

Bartieniava Iryna

FORMATION AND DEVELOPMENT IN THE EDUCATIONAL PROCESS OF INFORMATION AND COGNITIVE NEEDS OF ADOLESCENTS

*South Ukrainian National Pedagogical University named after K. D. Ushynsky,
Odesa, Ukraine*

Abstract. *The article considers the topical subject of the formation and development of adolescents' information and cognitive needs in the educational process. The essence of the concepts of "information", "need", "interest", "information need", "cognitive need", "cognitive interest" is disclosed. The relationship of interests and needs, their levels, forms of manifestation are analyzed. The peculiarities of adolescence within the framework of the research topic are determined.*

Keywords: *adolescents, information, need, interest, information need, cognitive need, cognitive interest.*

In a modern, constantly changing, dynamic world, not only the child's subject knowledge, skills and abilities are brought to the forefront, but the student's personality as a future active person, his comprehensive development, and the formation of competencies. In this regard, the relevance of the psychological and pedagogical task of finding methods, forms, means of forming the need for knowledge in the younger generation becomes apparent.

In psychology, pedagogy, sociology, there are various approaches to the concept of "need". Need is considered as:

1. The condition of an individual created by his need for objects necessary for his implementation and development, and acting as a source of his activity (A. Petrovskii);
2. The need for something objectively necessary to support the life and development of the body, the human person, social group, society (A. Prokhorov);

3. Source of personality activity. The process of meeting human needs acts as a focused activity. They act as such states of personality through which the regulation of human behavior is carried out, the orientation of thinking, feelings, and the will of a person is determined (V. Davydov).

The authors of the above definitions of the concept of “need” share the same thoughts as they consider need as an internal source of personality activity. We share their point of view.

According to the classification of needs by K. Obukhovskii [2], one of the five needs are cognitive and the need for emotional contact (communication). Sh. Chkhartishvili [2] called the need for communication and cognition sociogenic ones, pointed out their interconnection, noted their belonging to the highest levels of needs. Such needs are not peculiar to every person; they are formed only as a result of special work. We share the opinion of S. Kaverin [2] that with the undeveloped needs of higher levels, the needs of lower levels begin to occupy a dominant place.

A. Maslow [2] depicted his theory of needs in the form of a visual pyramidal model. At the top of the pyramid, he placed the need for knowledge, considering it as the highest need.

Yu. Sharov [2] defined the need for information as the very initial stage in the development of spiritual (including cognitive) needs. His view coincided with ours regarding the fact that cognitive need includes information.

Let us consider the concept of “information” and its role in the noospheric era. According to S. Ozhegov’s definition, information is “knowledge about the environment and the processes taking place in it, perceived by man” [4, p. 217]. A more complete definition of the term “information” was given by N. Moiseev, who understands it as the sum of information received by some subject about the world around him, about himself, about another subject or phenomenon — information with which he can more accurately predict the results of his actions and select ways to use their capabilities to ensure their own interests and to achieve their goals [3, p. 161].

Whether the amount of information received will turn into quality depends on the subject itself, on his ability to perceive and process information,

because these processes are not identical. A man of the end of the 21st century lives in a stormy stream of various information received. One cannot disagree with the opinion of N. Moiseev [3] that an excessive amount of it can cause a loss of a holistic view of the world and lead to erroneous decisions. The human brain is not able to process all the information that a person perceives. In order to make it easily accessible to humans, information must be streamlined, systematized. An important problem is the formation and development of a person's need for information, its use in life goals, interests. Then the meaning, value, meaning of the information will be fully revealed. "Information is not just some external signal. . . , but also an internal assessment of this signal, due to the activity of consciousness "[3, p.166].

If a person has no need for information, i.e. if the internal evaluation of the external signal is negative or indifferent, then it does not have a cognitive need, as the highest form of development of the informational need.

The purpose of the article is to disclose, theoretically substantiate the need for the formation and development of adolescents' information and cognitive needs in the educational process of secondary education.

In adolescence, communication is a leading activity. One of the functions of communication is the transfer of information. As noted by Ya. Kolominsky, the need for communication at a high level of its development becomes "a specific form of unsaturated demand for new information" [6]. The desire to receive or transmit information is becoming one of the main motives for interpersonal communication.

Important for us are studies of the information needs of V. Vedinapina, who identified it as a source of "activity of a person as a subject in interaction with the outside world" [1, p.27].

The researcher identified two main levels of information needs:

1. The need of all living things for information for orientational and adaptive behavior and the struggle for existence.
2. Man-realized need for information for the implementation of creative transformative activity.

Obviously, the first level of information need is the lowest one, and the second

one is the highest. V. Vediniapina also noted that the higher the level of knowledge of the child is, the higher the level of information need for him. This is explained by the fact that any available knowledge can reinforce this need.

