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METHODOLOGICAL BASIS FOR THE DEVELOPMENT OF STUDENTS' COGNITIVE COMPETENCE

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Abstract. The article raises the problem of increasing the level of reading literacy of pupils through increasing the level of formation of their skills in working with information. Russian comprehensive program aimed at the formation and development of educational and cognitive competence of schoolchildren can become a mechanism for solving this problem. The practical aspect of the article is a description of international experience in the formation of educational and cognitive competence of students through project assignments, successfully implemented in schools in Latvia.

Keywords: educational and cognitive competence, assessment criteria, reading literacy.

In the context of global technology development, intensive modernization of socioeconomic processes, and a high level of uncertainty, the key intangible factor in the region's progress is the quality of human capital.

According to a study conducted by the Higher School of Economics, currently the leaders in the world have become countries that "have learned better than others to form and use the knowledge, skills, competencies of people, their ability for further learning and complexly organized joint activities" [3]. Thus, nowadays education plays a huge role in achieving success both for an individual and for an entire country. If people receive quality education, this leads to the development of science and technology, and therefore to the economic growth of the state.

At the same time, as noted by S.G. Thieves, Russian schoolchildren's performance in reading literacy, for example, has long been a cause for concern. This was due to both low quantitative indicators and their negative dynamics. According to a 2006 PIZA study, 64.3% of 15-year-old students in Russia had the literate reading skills necessary for adaptation in society. A high level of reading literacy, consisting in the ability to understand complex texts, critically evaluate the information provided, formulate hypotheses and conclusions, was demonstrated by only 1.7% of Russian students [1].

Most international experts diagnosed not so much the presence of a low level of development of reading skills, but rather a low level of development of schoolchildren's ability to work with information.

The solution to this problem should have been a targeted comprehensive program covering all aspects of students' educational activities, all academic subjects and all stages of schooling [1].

This program was based on a model of the content of educational and cognitive competence of schoolchildren, which has the following structure:

- 1) the range of objects of reality and knowledge, in relation to which educational and cognitive competence is introduced;
 - 2) social and personal significance of educational and cognitive competence;

- 3) the body of knowledge about the system of objects of reality and knowledge, in relation to which educational and cognitive competence is based;
 - 4) a set of skills and abilities included in the educational and cognitive competence [1].

In general, educational-educational-cognitive competence is considered as "a requirement for students to master a complex procedure that integrates a set of interrelated semantic orientations, knowledge and skills that allow them to carry out self-managed activities to solve real cognitive problems, accompanied by the mastery of the knowledge and skills necessary to resolve them in obtaining and processing and application of information" [1]. By competence, methodological scientists proposed to understand "the student's possession of the relevant competence, including his personal attitude towards it and the subject of activity" [2]. Thus, educational-cognitive competence determines the content of educational-cognitive competence that the student needs to master.

One of the means of developing educational and cognitive competence is the organization of project work for students. In the course of teaching the Russian language in Latvian schools, in accordance with approved programs, schoolchildren are offered various project tasks, for example, screening Russian films on a certain topic, preparing a presentation in the format of a film review [4].

We have identified the development and implementation of a system of lessons as a pedagogical condition for the development of educational and intellectual skills, which represent the basis for the formation of the ability to self-organize the knowledge of younger schoolchildren.

M Djumaev proposed a system of specific exercises as a means of developing logical knowledge and skills, studying concepts and actions, and revealing connections between them in first-graders. [5]. It should be noted that, despite the attention of teachers, psychologists, didactics, methodologists to the problem of creating conditions for the formation of intellectual skills in schoolchildren, with the importance of this group of skills noted in the literature, for the development of productive ways of activity, for the formation of full-fledged educational activities, in real practice In teaching, teachers most often build their work in traditional conditions, based on methods and forms of a reproductive nature and the choice of subject-object relationships in the learning process.

The success of learning largely depends on the conditions in which it takes place.

We have determined that educational and intellectual skills can be most effectively developed in the conditions of student-centered learning, built on the basis of subject-subject relationships between participants in the pedagogical process. This creates the prerequisites for revealing the essential strengths of students, their intellectual potential, and the opportunity to independently develop their own activity. As is known, to organize such training it is necessary to change the teacher's professional position, create an atmosphere of "free learning" in the classroom, and use methods that stimulate student activity and development [6].

Therefore, among the conditions for the development of educational and intellectual skills, the following were identified: orientation to the humanistic principles of education in the process of educational activities, the implementation of a system of lessons on the problem of developing educational and intellectual skills of junior schoolchildren, the use of an optimal combination of teaching methods and forms of educational work in the lesson system.

