



FACTORS OF INTEREST AND MOTIVATION IN THE ORGANIZATION OF INDEPENDENT WORK OF STUDENTS

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A B S T R A C T

The article is devoted to the factors and directions of increasing and strengthening interest and motivation in science for organizing independent education of students of technical specialties. In the state, one of the biggest pressing problems is the interest of students in independent learning in science lessons. Motivation is a way to increase a student's interest in science; it is a type of independent activity that has occupied an important place for the student in education.

The article analyzes motivational values and concepts that are recognized by many students as an important factor in students' independent learning. Motivation in organizing self-study in the field of information technology for technical education students is one of the pressing issues of our time. In the credit system, the volume of training for auditors is 40%, and the volume of training for self-study is 60%. According to this development of motivation, the development of educational knowledge during independent learning by students is today considered a complex interdisciplinary problem.

K E Y W O R D S

Motivation, factor, need, activity, driving factor, motive, Maslow's pyramid.

I N T R O D U C T I O N

When considering the issues of organizing and planning students' independent work, first of all, it is necessary to consider such problems as factors that arouse interest and motivation in this activity, as well as approaches aimed at the independent organization of educational activities, management and control of students' independent work.

Before planning students' independent work, the teacher must clarify exactly what the student should do. To effectively achieve the goal of students' independent work, it is necessary to motivate them and coordinate the performance of these tasks.

The most important feature of independent activity is the presence and development of motivations for it, that is, conditions consisting of a cognitive need that has found its essence in the studied science. When studying students' motivation, it is advisable to pay attention to this very essence, or rather, to the initial period of activity. "Because the need for knowledge is formed precisely in the initial period of studying science, that is, the need is combined with science, and thus this science becomes a

motivating factor" [1;167b]. Thus, we can say that the concept of "activity" is connected with the concept of "motive" by means of need. Activity cannot exist without a motivating factor" [2;121-b].

Analysis of the literature on the topic

The aforementioned definition is based on S.L. Rubinstein's understanding of the activity factor (motive): "Any activity stems from the motivating factor (motive) (referring to the motivation-forming factor - author), that is, the motivating factor (motive) encourages action for something that has certain significance for the individual, and as a result, this action becomes important for the individual" [4;15b].

Based on A.N. Leontyev, we classify activity with such definitions as "processes that embody a person's relationship to the external world in one form or another for the satisfaction of their needs," "a set of purposeful, strategically planned actions of a psychological nature, such as the correspondence of the factors (motives) that prompted the subject to this process with the direction of a certain process as a whole" [1;186b].

Research Methodology

Motivation theory is divided into two categories: content-based and process-based [3;98b].

The substantive theory of motivation is based on the identification of primary and secondary needs in the subject.

Primary needs include a person's physiological needs, such as the need for food, water, breathing, rest, and similar life-related behaviors. Secondary needs are psychological in nature. For example, one can cite such psychological and emotional needs of a person as the desire to achieve success, to be respected, to achieve something, to dominate.

Primary needs are inherently natural and, so to speak, "enter with blood" and have a genealogical character. Secondary needs are formed on the basis of life experience.

It is impossible to directly observe needs or measure the number of their occurrences. The existence and forms of manifestation of needs can be understood through human behavior. According to psychologists, as a result of observing human behavior, it is the need that serves as a factor (motive) that motivates them to act.

When a person feels a need, aspiration and a desire for action awaken in them. The manifestation of this passion and aspiration as goal-oriented behavior resulting from a need is called motivation. Here, the concept of a goal is understood as a means of satisfying a need. As a person achieves a certain goal, their need can be satisfied, partially satisfied, or unsatisfied.

Paul Lawrence and Jay Lorsh stated that "a person is rewarded in some way in exchange for processes that involve their actions in solving their problems" [3;98b]. In this case, situations related to how a person solved a particular problem remain in memory. Therefore, if he encounters such a problem in the future, he is considered to have experience and a method for solving it without difficulty. Over time, if one aspect of their behavioral model consistently and consistently leads to success, they will realize that they need to constantly rely on this model.

Now, returning directly to our research topic, we can say that teachers should create such situations for students as well. That is, in this situation, students should be able to satisfy their needs, consisting of the goals envisioned in independent work.

One of the first behaviorists (studying human behavior in a specific situation) was Abraham Maslow [5;60b]. In his works, he emphasizes the immense number of human needs and the complex impact of these needs on motivation. Abraham Maslow, while recognizing the diversity of human needs, believes that these needs can be divided into five main categories. These categories are:

1. Physiological needs are necessary for a person's normal life. These needs, along with the material provision of a person - food, drink, clothing, rest, housing - also include sexual needs.
2. The need for security and confidence in the future. Needs belonging to this category are associated with the need to protect a person from physical, mental, and psychological threats and, as a result, to have confidence in the full satisfaction of physiological needs.
3. Social needs arise from a person's sense of being needed by someone or something. That is, how a person is perceived by others in society, the presence of a strong inclination towards something, the need for social relations and support are included in the category of social needs.
4. The need for respect, that is, this category of need, which is called an emotional need, is a need associated with the appreciation by others of such specific aspects of a person as their personal achievements, qualities, competence.
5. The need for self-actualization consists of the need to mobilize one's potential, available opportunities in the process of acquiring the characteristics and qualities necessary for the development of a person as a person. [2; p.39].