Information need is included in the motivational and volitional sphere of a teenager and can affect cognitive need. Cognitive need can be a product of completed intellectual activity and induce a new, maybe even more complex activity (O. Tikhomirov).

Let us consider the criteria for cognitive needs identified by V. Leontev:

1. A person should actively strive for knowledge, for cognitive activity.
2. A person must experience a state of active search, expecting information.
3. The expected information, the object of cognition causes questions in the human mind, which are formed in the form of cognitive tasks, problem situations.
4. A person performs targeted cognitive activity and is characterized by increased intellectual stress; he does not need to be stimulated by external stimuli (the requirements of the teacher, parents, etc.) [6].

According to the first two criteria, we took cognitive activity as one of the signs of the presence of cognitive need. It manifests itself in the orientation and stability of cognitive interests, the desire for effective knowledge and methods of activity, the mobilization of volitional efforts to achieve educational and cognitive goals (T. Shamova). Cognitive activity is formed in the process of cognition. It is necessary to organize the cognitive process accordingly, so that the student has a positive attitude towards it, so that he is an active participant in it. This is especially important in adolescence. In young adolescents (11-12 years), research activity increases, the depth of questions develops as a means of independent thinking. Between 11-12 years and 14-15 years, the level of research activity decreases, the nature of the questions changes, because they become more specific and are aimed at an in-depth examination of the problem under study.

If the child is characterized by cognitive activity, then he feels the need to solve cognitive problems and put the acquired knowledge into practice. Since we are talking about middle school age, the most favorable activity in which this need will

be realized is education, in particular, educational activity.

We noted that the attitude to educational activities has an emotional, needful, motivational basis. The upbringing of a positive attitude towards learning should be carried out by forming the need for knowledge and information.

P. Simonov developed the “information theory of emotions”. We will reveal its main provisions. Emotion is a reflection by the human brain of a need and the probability of its satisfaction at the moment. Low probability of satisfying needs contributes to the emergence of negative emotions. The subject will try to prevent or weaken such negative emotions. With an increase in the probability of satisfying a need, positive emotions arise and the subject will seek to strengthen them by acting actively. Based on the provisions of this theory, emotions evaluate the significance of events in the external world for the subject. Assessment of significance is important because only that which contributes or hinders the satisfaction of needs is significant. That is why we have once again become convinced of the need to educate adolescents in an emotionally positive attitude to learning, to educate intellectual feelings.

This kind of work is impossible without the purposeful formation of cognitive interest of children.

The emotional and volitional moment of interest acts specifically - as intellectual emotion and efforts associated with overcoming intellectual difficulties. Interest occupies an intermediate position in an increasingly complicated series of human needs for the world: it arises on the basis of a cognitive desire for a particular field of activity and in the course of its development can develop into a stable personal need for an active, active attitude to his own subject.

Cognitive interest is the most important area of the general phenomenon of interest. The subject of cognitive interest is the knowledge of the surrounding world, not only with a view to biological and social orientation in reality, but also in the most essential relation of a person to the world - in the desire to penetrate into its diversity, reflect in the consciousness the essential aspects, cause and effect relationships, laws, contradictions.

The following definition appears to be the most general and meeting the objectives of our study: “Cognitive interest is a special selective orientation of a person to the process of cognition; its selective character is expressed in a particular subject area of knowledge. A man seeks to penetrate into this area in order to study, to master its values.”

G. Shchukina identifies the following main trends in the development of cognitive processes:

1. From the interest related to external stimuli to the interest related to the internal environment of the student himself.
2. From the interest of undifferentiated to more differentiated one.
3. From random interest to more sustainable one.
4. From superficial interest to interest with a deep theoretical foundation.

The first step in the formation of cognitive interest is curiosity, which should turn into inquisitiveness. Due to the fact that inquisitiveness does not provide a depth of knowledge due to its vastness, the third step is necessary - the cognitive process itself.

The core property of interest is its ability to influence such personality characteristics as: worldview, belief, attitude toward learning, personality orientation, self-actualization, etc.

Interest in knowledge can be considered in the narrow sense of the word (at school) and in the broad sense. In the first case, this is the orientation of the individual towards mastering the entire body of knowledge studied at school. In the second case, this is the orientation of the individual to the study of a whole huge circle of knowledge, skills. To raise a child’s interest in knowledge in the broad sense of the word is one of the main tasks of a teacher.

Thus, cognitive interest can be considered as a means of learning, as a motive for educational activities, as a sustainable quality of personality. Cognitive interest has a special property - its object is not only the content of the studied subject, but also the process of possessing knowledge.

So, being an important mental property of a person, cognitive interest directs

all mental processes in a certain direction, activates all personality activities. It is of leading importance not only for the success of training, but also significantly affects the formation of a holistic personality.

