

Motivation as a Condition and Background for Successful Learning Activity

La motivación como condición y antecedentes para una actividad de aprendizaje exitosa

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ABSTRACT:

The article reveals the directions of the study of motivational component of schoolchildren' educational activity in the domestic and foreign pedagogical science in the information age and under the conditions of updating the requirements for the results of education in the Russian school. The authors present a research of teacher's activities aiming at motivating the cognitive activity of high school students, analyze the methods of motivating the learning activity, used in the practice of teaching social science in high school. The paper reveals and pedagogically interprets the contradiction between the developed theoretical approaches of motivating cognitive activity of students and the degree and peculiarities of their implementation in teaching practice.

Keywords: Cognitive activity, motivation, methods of teaching, Social sciences, lesson components.

RESUMEN:

El artículo revela las direcciones del estudio del componente motivacional de la actividad educativa de los escolares en la ciencia pedagógica nacional y extranjera en la era de la información y bajo las condiciones de actualizar los requisitos para los resultados de la educación en la escuela rusa. Los autores presentan una investigación de las actividades del docente con el objetivo de motivar la actividad cognitiva de los estudiantes de secundaria, analizar los métodos de motivación de la actividad de aprendizaje, utilizados en la práctica de la enseñanza de las ciencias sociales en la escuela secundaria. El artículo revela e interpreta pedagógicamente la contradicción entre los enfoques teóricos desarrollados para motivar la actividad cognitiva de los estudiantes y el grado y peculiaridades de su implementación en la práctica docente.

Palabras clave: actividad cognitiva, motivación, métodos de enseñanza, ciencias sociales, componentes de la lección.

1. Introduction

Motivation as a purposeful process of involving students in cognitive activity in a lesson plays an exceptionally important role among the factors directly influencing the educational achievements of schoolchildren. (Bozhovich and Blagonadezhinoy 1972, Entwistle 1968, Markova et al. 1990, Mil'man 1987)

In the era of digital education, the problem of motivating cognitive activity has not lost its relevance. The modernization of Russian education, the adoption of a new educational paradigm, and the development of modern requirements for the results of education have intensified the study of problems associated with the motivational component of a lesson.

The absence of motivation as a component of learning nullifies all efforts to organize the classroom activity, reduces the effectiveness and productivity of the lesson. Motives are understood as perceived or unconscious reasons for the activity carried out by the subject, behind which his needs and values stand. Psychological and pedagogical studies consider the importance of intrinsic and extrinsic motivation in learning activity. With intrinsic motivation, the causes that generate the learning activity lie within the individual, he himself is the source of motivation, and the main interest and value to him is his learning activity. Intrinsic motivation performs in the research activity and initiative of the student, who prefers new and difficult tasks and feels intellectual pleasure in solving them. With extrinsic motivation, the individual focuses primarily on the results. The learning activity is a means to achieve these results that are important, but external to the content of the activity itself (Bozhovich and Blagonadezhinoy 1972, Hekkhauzen 2003). According to experts, intrinsic motivation leads to the best learning outcomes (Gordeeva et al. 2017, Il'in 2011, Patyaeva 2002).

The following sequence of processes determining the learning activity is formed: needs, motives, interests, goals. Cognitive interests express, first of all, the need for self-actualization. The goal as a realized idea of the final result of activity is the core of the motivational process. Goals initiate and direct the activities (Lazebnikova 2000). The integrative approach to motivation stresses that the links between learning goals with academic achievements are not linear (Pintrich 2003), other structural components of motivation also have an effect (Andreeva et al. 2014, Berezneva and Krysova 2015, Williams and Williams 2011).