Analysis and Results

According to Maslow's theory, human needs are stratified: that is, there is a stratification between them according to the degree of importance. This stratified structure of needs is shown in Figure 1. The scholar also acknowledges that, despite the seeming stability of the hierarchical structure of human needs, it is not so. In general, the stratification of the needs of most people takes the form described above, but there are some exceptions. For example, in some individuals, the need for self-expression (belonging to category 4) is more pronounced than the sexual need (category 1), or the need to mobilize one's potential (category 5) is more dominant than the need to be valued as a person (category 3), which is the most common case of reversibility.

The significance of Maslow's theory lies in the fact that it allows us to determine what lies at the heart of a person's striving for activity. To motivate a particular person, it is necessary to provide them with the opportunity to satisfy not only their most important needs, but also high-level human needs. From this it follows that it is wrong to motivate students only by "overrating": by doing so, we may have satisfied their needs of the lowest class and, naturally, deprive them of aspiration.

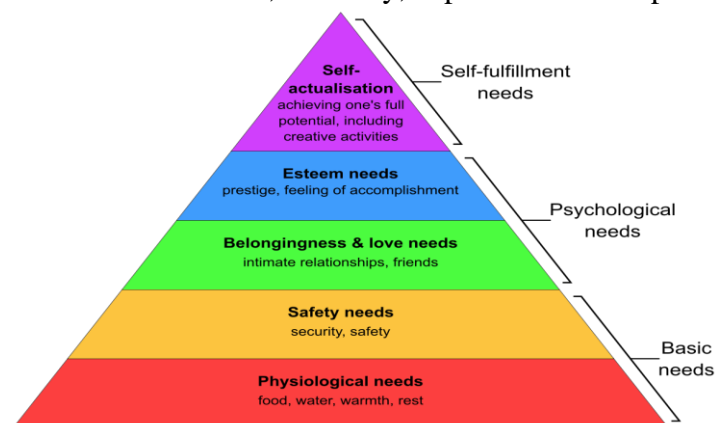


Figure 1. A. Maslow's pyramid of needs.

Process theory is primarily based on how a person behaves based on their level of perception and cognition [3;98b]. The theory of prospects is based on the fact that a person mobilizes all their capabilities only in situations where there is a high probability of satisfying their needs or achieving a certain goal. Motivation is a function of the prospective factor, that is, it means that needs are met to a certain extent. The most effective and high-level manifestation of motivation is observed when people firmly believe that their actions will ensure the achievement of the goal and, as a result, they will be rewarded. Conversely, if a person's probability of achieving a goal and receiving a reward as a result of their actions is lower, then, accordingly, motivation is also weak.

The prospective theory of motivation offers great opportunities for teachers who want to strengthen students' motivation to work independently. Since the needs of different people are not absolutely identical, their perceptions of "goal" and "reward" are also different. Therefore, teachers should, first of all, generalize and coordinate the intended goal and reward of the completed independent work in accordance with the needs of students. It is also correct to announce the essence of the reward for independent work before the work is evaluated. For example, some students may perceive a high grade for independent work as a reward. For students with a much higher level of academic performance, it is clear that grades mean nothing and, consequently, do not provide motivation. Therefore, they can be offered other incentives, such as participation in scientific conferences, subject Olympiads, and participation in the development of educational materials within the department.

The theory of reward fairness assumes that a person objectively evaluates the ratio of their effort, actions, to the achieved result and the reward received, and compares it with this ratio in others: that is, a person objectively evaluates what they and others have achieved by spending. In people's opinion, a reward obtained as a result of excessive psychological and mental strain cannot be considered fair. Indeed, if a person feels that their work is not sufficiently valued, they consciously reduce the effort they expend. If he feels that his work is being properly valued, he will maintain and even increase his energy expenditure at the current level.

The main conclusion from the theory of justice in educational practice is that as soon as students feel that they are receiving fair rewards in return for their efforts, they begin to strive to further increase the effectiveness of their work. However, the understanding and acceptance of fairness is also relative: that is, students compare themselves with classmates performing work of the same volume and content. Therefore, the teacher must give students an idea of a specific system and procedure for evaluating completed work, otherwise the labor productivity of "deceived" students may sharply decrease.

Conclusions and Suggestions

According to the concept of motivation, when organizing and implementing students' independent work, the main emphasis should be placed on the criteria of motivation [6;2b]. Including:

1. Criterion of informativeness and ownership of the information support apparatus. This refers to the level of students' mastery of technologies for conducting independent cognitive work.
2. Criterion of personal participation. The subject-activity approach takes into account the activity of all students in group independent work, as well as in individual independent work.
3. Natural interest as a criterion of content.
4. Criterion of active methods, embodying the creative orientation of tasks for independent work.
5. Criterion of achievements and success in assimilation.
6. Grade criteria.

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