An analysis of didactic literature shows that the structure and methodology of lessons at school largely depend on the didactic goals and objectives that are solved in the process of studying

a particular topic. This allows us to talk about the methodological diversity of lessons and highlight those that are characterized by a number of common features.

The specificity of the lesson system is that each lesson combines the study of new things, repetition in the form of updating previous knowledge, abilities and skills, the formation of new concepts and methods of activity and control of the assimilation of educational material of the entire topic as a whole during its application by schoolchildren in solving practical and educational tasks in the lesson[7].

One of the system-forming elements is the goal of forming specific educational and intellectual skills in younger schoolchildren that contribute to the effective formation of the ability to self-organize knowledge as the basis for their successful education in middle and senior school and mastering a synergistic style of thinking.

The characteristic features of this method include the fact that knowledge is given to students in a "ready-made" form, the perception of knowledge is organized by the teacher using various didactic means, and students perceive, comprehend knowledge and memorize the information communicated. The main focus of the reproductive method is the formation of skills and abilities to use and apply the acquired knowledge. The teacher communicates and explains knowledge in a "ready-made" form, and students master techniques for performing individual tasks.

The problem-based method involves revealing various problems in the educational material being studied and showing ways to solve them. The partial search method is aimed at gradually preparing students to independently pose and solve problems. Part of the knowledge is communicated by the teacher, part of the knowledge is found by students on their own, participating in heuristic conversations, mastering techniques for analyzing educational material, and so on.

The main purpose of the research method is to ensure the organization of creative search activities of students to solve problems that are new to them. The educational process is characterized by high intensity, during which students master techniques for independently posing problems, finding ways to solve them, and so on.

The significance of this classification for primary school teachers is manifested in the fact that they see what paths need to be followed in order to teach children to think and independently acquire knowledge.

The first is represented by methods of organizing and implementing educational and cognitive activities. There are four large groups of methods based on various aspects. Visual, verbal and practical methods (aspect of transmission and perception of educational information). Group of inductive and deductive methods (logical aspects). Reproductive and problem-search methods of teaching (aspect of thinking). Methods of independent work and work under the guidance of a teacher (aspect of learning management).

The second includes methods of stimulation and motivation of educational and cognitive activity. Yu.K. Babansky distinguishes two other subgroups in this group: methods of stimulating and motivating interest in learning and methods of stimulating and motivating duty and responsibility in learning. The first is represented by methods of emotional and moral stimulation, cognitive argument, analysis of life situations, educational games, educational discussions, creating situations of success and others. The second is based on methods of explaining the social and personal significance of the teaching, methods of presenting requirements, compliance with

which means fulfilling one's duty, methods of training and training to fulfill requirements, encouragement and reprimand, and others [6].

The third group includes methods of monitoring and self-monitoring of the effectiveness of educational and cognitive activities. Here there are methods of oral, written and laboratory-practical control and self-control. It is important that control is not a separate element of the educational process, but at the same time performs teaching, developmental, educational, and stimulating functions. Self-control in these conditions presupposes the formation of the ability to independently find mistakes made, inaccuracies, and outline ways to eliminate detected gaps.

The form of educational work is understood as the design of a segment of a link in the learning process, covering the management of educational activities and the different composition of students.

Modern didactics identifies three main forms of organizing students' learning activities in the classroom: frontal, individual, group. The frontal form involves the joint activity of all students under the direction and control of the teacher. The individual form represents the independent work of each student. The group form is based on student collaboration in small groups with less strict teacher control.

Group forms involve dividing the class into groups, brigades, and units. Among them are: paired (two purposefully solve assigned tasks), link (involve the organization of educational activities of permanent groups), brigade (specially formed temporary groups of students perform certain tasks), differentiated group (for different typological groups of students, tasks are given and specified, corresponding their educational capabilities) cooperative-group (involve students working in groups on specific tasks, as a result, the performance of each new group is a continuation of the previous one).

The main feature of the group form of educational work is that during communication the speaker is listened to by one or more people (group).

Among the generally recognized ones, there are two more forms of educational work: individualized and individualized-group. When implementing the first, the teacher gives each student a task corresponding to the level of his learning ability. The second form implies that while working with the whole class, the teacher gives separate tasks to certain students. It should be noted that various forms of educational work and ways of combining them make it possible to differentiate educational activities for different categories of students, to diversify tasks so as to make them feasible for each student. This is also very important for the development of learning motivation, independence, self-control, and intellectual activity.

It is important to note that in didactics the problem of forms of educational work and the design of methods in different forms of educational work still remains insufficiently developed. An analysis of research in the field of psychology and pedagogy, aimed at studying the issues of teaching primary school students, showed that in the work of teachers with students of this age, a large role is given to verbal, visual and practical methods. Game methods and techniques, as in preschool age, retain their importance. Among the forms of educational work, frontal and individual work prevail [7].