However, the determination of a motive as intrinsic or extrinsic one is not a simple task. V.E. Milman distinguishes intermediate states when motivation moves from the inner to the outer. The classic intrinsic motivation for learning is the desire to learn new, unknown, realize one's inner creative potential. Realization of learning for life, for full communication, the author attributes to "not completely internal motive". The extrinsic motive is the learning for the sake of leadership, or reward, or as a means of avoiding failure. According to the author, verbal praise, being an external motivational factor, increases interest in learning activity. Cognitive motives are manifested in interest, curiosity, the desire to learn new things in the learning process; in the enthusiasm for the learning process (Muslimova et al. 2017, Mil'man 1987).

The identification of the leading motives, which guide the schoolchildren at various stages of learning, showed the domination of extrinsic motivation. Both in middle and in high school the students are striving to get high marks, and only for schoolchildren who show the highest academic achievements, this desire gives way to the cognitive interest (Gordeeva 2013). For high school students the predominant motivations of the educational activity is the success in national exams that gives the opportunity to enter the higher school. The second position is the desire to deserve the approval of parents, teachers, and classmates (Berezneva and Krysova 2015).

The organization of learning process and classwork in particular create the conditions for changing the motivation from extrinsic to intrinsic. Many authors discuss the possibilities of various methodical approaches and teaching techniques that increase the intrinsic motivation. The pedagogical and methodical literature shows a wide range of ways and means of enhancing the internal motivation of students for cognitive activities (Fries and Dietz 2007, Headden and McKay 2015, Hidi and Renninger 2010, Lavrova 2014).

Among these methods are the creation of a problem situation or situation of personal interest, based on students' experience; the organization of research activity; the use of untraditional forms of instruction; the involvement of students in assessment, etc (Falikman and Asmolov 2017, Headden and McKay 2015, Hidi and Renninger 2010). Special attention has recently

been paid to the students' experience (Koval 2007). Researchers distinguish two types of results in the subject experience: connecting with past years training and basing on direct interaction with the environment (Podhodova 2014). A significant motivational factor can be the creation of a situation that shows the differences between common views (stereotypes or conclusions from everyday life experience) and scientific views or approaches to the problem under study.

In spite the variety of research works on learning motivation problem, there are practically no works aimed at studying the real activity of teachers in the implementation of this task in the classroom.

2. Research Question

The organization of students' learning activities, which solves the problem of forming intrinsic motivation, acts as the basis for the formation of stable cognitive interests of students and one of the conditions for effective education throughout life. Aspects of the teacher's activities related to the motivation for learning affect the results of education of each student, educational institution, and the education system as a whole. A study of the real practice of teaching is the focus of the research. It will help to determine ways to improve the effectiveness of education.

3. Purpose of the Study

The task of the research is to analyze the methods of motivating the learning activity of high school students, used in teaching practice (on the example of teaching social studies). Hypothesis of research: there is a contradiction between the developed theoretical approaches to motivating cognitive activity of students and the degree of their use in teaching practice.

4. Research Methods

4.1. Analysis of teaching materials

The analysis was based on video materials presented on the educational platform of the MES (Moscow Electronic School), which are offered to teachers for use in the teaching process or as a support in developing their version of the lesson. We chose 50 lessons (training sessions), the subjects of which reflected the content of the subject "Social studies" (10 lessons per sections "Man and Society", "Economy", "Social Relations", "Politics", "Law").

4.2. Questionnaire for students

To research the teachers' experience on the motivation of educational activity, we conducted a questionnaire survey of a group (50 students). Appeal to the students created conditions for obtaining reliable information about the methods of motivation of their cognitive activity in the lesson. Respondents were chosen in accordance with three criteria: they were trained in grade 11, had a high score (mark "4" or "5") in Social Studies, and have an additional training course in this subject to improve their grades with the goal to pass the national exam and enter the higher school (for vocational education in the social sciences). The respondents were not familiar with each other and represented various schools in Moscow and the Moscow region. These criteria helped to identify respondents with the "not completely internal motive" for learning the school subject "Social Studies". At the first stage of the research, respondents were asked to describe the beginning of a typical lesson on Social Studies (first 5-7 minutes) in accordance with the following plan: 1) the words and actions of the teacher, 2) my actions, 3) the activities of my classmates.

