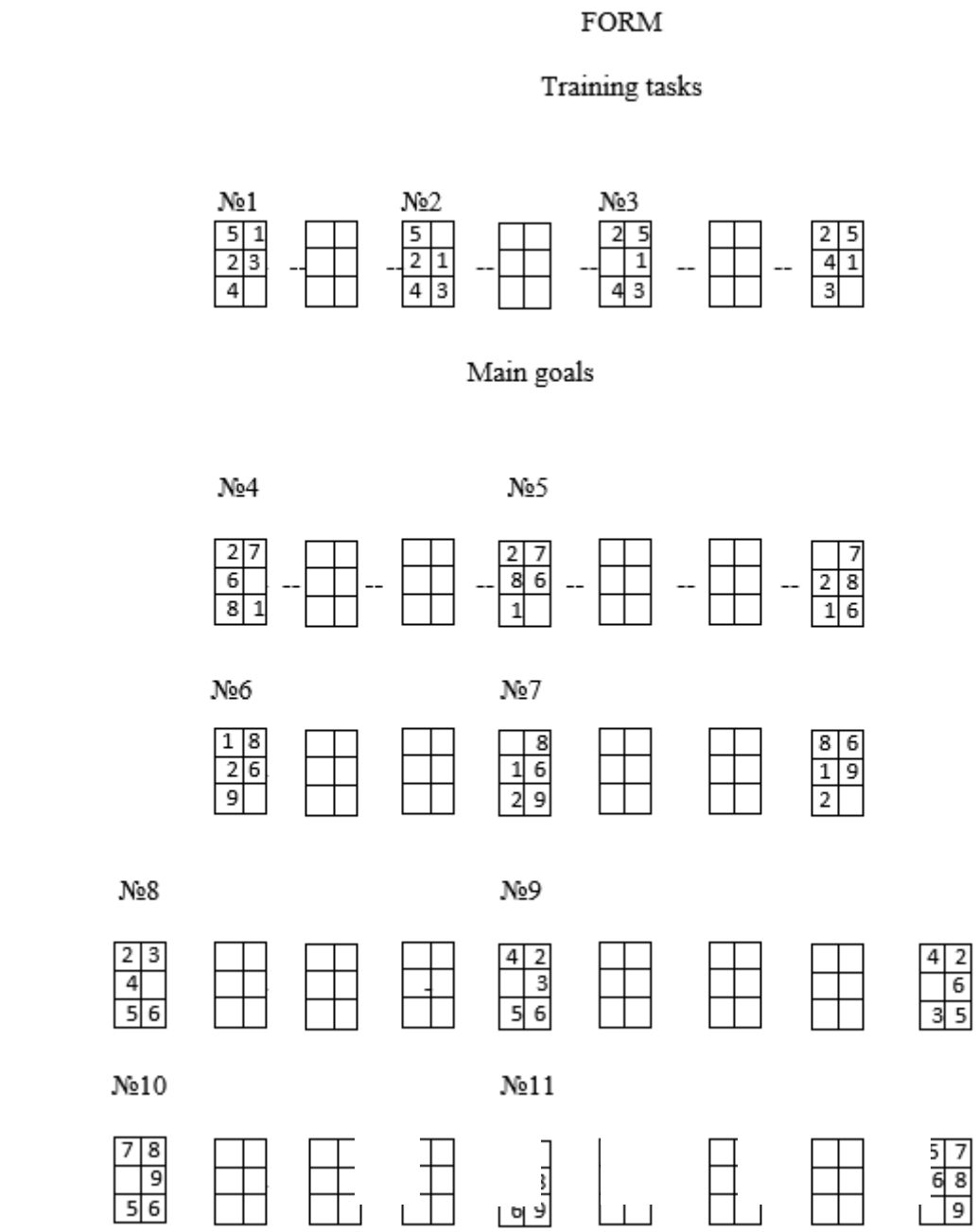

Fig.10. FORM.

Children are invited to write their names at the top of the form and then the necessary explanations are given: “Look at the sheet. First (above) the conditions of three training tasks are drawn: they are solved in two steps.

Next, the conditions of the main tasks 4, 5, 6 and 7 are drawn, - these tasks must be solved in three actions. Then you need to solve the main problems 8, 9, 10 and 11 - in these problems you need to find four actions.

Now solve the training problems. Write down the solution as we did on the board - put the numbers in the empty spaces. Remember that in one action only one digit is mentally moved".