By reading professional reviews, the student broadens his horizons and acquires the ability to critically perceive and speak analytically about films and videos in Russian, and provide a review of a film or production he has seen.

The list of tasks looks like this:

- 1. Find reviews of a movie you watched.
- 2. Discuss the content and form, author and source of reviews.
- 3. Compare the style and language of reviews.
- 4. Create a recall plan.
- 5. Write your review (500-600 words).
- 6. Compare your review with the reviews of your classmates, give recommendations to your classmates.
 - 7. Improve and publish your review.

The following are assessment criteria for each stage of educational and cognitive activity of students.

Criterion "Knowledge and understanding".

High level: the review fully reveals the understanding of the film: the time and location of the plot, the peculiarities of the acting, the specifics of the work of the director and cameraman, the role of the film in the historical and social context, as well as personal recommendations for new viewers.

Medium level: the review almost completely reveals an understanding of the film: the time and location of the plot, the peculiarities of the acting, the specifics of the work of the director and cameraman, the role of the film in the historical and social context, as well as personal recommendations for new viewers.

Low level: the review partially reveals an understanding of the film: the time and location of the plot, the peculiarities of the acting, the specifics of the work of the director and cameraman, the role of the film in the historical and social context, as well as personal recommendations for new viewers.

Unacceptable Level: The review does not convey an understanding of the film.

Criterion "Text literacy".

High level: the structure of the review is clear, the parts are logically coordinated, the textual content is revealed. The review expresses the author's vision in the author's characteristic style and is supported by arguments, relevant quotes from the film and/or from other reviews, and logical conclusions are drawn.

Criterion "Use of language".

High level: the language used in the review is grammatically diverse, some vocabulary, spelling, punctuation and grammatical inaccuracies do not interfere with perceiving and understanding the author's opinion. The vocabulary used in the review is varied, includes idiomatic expressions, the choice of words is correct, and the author's style corresponds to the journalistic style.

Particular attention should be paid to the pedagogical cooperation between the teacher and students, during which conditions are created for the implementation of project tasks. Students' positive attitude towards the proposed tasks is formed by creating an atmosphere of cooperation based on friendliness and support. An atmosphere of mutual respect, exactingness and trust increases students' motivation, gives them confidence in their abilities and faith in success. With this approach to the educational process, all its subjects receive support, since project tasks are carried out through business and friendly communication with full mutual understanding and mutual assistance.

Thus, we can consider educational and cognitive competence as a factor in the social competitiveness of students, since it not only allows them to receive a high-quality general education, but also develops skills in project activities, self-study, creative and communication abilities, allowing school graduates to organically integrate into the system of lifelong learning. education on the path to a better version of yourself.

REFERENCES

- 1. Vorovshchikov S.G. and others. Development of educational and cognitive competence of schoolchildren: experience in designing an in-school system of methodological and managerial support. / S.G. Vorovshchikov, T.I. Shamova, M.M. Novozhilova, E.V. Orlova and others 2nd ed. M.: 2010. 402 p.
- 2. Khutorskoy A.V. Key competencies as a component of the personality-oriented paradigm of education // People's education. 2003. No. 2. P. 58-64
- 3. How to increase human capital and its contribution to economic and social development: abstract. report / Biryukova S. S. et al.; edited by Ya. I. Kuzminova, L. N. Ovcharova, L. I. Yakobson; National research University "Higher School of Economics". M.: Publishing house. House of the Higher School of Economics, 2018. 63, [1] p. 500 copies. ISBN 978-5-7598-1758-1 (in the region). ISBN 978-5-7598-1816-8 (e-book).
- 4. Svešvaloda II (krievu valoda) Padziļinātā kursa programmas paraugs vispārējai vidējai izglītībai Valsts izglītības satura centrs | ESF projects Nr. 8.3.1.1/16/I/002 Kompetenču pieeja mācību saturā
- 5. Djumayev M.I Formation of mathematical competence in future primary school teachers in the. Educational process science and innovation international scientific journal volume 2 issue 3 march 2023 uif-2022: 8.2 | issn: 2181-3337 | scientists.uz 165-173
- Djumayev M.I The transformation of Te english language's variants in contemporary great Britain. Educational process science and innovation international scientific journal volume 2 Issue 4 April 2023 Uif-2022: 8.2 | Issn: 2181-3337 | Scientists.Uz 19-27 https://doi.org/10.5281/zenodo.7818607
- 7. Djumaev M. I.. Some Considerations of Teaching Mathematics Inuzbek Primary School. Journal of Mathematical & Computer Applications. SRC/JMCA-123. *J Mathe & Comp Appli*, 2023 Volume 2(2): 1-5 ISSN: 2754-6705