At the second stage, the respondents filled out a questionnaire:

1. Indicate the end of the sentence corresponding to your experience, or add it.

At the lesson we begin to study a new material (a new topic) ...

1) always after checking the homework;

2) usually after checking the homework;

- 3) from the beginning of the lesson, and the checking of homework is related with learning a new topic;
 - 4) as a rule, from the beginning of the lesson, without checking the homework;
 - 5) always from the beginning of the lesson;
2. What methods does the teacher use when moving to explaining a new material (can you single out a few tricks that your teacher uses)? If the techniques that your teacher uses are not named, add them.

Teacher

- 1) indicates that a new topic will be studied in the lesson, and proceeds to the presentation of the material.
 - 2) names a new topic and puts the problem (problem issue).
 - 3) after the naming of the topic suggests a plan for its study.
 - 4) uses video material.
 - 5) uses a quote or other statement that is related to a new topic.
 - 6) uses a real situation, which is related to a new topic.
 - 7) gives a cognitive task, for which you need to draw information from a new topic.
 - 8) indicates the place of a new topic in national exam or in other form of certification.
 - 9) indicates the pages of the textbook or other manual and offers to read them independently at the lesson.
 - 10) gives a new topic for homework.
3. Express and justify your opinion: should the teacher stimulate the interest of students when studying a new topic?

5. Findings

5.1. Results of the analysis of teachers' materials

To systematize the information obtained in the study of video lessons (Table 1), the following questions were posed:

- 1) Is there a component in the structure of the lesson that motivates cognitive activity of students?
- 2) What methods of motivation are offered in the class?

The following methods of motivating the cognitive activity were identified: 1. use of problem (problematic issue); 2. use of video material (image or several images, photograph, video fragment), which illustrates the topic; 3. use of a quote or other kind of statement related to the topic; 4. involvement of a real situation related to the topic and based on students' experience; 5. use of the cognitive task (in any form), in solving of which students need a new topic.

Table 1
Results of the study of lessons (teaching materials)

Methods of motivation	Content of the subject "Social Studies" (10 lessons per sections)				
	Man and Society	Economy	Social Relations	Politics	Law
Is there a component of motivation (quantity of lessons))	8	8	7	7	3
1. Problem (problematic issue)	0	1	0	1	0

2. Video material	5	1	6	5	3
3. Quote	2	4	4	1	2
4. Real situation	0	1	0	0	0
5. Cognitive task	6	1	2	4	0

The choice of items 2 to 4 meant that the lesson's materials contained video material, a statement (or both) or a real life situation without describing the methodical techniques of using this material as motivating. We assume that the developers of the lessons considered their presence as a component of motivation. If the above tools were used as the basis for a cognitive problem task, position 5 was chosen.

On the basis of illustrations or quotations, in a number of cases, the developers proposed "to define / formulate / propose options" the topic or to recall the meaning of the concepts studied earlier. Both methods cannot be attributed as motivating. To give the definition of a topic in practice means to guess it by some indirect secondary characteristics. It is imitation of the cognitive activity and it takes time of the lesson. Definition of concepts is associated with the reproduction of previously acquired knowledge and does not directly determine the cognitive activity of students. Despite the opportunities presented by the content of the subject "Social Studies", the problem approach and the appeal to personal experience of students, to life situations was practically not used.

5.2. Results of the questionnaire survey

At the first stage, 25 detailed answers were received. Respondents informed about the "triggers" for personal and group involving in cognitive activity. The majority of the respondents described the standard situation at the beginning of the lesson, during which the homework is checked and / or the explanation of the new material begins, and their actions ("open notebook / textbook", "repeat homework", "write down the topic"). 8 respondents (32% of the respondents) reported on the regular use of the following methods: appealing to the personal experience of the teacher (3 answers), appealing to the pupils' experience (positive - 3 answers, negative - 3 answers), appealing to the situation in the country or in the world (1 answer). Respondents noted that reliance on positive experience stimulated informal communication and helped to move on to learning new material. The descriptions of the actualization of negative experience ("teacher criticizes what a bad class we are", "test results are poor," "you will not pass the exam"). The disorganization of the educational process without focusing on studying the subject was followed to "personal stories" of teachers.