Walking around the class, the organizer of the lesson checks the solution of the training problems and helps the children correct the mistakes in their movements, if they immediately rewrite two digits to free places, and not one. After checking the training tasks, the children are asked to solve the main tasks.

Noted features of the routes for moving chips in problems "Games of five" were used in our methodology in the following way. So, tasks where it is required to perform three actions - (Nos. 4 and 5) were solved on the basis of moving the numbers along the "small circle", and tasks No. 6 and No. 7 (also with three actions) were solved on the basis of moving along the "big circle" ; tasks 8 and 9 (where it was required to perform four actions) were solved by moving the numbers in a "small circle", and problems No. 10 and 11 (where it was also required to perform four actions) were solved by moving the numbers in a "large circle". In tasks Nos. 1, 2 and 3, it was required to perform two actions.

Thus, the correct solution of all problems presupposes a meaningful, theoretical way of this solution for the following reasons:

– first, the smallest number of moves is regulated;

– secondly, when solving problems, it is forbidden to use drafts and make any corrections to the already written figures;

– thirdly, for each of the two types of route (moving numbers in a "small circle" and moving numbers in a "large circle"), only two problems were built.

This option of distributing tasks with different types of routes creates favorable conditions for the child to discover the optimal route and transfer it from one task to another.

It is important to note that the route types underlying the solution of problems change constantly, every two tasks. This was done in order to exclude a possible accidental correct solution of problems and, in turn, ensure their conscious solution, the necessary moment of which is the child's appeal to his own mode of action in order to consider and evaluate it.

3.Results.

A total of 145 junior schoolchildren participated in a group survey using the "Game of Five" method at the end of the school year: 48 second-graders, 46 third-graders, 51 fourth-graders. The data obtained in the survey are placed in the table.

Table

The number of students in the second, third and fourth grades who solved all the main problems (No. 4 - 11), part of the main problems (No. 4 - 7) and solved only three training problems (No. 1 - 3).

Classes	Problems		
	1- 11	1 - 7	1 - 3
Second	15 (31,2%)*	25(52,1%)	8(16,7%)
Third	20(43,5%)	21(45,6%)	5(10,9%)
Fourth	27(52,9%)*	22(43,1%)	2(4,0%)

Note: * $p<0.05$

The data presented in the table allow us to note the following features.

Firstly, in the second grade, the number of children who solve the problems of the “Game of Five” method in a private way (that is, those who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh) makes up the majority of the sample of this age - 52 ,1%.

In the remaining two grades (third and fourth), the number of children who managed to solve the problems of the "Game of Five" method in a private way (i.e., who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh) is less than half of the sample: in the third grade - 45.6%, in the fourth grade - 43.1%.

The noted results allow us to conclude that the proportion of children who managed to solve the problems of the “Game of five” method in a private way (i.e., those who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh) with age (from the second grade to fourth grade) decreases: from 52.1% in the second grade and 45.6% in the third grade to 43.1% in the fourth grade.

Secondly, in the second grade, the number of children who managed to solve the problems of the “Game of Five” methodology in a general, meaningful, theoretical way (that is, who correctly solved all the main problems from the first to the eleventh) is approximately one third of the sample of this age - 31, 2%. The noted number of children is less than the number of children who managed to solve the problems of the "Game of five" method in a private way (i.e., those who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh), which makes up the majority of the sample - 52.1 %.

In the third grade, the number of children who managed to solve the problems of the Game of Five methodology in a general, meaningful, theoretical way (i.e., who correctly solved all the main problems from the first to the eleventh) is approximately two-fifths of the sample of this age - 43.5%. The noted number of children is approximately equal to the number of children who managed to solve the problems of the "Game of Five" method in a private way (i.e., those who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh), which is 45.6%.

In the fourth grade, the number of children who managed to solve the problems of the "Game of Five" methodology in a general, meaningful, theoretical way (i.e., who correctly solved all the main problems from the first to the eleventh) is more than half of the sample of this age - 52.9%. The noted number of children is noticeably greater than the number of children who managed to solve the problems of the "Game of Five" method in a private way (that is, those who correctly solved only problems from the first to the seventh and incorrectly solved the problems from the eighth to the eleventh), which is 43.1%.

The noted results allow us to conclude that the proportion of children who managed to solve the problems of the “Game of Five” methodology in a general, meaningful, theoretical way (i.e., who correctly solved all the main problems from the first to the eleventh) with age (from the second grade to the fourth class) increases: from 31.2% in the second grade and 43.5% in the third grade to 52.9% in the fourth grade.