Cognitive interests and needs are closely interconnected. Some scholars define interest through need. The essence of interest as a form of manifestation of cognitive need was formulated by A.V. Petrovskii. According to the scientist, the satisfaction of some interest does not contribute to its decrease, but, on the contrary, causes some other interests that correspond to a higher level of cognitive activity.

In cognitive activity, interest arises from a cognitive need, but it itself can turn into a need of the second kind, the highest conscious, stimulating to deepen and expand knowledge. Interest is the main motive for teaching and cognition (S. Rubinstein, A. Leontev, L. Bozhovich, A. Petrovskii, G. Shchukina and others).

Scientists have clearly identified three components of the nature of cognitive needs: social, psychophysiological, psychological. The question of the nature of the human need for knowledge is the subject of research of V. S. Ilin, who believes that the psychological nature of needs includes the following aspects: intellectual, which expresses the nature of selectivity of needs in relation to various knowledge and methods of mental activity; emotional need for pleasure, joy from mental activity; strong-willed.

We believed that if in pedagogical practice it is quite difficult to diagnose the presence of needs in a pure form, then a conscious cognitive interest indicates a formed need. The lack of interest is a signal that the corresponding need is not formed.

In his research, L. Katkova identifies the features of the development of cognitive needs in adolescence.

1. Cognitive needs begin to be actively formed and inattention to the solution of this problem by the teacher negatively affects their development in youth.

2. The main features of the enthusiasm for the subject are: great interest in the applied part of the subject, instability of cognitive needs and its emotional nature with insufficient development of its volitional components.

3. The enthusiasm for the subject exists in several forms: it is combined with general curiosity, a high level of development of cognitive interests; combined with indifferent or negative attitude to other subjects; mixed view.

Given the complexity and ambiguity of understanding the phenomenon of interest, many scientists in their dissertations tried to study in more detail those or other aspects of this problem.

The study by G. Pertenava of the dynamics of changes in the interests of children at the turn of the transition to adolescence was based on the well-known position of L. Vygotskii that changes in the interests of children can act as a criterion for moving to the next stage of age development.

However, changes in interests can take place in two directions: positive and negative. A teenager may become interested in things that lead to personality degradation rather than development.

For our study, it is important to consider the issue of human perception of informational impact. Those informational influences will be perceived by a person more efficiently, which are at least to some extent related to his needs.

The psychological characteristics of the formation of the cognitive interests of schoolchildren were studied by Wu Thi Nyo. He established that, compared with primary school age, in adolescence, cognitive interests become more stable, are distributed over specific areas of knowledge, and acquire a personal character.

Traditional training, which presents knowledge in a finished form, leads to the extinction of cognitive activity, since the child no longer needs to acquire this knowledge. A transition to collective and group forms, teaching methods that increase activity in cognition is necessary.

Conclusions. The formation and purposeful development of information and cognitive needs in the process of professional activity of a teacher helps to educate adolescents in an emotionally positive attitude towards learning.

References translated and transliterated

1. Vedinapina, V. A. (1991). Komponenty psikhicheskogo razvitiia rebenka [The components of psychic development of a child]. *Sovetskaya pedagogic - Soviet*

pedagogy, 11, 24-31 [in Russian].

2. Kaverin, S. B. (1987). O psikhologicheskoi klassifikatsii potrebnosti [About psychological qualifications of needs]. *Voprosy psikhologii - Psychological issues, 5, 121-129 [in Russian].*

3. Moiseev, N. N. (1990). *Chelovek i noosfera [A person and a noosphere].* Moscow: Moloda Gvardiya [in Russian].

4. Ozhegov, S. I. (1987). *Slovar russkogo iazyka [Russian dictionary].* Moscow: Russkiy yazyk [in Russian].

5. Rubinshtein, S. L. (1946). *Osnovi obshchei psikhologii [Basics of general psychology].* Moscow [in Russian].

6. Chkhartishvili, Sh. N. (1981). *Problemy formirovaniia sotsiogennykh potrebnosti [The problems of formation of sociogenic needs].* Tbilisi [in Russian].

ФОРМУВАННЯ І РОЗВИТОК В ОСВІТНЬОМУ ПРОЦЕСІ ІНФОРМАЦІЙНИХ І ПІЗНАВАЛЬНИХ ПОТРЕБ У ПІДЛІТКІВ

Анотація. У статті розглянута актуальна тема формування та розвитку у підлітків інформаційної та пізнавальної потреби в освітньому процесі. Розкрито сутність понять «інформація», «потреба», «інтерес», «інформаційна потреба», «пізнавальна потреба», «пізнавальний інтерес». Проаналізовано зв'язок інтересів і потреб, їх рівні, форми прояву. Визначено особливості підліткового віку в рамках теми дослідження.

Ключові слова: підліток, інформація, потреба, інтерес, інформаційна потреба, пізнавальна потреба, пізнавальний інтерес.

