

THE PROBLEM OF THE EXISTENCE OF NOTIONAL BARRIERS IN TEACHING STUDENTS

*Alla A. Osipova*¹, *Victoria F. Boguslavskaya*²,
*Alexander V. Miroshnichenko*³

¹Southern Federal University, Rostov-on-Don, Russia,
e-mail: alla_nika2006@mail.ru

ORCID ID: 0000-0001-9291-7753

²Southern Federal University, Rostov-on-Don, Russia,
e-mail: vikbog04@yandex.ru

³Southern Federal University, Rostov-on-Don, Russia,
e-mail: akmrgu@mail.ru

ORCID ID: 0000-0002-3510-1704

Abstract. The article deals with such a problem of education as the interrelation of semantic barriers and learning efficiency. Learning, as a process of interaction between teacher and student, has a complex structure, due to the polymotivation of both parties. The effectiveness of such interaction is influenced by a very large number of factors - both objective, related to the learning conditions, and subjective, related to the personality characteristics of students and teachers, students' attitude to learning activities, the presence of positive experience in overcoming problems.

Training is a complex system, the set of elements of which are interconnected both linearly and probabilistically and nonlinearly. The structure of any system necessarily includes barriers that ensure the integrity of the system and prevent its collapse. The educational activity of students has an external and internal side. Students in the framework of the implementation of educational activities may experience semantic barriers that affect its effectiveness. The semantic sphere of a person is constantly evolving, which creates the potential for reaching new, higher levels of development. Overcoming the semantic barrier leads to an increase in the quality of learning activities. The presence of rigid and stagnant semantic barriers inhibits and distorts learning activities. The effectiveness of any human activity, including learning, is determined by many factors, among which the most important role is played by the ability to overcome obstacles to achieve the goal. Psychological barriers that reduce the effectiveness of training become such obstacles in the university. They inhibit the thought processes of students. Because of the fear of failure, anxiety, fear, low self-esteem and excessive self-criticality, even gifted students cannot fully reveal their abilities, realize their knowledge and skills acquired during their studies. Traditionally, barriers are perceived as something undesirable that

creates interference, but it must be borne in mind that barriers are permanent attributes of life, its necessary satellites. Any integral system consisting of elements owes its existence to the barriers that prevent its disintegration. Man himself has ceased to be a savage only because of such a barrier as conscience - which is considered as the core of any civilized society. Barrier is a psychological phenomenon (represented in the form of images, sensations, experiences, etc.), which reflects the properties of the object to limit the manifestations of human life, to hinder the satisfaction of his needs. The absence of a barrier devalues a subject of any need, therefore it can be noted that the presence of barriers makes learning more attractive for students.

Keywords: education, training, student, meaning, barrier

Introduction

Education is a developing environment in which the sense-development of a person takes place, therefore for the formation of individual meanings that are learned when mastering the content of education, it is necessary to create special conditions. E.G. Belyakova believes that "... the general conditions of sense-formation in the study of subjects of different educational cycles are realized through the individualization of learning" (Belyakova, E.G, 2008: 112).

In the context of the modern theory of meaning, it becomes necessary to describe barriers in educational cognition as value-semantic, preventing the disclosure of personal meanings. The concept of meaning-making by I. V. Abakumova showed that the criteria for the development of the semantic sphere are two kinds of meanings. According to I. V. Abakumova, in the transition to a new level of development, there is a constructive overcoming of a certain semantic barrier (Abakumova, I.V., 2014).

For the first time in Russian psychology, the term "semantic barrier" was suggested by L. S. Slavin, who believed that the "Content barrier" is a phenomenon when a child understands the teacher's demand and can fulfill it, but does not do it because he does not consider it" (Slavina L.S., 1958).

In modern domestic psychological and pedagogical studies, psychological barriers are described that correspond to the individual characteristics of the subject of study (Scheblanova, E.I., 2013).

In the works of V.A. Averina, V.Ya. Laudisa, S.D. Smirnova, V.D. Shadrikova, V.Ya. Yakunin et al. Justified the need for specifying the particularities of students' educational activities, in contrast to the educational activities of schoolchildren. The educational activities of students, in their opinion, are distinguished by the fact that, on the one hand, students choose this activity for themselves, that is, they take the student's

role consciously, on the other hand, special requirements are imposed on students as learning subjects. In comparison with schoolchildren, these requirements also concern the ability to independently organize their learning activities (Vartanova, I.I., 2012).

The barrier as a difficulty in comprehending and assimilating new information has been studied most thoroughly in the domestic psychology of intelligence and cognitive-oriented didactics. Of particular interest is the theory of psychological and cognitive barriers to learning A.I. Pilipenko (Pilipenko, A.I., 1995).

Numerous studies have shown that the success of learning depends on the attitude of students to study, on the motives that underlie learning activities and the barriers that arise in the process of learning activities and impede not only the qualitative learning, but also the personal development of the student. . A number of research papers are devoted to the problem of studying psychological value-semantic barriers that arise for students in the learning process (Abakumova, I.V., Kagermazova, L.Ts., et al., 2016).

In the study of D.V. Melnichenko was shown that students of a natural-scientific direction in studying the disciplines of the humanities cycle have value-semantic barriers that negatively affect the achievement of humanitarian knowledge (Melnichenko, D.V., 2011).