Thirdly, the number of children who failed to solve a single main problem (from the first to the eleventh) and who solved only the training problems of the "Game of five" method decreases from class to class: in the second grade there were 16.7% of such children, in in the third grade - 10.9% and in the fourth grade - 4.0%.

Thus, the analysis of the data presented in the table shows that with age (from the second grade to the fourth grade), the number of students who solved the problems of the "Game of Five" method in a general way increases and the number of students who solve problems in a private way and does not solve any decreases. one main task.

4. Conclusion.

The performed experimental work was aimed at characterizing the ways of solving search problems by younger students. For this, the “Game of Five” technique was developed, which includes eleven search tasks that could be solved in different ways: general, associated with the identification of significant relationships in the conditions of tasks, and private, associated with the allocation of only their external features in the conditions of tasks.

To achieve this goal, preliminary individual experiments and main group experiments were carried out, in which students of the second, third and fourth grades participated.

As a result of the experiments, it was shown that with age, from the second grade to the fourth grade, the number of children solving problems in a general way increases and, accordingly, the number of children solving problems in a private way decreases.

The results of the study contain knowledge that characterizes the age dynamics (within the elementary school) of children mastering the general way of solving search problems. This knowledge expands the ideas of developmental and pedagogical psychology about the nature of the mental development of children during education in the primary grades of the school.

In future studies, it is planned to conduct experiments with students in the fifth and sixth grades in order to determine the distribution of children in early adolescence who solve problems in general and particular ways.

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SECTION 2. INFORMATION SYSTEMS AND SOFTWARE

UDC 658.2:338.22

Bazarov V.V. Production Management Information Systems MES

Информационные системы управления производством MES

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Abstract. *The article describes the work and implementation of the MES production management system*
Keyword: *mes, management, system, production*
Аннотация. *В статье описывается работа и внедрение системы управления производством MES*
Ключевые слова: *mes, управление, система, производство*

Управление производством, этот процесс на российских предприятиях связан с понятием внутрицехового управления. Однако современные стандарты трактуют этот уровень управления как управление производством, в отличие от управления предприятием и компанией. На этом уровне акцент управления сдвигается от воздействия на людей, что свойственно менеджменту, к воздействию на машины. Эта группа функциональных подсистем информационной системы производственного предприятия получила наименование информационной системы управления производственными процессами (Manufacturing Execution System - MES). Международная ассоциация производителей и пользователей систем управления производством (MESA International) в 1994г. утвердила модель MESA-11, а в 2004 г. модель c-MES. Эти модели легли в основу разработки серии стандартов управления производством, которые фактически дополняют эти модели. Согласно этим моделям можно определить следующий состав функциональных подсистем в MES [1]:

Управление состоянием и распределением ресурсов (resource allocution and status RAS), оперативное/детальное формирование расписаний (operations/ detail scheduling ODS), диспетчеризация производства (dispatching production units – DPU), управление документами (document control — DOC), сбор и хранение данных (data collectim/acquisition — DCA), управление производственным персоналом (labor management I.A1), управление качеством (quality management QA), управление производственными процессами (process management PM),управление техобслуживанием и ремонтом (maintenance management — MM),

прослеживаемость (product tracking and genealogy PTG), анализ производительности (performance analysis PA). Достаточно разнообразный функционал имеет данная система управления производством, в реальном времени можно посмотреть работу оборудования, соотношения брака продукции к выполненной работе, либо запланировать ремонт. На рисунке 1,2 изображен пример внедрения MES системы, производственные задания и время на их выполнения, на рисунке 1 видно, что до внедрения, все план задания находятся в разброс, большое количество простоя. После внедрения, план задания скомпонован, простоя оборудования не наблюдается.