Responses - descriptions (the first stage) and answers to the first question (the second stage), presented in Table 2, made possible to represent the value of such a motive as the check and assessment of homework. Respondents testified that even at 11 grade (the last grade of school education) the checking of homework is a separate stage of lesson. An obligatory check of home assignments is one of the extrinsic motives of cognitive activity. The question of the effectiveness and advisability of this technique in the final stage of schooling needs to be researched separately.

Table 2

Checking the homework in the lesson structure. At the lesson, we begin to study new material (a new topic) ...

Variants of response	Percentage of respondents, %
always after checking the homework	4%
usually after checking the homework	36%

from the beginning of the lesson, and the checking of homework is related with learning a new topic	12%
as a rule, from the beginning of the lesson, without checking the homework	20%
always from the beginning of the lesson	12%
when lesson begins, because we never have a homework*	2%
"teacher doesn't do a lesson" and "is busy with one's own affairs"	2%
after a test	12%

* In italics are positions, added by the survey participants.

The answers to the second question (Table 3) indicated that the stage of motivation of cognitive activity of students in the lesson was practically absent. The teacher named a topic and proceeded to its presentation, in some cases after presenting a plan for studying topics. Students' self-activity in the classroom or at home was also not motivated.

Table 3
Methods of motivating cognitive activity

Variants of response	Number of references
Naming of topic	14
Problem (problem issue)	9
Naming of topic with plan of its learning	6
Video material	6
Quote (statement)	1
Real situation	8
Cognitive task	4
Indication of the place of topic in national exam or in other form of certification	6
Self-learning with a textbook in the classroom	4
A topic is given for homework	3
PP presentation *	1
"Does not use anything, discusses everything, except Social Studies"	1
Usage of game elements	1

* In italics are positions, added by the survey participants.

The answers to the third question of the questionnaire showed the prevalence of respondents' opinion about the need for motivation (70%) as an stimulus for cognitive activity. According to

the responses, motivation: 1. increases interest (42% of the number of respondents); 2. facilitates the learning of the topic (23%); 3. reveals the need to study the topic for the successful passing of the exam (14%); 4. demonstrates "the benefit of knowledge in everyday life" (12%); 5. forms internal motivation - "the desire to self-study of the school discipline" (12%); 6. indicates the quality of teaching and the "attitude of the teacher to his/her work" (12%): "If the teacher is interested in teaching the topic, he gives a certain incentive to the pupils, and we are interested to learn the material. If the teacher is not interested to provide students with knowledge, he does not stimulate them."

Respondents who deny the need of motivation as a part of the teacher's activity indicated the predominance of internal motives for cognitive activity (12% of the respondents); the importance of this process at the initial stage of training (4%); "good attitude towards the teacher" as a trigger for learning (4%).

The questionnaire survey showed the need for extrinsic motivation even in a group of respondents - academically strong students who chose the subject "Social Studies" for the final certification and understood its significance for their future professional activity. This fact could show the desire of the senior students to make the learning process less boring and labor-intensive. For most of the respondents, a personal desire for success was related to the activity of a teacher, interested in his professional activities.

6. Conclusion

The study showed that, despite the development of the problem of motivating the high-school students' cognitive activity in the pedagogical, psychological, methodological literature, there is a gap between theory and practice. The component (stage) of the lesson associated with motivation of cognitive activity is often absent or formal. The number of techniques that motivate the activity of student is limited. The study confirmed that teachers supported the extrinsic motivation, associated primarily with the requirements of the final exam, without attempting to evoke interest in the topic or in cognitive activity as a process.

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