Methodology

The semantic barrier as a certain mental state can arise either before the start of the activity or during the time it is performed. The state that has arisen (the semantic barrier) either does not allow the activity to unfold, or it blocks and disorganises the activity that has already begun. Such a state causes a rather high level of neuropsychic tension, to reduce which a person can use various kinds of psychological defenses. The reasons that led to the emergence of the semantic barrier may be in the sphere of the unconscious and the less mature the personality is, the less it can recognize the true causes of difficulties in activity. The semantic sphere of a person in psychology is represented by three levels of semantic structures, therefore it is possible to identify and describe the barriers on each of them.

The first level is the personal meanings and semantic attitudes which in the educational process are manifested in the form of the personal meaning of learning for the student. At this level teachers have personal professional attitudes and personal sense of professional activity. If there is a mismatch between the semantic attitudes and the personal meanings of the teacher and the student, semantic dissonance arises, which leads to the emergence of the first level semantic barrier.

The second level of the semantic sphere is motives, semantic constructs and dispositions. In their studies, these are the motives of the students' teachings

and the motives of the professional activities of teachers. When semantic dissonance arises at this level, a semantic barrier of the second level arises. The third level of the semantic sphere is personal values. The sense dissonance at this level leads to the emergence of a third level meaning barrier.

Semantic barriers in learning can lead to a decrease in the level of self-assessment, frustration of creative abilities, dissatisfaction with the results of educational activities. However, they can also protect an individual from traumatic experiences. Overcoming the semantic barrier allows an individual to reach a new level of development.

N.V. Drozdova believes the emergence of psychological barriers actualizes three levels of mental state: emotional, cognitive-analytical, operational-behavioral (Drozdova, N.V., 2011).

Research methods

We believe that the use of special technologies by teachers in teaching will allow students to overcome semantic barriers. 760 students and 87 teachers took part in the pilot study. There were control and experimental groups. Teachers in experimental groups received special training. In the control groups, teachers used traditional teaching methods. To measure the indicators used: the method "Who am I?" M. Kuna; the method of self-evaluation A.A. Rean; the "Meaningful Life Orientations" test by D.A. Leontyev; Typology of psychological protection R. Plutchik.

Results

As indicators of the presence and degree of intensity of semantic barriers, we considered the type and severity of psychological protection. The study showed a significant change in the structure and severity of psychological defense mechanisms. The number of mature psychological defenses increased against the background of a significant ($p < 0.05$) decrease in the indicators of primitive psychological defenses. Students of the control groups did not observe such changes.

Prior to the beginning of experimental work among students, the sample in the central cluster of self-assessment indicators included indicators of "self-incrimination", "self-attachment" and "self-value", with a medium-low level of severity. As a result of the impact, both the volume of the central cluster of self-assessment (from 3 to 6 indicators) and its structure have changed. In the control groups of students such changes were not fixed. There were significant changes in all indicators of the "Life-Oriented Orientation" test in the experimental group.

The level of external motivation in the control group after the completion of the experimental work has not changed. And in the experimental group there was a shift in motivation towards medium-high values. The students of

the experimental group underwent minor changes in the structure of the term values. And the greatest changes occurred in the structure of instrumental values. In the experimental groups there was a holistic development of self-awareness; self-esteem has become more adequate, sustainable and differentiated; the consistency of the self-concept has increased and its orientation has changed, the overall life perspective has become more specific.

Findings

Students of experimental groups are characterized by the following transformations of the semantic sphere: significant changes at the level of prosocial values, as students are more focused on comprehending both their own semantic values and the semantic values of others. The results obtained allow us to speak about trends in overcoming semantic barriers in the training of schoolchildren and students. This line of research opens up new opportunities in the study of semantic barriers and allows you to solve important scientific and practical problems associated with the education of modern schoolchildren and students.

Recommendations

To constructively overcome psychological barriers, students need to: be aware of their own emotional experiences and reduce the significance of a situation of failure in learning activities; take the image of I as a subject of educational activity; not to overestimate the complexity of learning activities and evaluate it adequately; adequately assess their capabilities; to actively interact with the subjects of educational activity in order to master the methods of educational activity; possess the skills of self-regulation and self-control.

References

- Abakumova, I.V. 2014. Didactic principles and content of the educational process in the context of the modern theory of meaning and meaning formation. In *The category of meaning in philosophy, psychology, psychotherapy and in public life. Materials of the All-Russian psychological conference with international*. Rostov-on-Don: KREDO Publishing, pp. 9-10.
- Abakumova, I.V., Kagermazova, L.Ts., Masaeva, Z.V. 2016. Formation of professional competencies of university students in the process of additional education. In *Competence approach in education: a collective monograph*, A.Yu. Nagornova (ed.). Ulyanovsk: Zebra, pp. 252-262.
- Belyakova, E.G. 2008. Sense formation in pedagogical interaction: monograph. Tyumen: Publishing house of Tyumen State University, 280 pp.

- Drozdova, N.V. 2011. Psychological barriers of students: how to overcome? *Recommendations for psychologists 2*: 41-46.
- Melnichenko, D.V. 2011. Value-semantic barriers of students of natural sciences in the study of humanities, PhD, Thesis, Rostov-on-Don, South Federal University, 170 p.
- Scheblanova, E.I. 2013. The relationship of cognitive abilities and personality characteristics of intellectually gifted students. *Questions of psychology 1*: 13-23.
- Slavina, LS. 1958. Individual approach to poor and undisciplined students. Moscow: Publishing House of the Academy of Pedagogical Sciences of the RSFSR, 212 pp.
- Vartanova, I.I. 2012. Personality of a high school student: motivation and value system. *Questions of psychology 3*: 3-11.