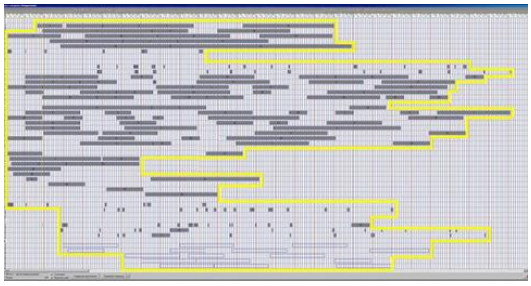


Рис. 1. До внедрения MES системы

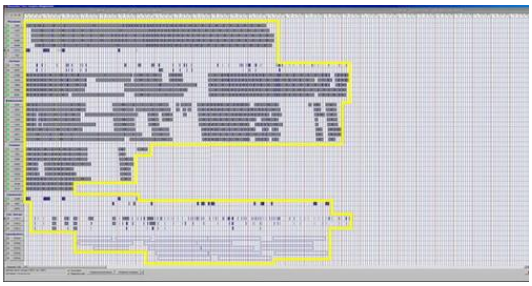
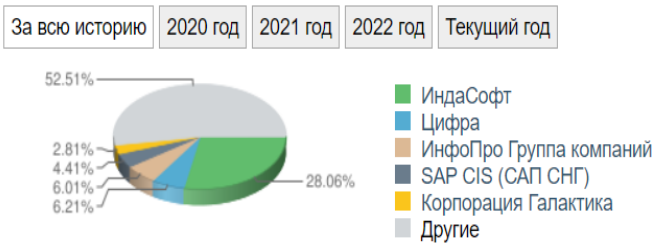


Рис. 2. После внедрения MES системы

Внедрения системы MES на производственное предприятие можно заказать, не выходя с рабочего места. Компании, внедряющие в свое производство системы класса MES, стремятся решить задачи роста конкурентоспособности выпускаемой продукции; минимизации издержек на производстве; улучшения производительности труда и экономии ресурсов персонала; увеличения прибыли; а также минимизации брака на производстве. В настоящий момент перед российскими производителями в условиях импорт замещения во всех сферах встает вопрос выбора отечественных систем управления предприятием взамен зарубежных аналогов. Проанализируем вклад российских разработчиков в процесс автоматизации современной промышленности. Согласно данным российского аналитического интернет-портала TADVISER [2] лидерами по количеству проектов внедрений (MES - управление производствами и ремонтами) являются десятки компаний (рис 3,4).



№	Подрядчик	Проектов в отрасли
1	ИндаСофт	140 (список)
2	Цифра	31 (список)
3	ИнфоПро Группа компаний	30 (список)
4	SAP CIS (САП СНГ)	22 (список)
5	Корпорация Галактика	14 (список)
6	Без привлечения консультанта или нет данных	10 (список)
7	SITEK Group (СИТЕК)	9 (список)
8	Ultimate Humanless Enterprises, Ultimate H.E. (Интеллектуальные управляющие системы предприятия)	9 (список)
9	Малахит Интеллектуальные Системы	8 (список)
10	Три Троникс Технолоджи (Tree Tronix Technology)	8 (список)

Рис.3. Лидеры по количеству проектов внедрений MES-системы

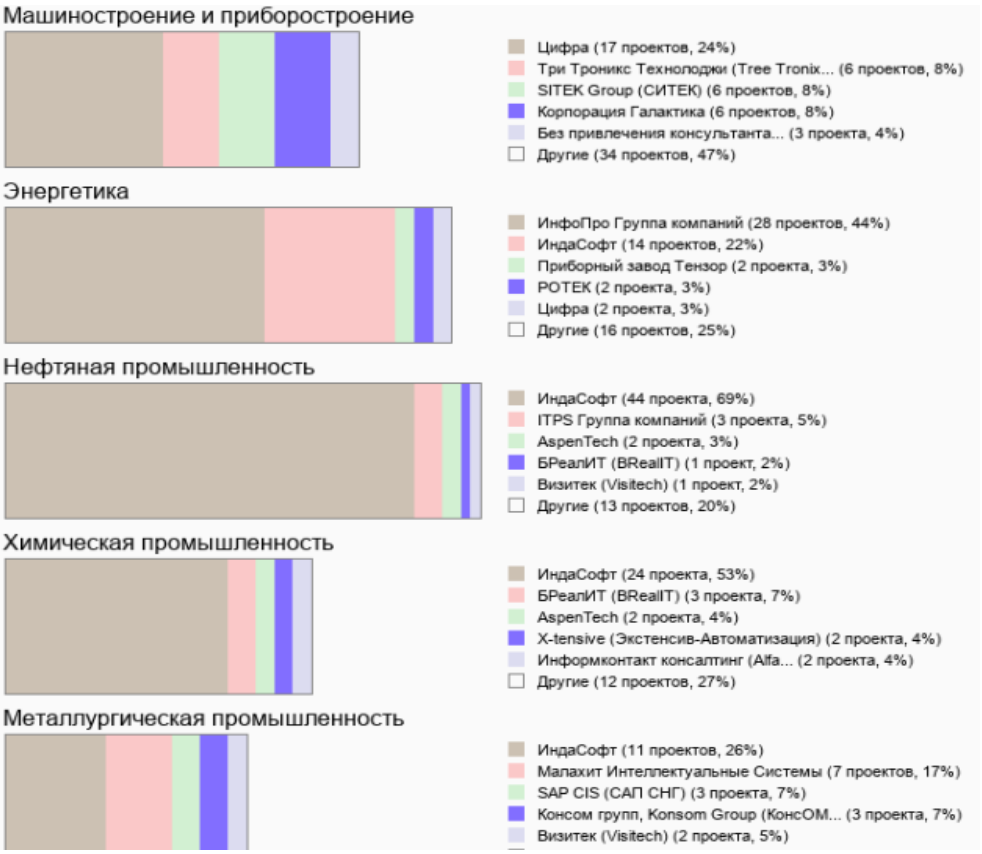


Рис.4. Лидеры по проектам в отраслях

Если проанализировать данные российского аналитического интернет портала TADVISER за последние три года (2020-2022 гг.), то можно выделить два безусловных лидера среди российских разработчиков, внедряющих системы класса MES – это «Цифра» и «ИндаСофт». Если говорить об авиационной промышленности, которая относится к тяжелому машиностроению то лучше рассмотреть интеграторов «Цифра», так как у нее всех больше проектов в машиностроение. Если у вас мелкосерийное или крупносерийное предприятие и вы хотите владеть всей производственной информацией в режиме реального времени, то это один из успешных проектов для реализации.

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2. Аналитическое агенство TADVISER [Электронный ресурс]. – Режим доступа: https://www.tadviser.ru/index.php

SECTION 3. PEDAGOGY, LANGUAGE AND CULTURE IN EDUCATION

UDC 7

Alibekova A.O., Kambarova G.S. TikTok as a means of teaching a foreign language

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Abstract. *The article is devoted to the problem of using the social network TikTok in foreign language classes in high school. The work justifies the choice of this social network, considers its advantages and disadvantages, and also provides examples of exercises developed on the basis of this service. The purpose of the article is to explore the possibilities of TikTok as a means of learning.*
Keywords: *generation Z, TikTok; foreign language lessons; a set of exercises; exercise classification; authentic video footage.*

Today, representatives of a new unique generation, Generation Z, are sitting at their desks in schools. These are children born and living in a digital environment, for whom "technologies of the future" are nothing more than an ordinary reality. The Internet has a decisive influence on their development and personal formation; communication with peers and training are becoming more technogenic [3]. Today, the opinion is expressed that working with social networks in the process of teaching a foreign language can contribute not only to strengthening the motivational component in teaching, but also to improving the quality of education in general. We assume that social networks can be considered as an effective means of teaching the 21st century and have made an attempt to discern and demonstrate the educational potential of social networks using the example of the Tik-Tok resource in order to ensure the most effective cooperation with the new generation. The purpose of this work is to explore the capabilities of TikTok as a means of teaching generation Z students.

Tasks:

- justify the choice of this particular social network;
- analyze the content;
- develop a range of TikTok-based exercises;
- Determine whether the Internet resource can be incorporated into the learning process.

The authors put forward the following hypothesis: TikTok in the lessons of a strange language is an effective didactic tool in modern education.

The object is the social network TikTok.

Subject -TikTok as a means of teaching foreign languages. The issue of using innovative technologies in the educational field has already been raised, but a social network such as TikTok has not previously been considered as a means of learning. Accordingly, a number of educational exercises developed by us on the basis of this Internet platform form have no analogues.

Observations of middle-level schoolchildren have shown that at the moment the TikTok platform is the most popular among representatives of this age category. S.M. Bondarenko wrote: "Knowledge learned without interest, not colored by their own positive relations, does not become the active property of a person" [1]. From this follows a completely natural conclusion: teachers need to reckon with the interests and preferences of students. The integration of this particular social network will be an external impetus to launch motivation for the target group, and will also produce an unexpected effect, since schoolchildren are accustomed to the skeptical and negative attitude of adults towards this service.

As a result of studying the proposed content, we have identified the positive aspects of using TikTok:

- presence of native speakers of the target language;
- age and status contrast of users;
- presence of video of different genres and formats;
- rollers duration from 15 seconds or more;
- availability of both entertainment and educational content;
- censorship restrictions.

However, despite censorship restrictions,there are videos of unacceptable content.

The results of a small analysis allow us to conclude that, working with TikTok, the teacher will have to spend time looking for adequate and age-appropriate material for students.

In order to prove or refute the hypothesis we put forward about the possibility of adapting the TikTok network for educational purposes, the authors attempted to develop a number of exercises based on this platform.

I.V. Rakhmanov divides exercises into linguistic and speech; E.I. Passov to conditionally speech and true speech; S.F. Shatilov for linguistic, pre-speech and speech. We focused on the classification proposed by I.V. Rakhmanov and E.I. Passov. Language exercises are aimed at primary mastery of skills in using language phenomena and "are able to help awareness of form" [3]. Speech exercises are aimed at the development and automation of speech skills within the framework of educational or natural communication. Language and speech exercises are directly related to each other, so they must be implemented comprehensively.

Further, for familiarization, one example of language and genuine speech exercises is offered.

Language exercises:

Subject: Past simple, negative

Make sentences in past simple, positive from these words.

Example: The girl in red/ notice/ the boy.

The girl in red noticed the boy.

Watch the video. Compare the statements in the Ex.1 with the video. Correct the wrong ones.

Example: The girl noticed the boy – The girl didn't notice the boy

Speech exercises:

Subject: Education

Stage 1. Discuss which 6 countries in your opinion occupy the leading positions in the ranking of the most "educated" countries.

Stage 2. Watch the video about the top 6 most educated countries. You write the countries and places they occupy.

Stage 3. Think and discuss what might be the reasons why your country is not on this list. Discuss how to fix problems and bring Kazakhstan to a leading position. Design your ideas in the form of a mental map and present to the class.

We concluded that working with this social network reveals almost all aspects of learning a foreign language namely:

- Educational practical aspect:

The use of TikTok's potential in the process of learning will allow students to master both receptive and productive types of speech activities through those technologies that are relevant for their generation.

- Educational aspect:

Viewing video clips in which global and discussion issues are raised and subsequent work with these videos is aimed at developing not only linguistic, but also personal competencies.

Educational aspect:

According to E.N. Solovova, this aspect involves the development of linguistic, sociolinguistic and socio-cultural competencies that are successfully formed when working with TikTok.

- Developing aspect:

Due to the fact that the videos used in the lesson were shot by native speakers, students have the opportunity to see a living language in action, draw parallels between their native and foreign languages; high speed of speech in videos and competent organization of work with them will allow developing a sense of language and linguistic intuition, as well as character traits such as willpower, determination, self-confidence, etc.

Therefore, we summarize that TikTok's potential can be used productively in the process of learning a foreign language due to its diverse capabilities. During the development of the exercises, the authors came to the conclusion that one minute video is an endless resource for various

methodological developments aimed not only at working on language skills, but also at forming critical thinking and the necessary value-meaning attitudes.

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UDC 7

Seitpanova M.K., Nurtaza A.Sh. The use of the theatrical method as an efective method of teaching english language

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Abstract. *This article is devoted to the analysis of the possibilities of using the theatricalization method and the means of theater in the development of the creative thinking of modern schoolchildren. The characteristic of understanding of theatricalization in the works of different authors and its form - dramatization is given. The influence of this technique on the educational and creative aspects of the learning process is described.*

Keywords: *interactive methods of education, subjects of the education process, objects of the education process, creative potential, theatricalization method, dramatization.*

The modern education system is directed to formation of the highly educated, intellectually developed and creative person. Currently, most of the developed countries of the world have come to the conclusion that the process of cognition itself, its forms and methods, and not just teaching, as has long been arranged in traditional learning, is important. Practical experience shows that the implementation of interactive forms and methods of education is undoubtedly not only relevant in the process of modern education, but also promising, since it creates the most suitable conditions for self-realization of students due to the maximum activation of communication resources. Such development is more effective when using non-traditional forms of organization of the educational process. Forms of this kind include the use of theatricalization elements in foreign language lessons.

The relevance of questions of introduction of a method of staging is that there is a need for the pedagogical technologies training to ability not only to perceive and remember information, but also creatively to process it into abilities [5], to see problems and to solve them. For implementation of these technologies at lessons of a foreign language, our way to opinion, it is necessary to involve a full range of feelings, emotions, the maximum realization of intellectual and creative potential, influencing by means of art. Synthesis of arts is most brightly reflected in theater.

L.S. Vygotsky defined the dramatized activity as the most widespread type of children's creativity, reflection of vital impressions is in the form of drama organic for the children's nature and is expressed spontaneously [2].

In works of many authors it is told about the high pedagogical potential of staging. P.Y. Ezhov causes it the resonant nature of emotional and figurative influence, synthesis art and real and also

communicative and reformative opportunities of art [3]. Kononovich, A.A., for example, the pedagogical importance of staging is defined by high personal and motivated activity of participants of process of statement, the social importance, emotional and figurative and information logical levers [6].

T.V. Ryzhkova believes that staging — one of forms of the organization of interaction of the teacher with children as a result of which their relations become closer and confidential [9].

The analysis of works on this subject allowed to come to uniform, capacious definition of staging: staging is nothing but use in pedagogical process of expressive, communication, educational and esthetic means of theater.

In theatrics, introspection of participants is widely used. Students analyze not their activities, but also conduct an analysis of the activities of comrades. Analysis, not evaluation of the work, makes it possible to achieve the best result. The teacher monitors the analysis process so that a benevolent tone is maintained throughout it [8]. Thus, tolerance and respect develops, adequate self-esteem is formed, analytical activity contributes to the ability to form thoughts, concentrate on their competent presentation, the development of logical thinking.

Except creation of performances in the learned foreign language (dramatization) that is the most labor-consuming and difficult product of theatrical educational activity, it is possible to use in the course of training and the following theatrical receptions:

- personification – attraction of an image of the historical hero or character for participation in educational activity at a lesson;
- reading monological and dialogical texts on roles, in any image;
- the dramatized story about the character or the historic figure from his name in image, an episode instsenirovaniye from his life;
- the sketch - small role representation according to the scenario and with use of theatrical attributes, is more often - an instsenirovaniye of fragments from fairy tales;
- game theatrical exercises are etudes, a pantomime, games, both on physical, and on psychological liberation.

The use of such techniques contributes to the expansion of the horizons, the development of speech, plastic and playing abilities among students, overcoming the language barrier and psychological clamp [4].

Quite often there is an identification of concepts of staging and dramatization. However dramatization – a staging element. The game element is always the cornerstone of dramatization therefore staging is closest and clear to children as the leading activity of children is game activity. Theatrical activity also contributes to the esthetic development of pupils, the specifics of children's perception are considered, also transformation of imagination to creative imagination develops, and need of knowledge of the text by heart contributes to the development of emotional memory.

Elements of theater give an opportunity to perceive a training material not only it is rational, but also emotionally.

Returning to a concept of dramatization, it should be taken into account in more detail process of creation of activity of the teacher and pupils when using this method.

Dramatization introduction as product of educational and theatrical activity, in turn, too consists of several stages (according to N.I. Nikonova.):

1) preparatory, the biggest, including perception, judgment of the text; performing analysis;

2) statement;

3) a reflection – reconsideration [8].

Children's performances, as well as other forms of theater productions, are of the exclusive value since this genre, more than other types of creativity, is under construction on game and on communicative activity.

As the learning of foreign language provides broad intersubject communications, attraction of the dramatized scenes at lessons is one of important aspects of realization of intersubject communications which promote formation of outlook of pupils, their esthetic development. The main objective of these lessons — removal of a language barrier and development of such qualities as memory, figurative thinking, the speech.

You can arrange a skill training to use the past time, each of the students should be in more detail and without repeating with the previous participant, the time for inventing can be limited, specific role tasks can be given. The game "Guess what I do" is designed to expand the possibilities of the imagination of the participants, as well as good for the practice of a newly learned effective vocabulary.

One presenter depicts an active action, the participants either guessing the action in a foreign language or repeating. A possible stage of the game - the host shows only part of this action, the next participant continues this action as he sees it and so on until the last participant, usually the word is either guessed or the team comes to a completely new awareness of the word. The exercise game "Director" is suitable for older participants, with a higher level of proficiency in a foreign language. The host, like the real director, will have to answer any questions from a foreign-language audience, the task is to come up with the most justified answer. "Study" is more an exercise or even training than the game itself, but this does not downplay interest in this activity. A condition is given under which participants will have to interact with each other, a speech situation is set, for example, in a cafe or in a hospital, one can be a visitor, and a second doctor or waiter. Such a situation has a beginning, development and end, a resolution of the situation to which students should come with the help of speech and effective improvisation based on their knowledge of the topic, possession of the necessary lexicon, speech structures, etc.

Each "Study" is like a separate small improvisational performance, incredibly interesting for observation from the outside and no less interesting for the participants themselves.

From our experience, we came to the conclusion that theatrical activity makes the educational process interesting. The atmosphere of passion and joy, the feeling of complacency of tasks makes it possible to overcome the shyness that prevents children from freely using the words of someone else's language in speech, and has a beneficial effect on the results of education. Language material is more easily absorbed, and at the same time there is a feeling of satisfaction from learning a foreign language.

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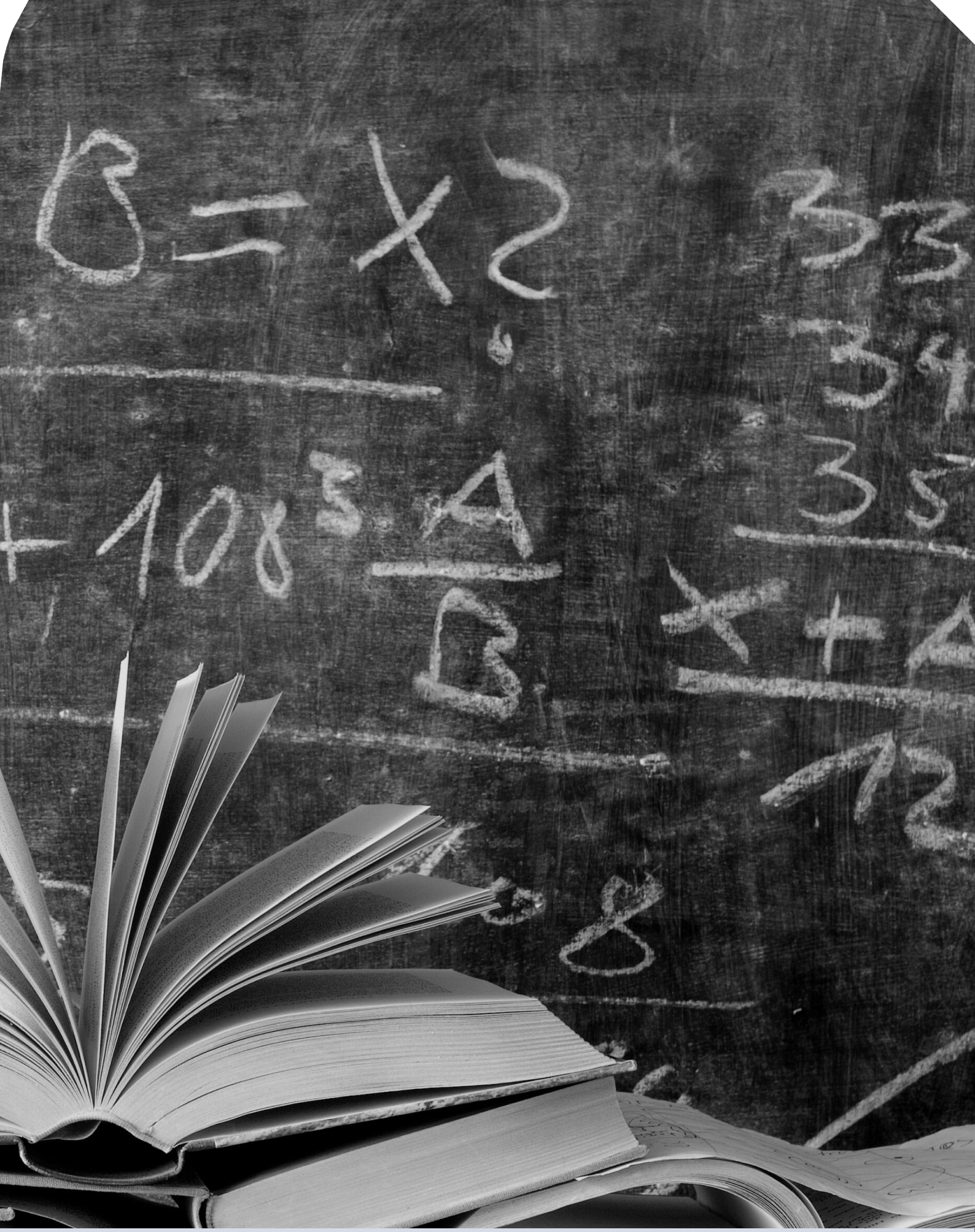

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