

BASIC CONCEPTS OF USING THE THEORY OF INFORMATIONAL METABOLISM IN THE EDUCATIONAL PROCESS

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Nowadays, there is a necessity of modernization and renovation of professional educational sphere due to trends in economic and social development. This is a very actual problem of selecting training methods and technologies for the process of improvement of higher professional education system.

An important strategic task of implementation in pedagogical practice of modern educational technology corresponding to educational goals is set for the teachers. There is a necessity for teachers to be innovative in scientific and pedagogical activities, as an inexhaustible source of cultural and technical growth and the acceleration of scientific progress [4, 59].

It is necessary to consider psychological features of students' personal development for the best interaction between participants of the educational process. The issue of the necessity of implementation the psychological knowledge in education system was repeatedly emphasized at conferences, debates, seminars by the foreign and native scientists in the pedagogical sphere. These issues have been studied by the known scientists: V. Antoshkin, A. Augustinavichiute, A. Bukalova, V. Gulenko, V. Ermak, N. Medvedev and some others. Thus, it has become necessary and possible to study established theoretical developments and to continue the further search for ways and means of psychological support of educational process.

One of the ways of increasing efficiency educational work is the concept of socionics, which is developed on the basis of the theory of informational metabolism (TIM). The essence of the theory of informational metabolism is based on the basic concepts of metabolism - (from the Greek "transformation") metabolic or chemical transformation.

Prominent polish psychiatrist A. Kempinski drew an analogy among the energy and information metabolism. TIM concept consists of the following suggests: receiving a signal from the surrounding environment and the reaction of an organism, the subsequent actions, behavior equally the response signals. The human psyche differentiates received streams of the information to certain components or aspects. Information is perceived, acquired, accumulated, stored, transformed by certain channels of the human psyche and then partially displayed on the external level of interaction with the world around. [2, 32-40, 190-195].

Process of exchanging signals with the environment gradually becomes more complicated due to the development of society. The psyche of the modern person performs the selection and differentiation of the received information and creates a personal model of perception of the world around.

Lithuanian economist and one of the first Soviet sociologists A. Augustinavichiute with a group of like-minded people developed the concept socionic theory in the 60s of the last century. This concept is based on the Kempinski's TIM, C. Jung's personality typology, Freud's psychoanalysis works, B. Shneiderman's treatise "Software Psychology" and other scientific works in the field of psychology, pedagogy and sociology [1].

A. Augustinavichiute introduced the concept of socionics in a number of reports at scientific conferences. In consequence, there were students and followers not only teachers and psychologists, but also specialists in cybernetics, bionics, computer programming, systems science, artificial intelligence.

Basing on the concept of socionics the society can be divided according to the dominant function. A group of people with the dominant rational function (Logic or Ethics) is characterized by the ability to be more successful in natural sciences. Conversely, a group of people with the dominant irrational function have better results in acquiring knowledge of the humanities.

This attitude follows from the psychological characteristics of the individual perception of the information signals. The certain aspects of the information differentiated and well-understood, and the other one's are not differentiated and received in a compressed form. The processes of the receiving and processing information are associated with cognitive processes.

Thus it was created the theory of psychological types - the classification of people according to the process of perception. According to this theory it is possible to distinguish 16 sociotypes (fig. 1, 2) [5].

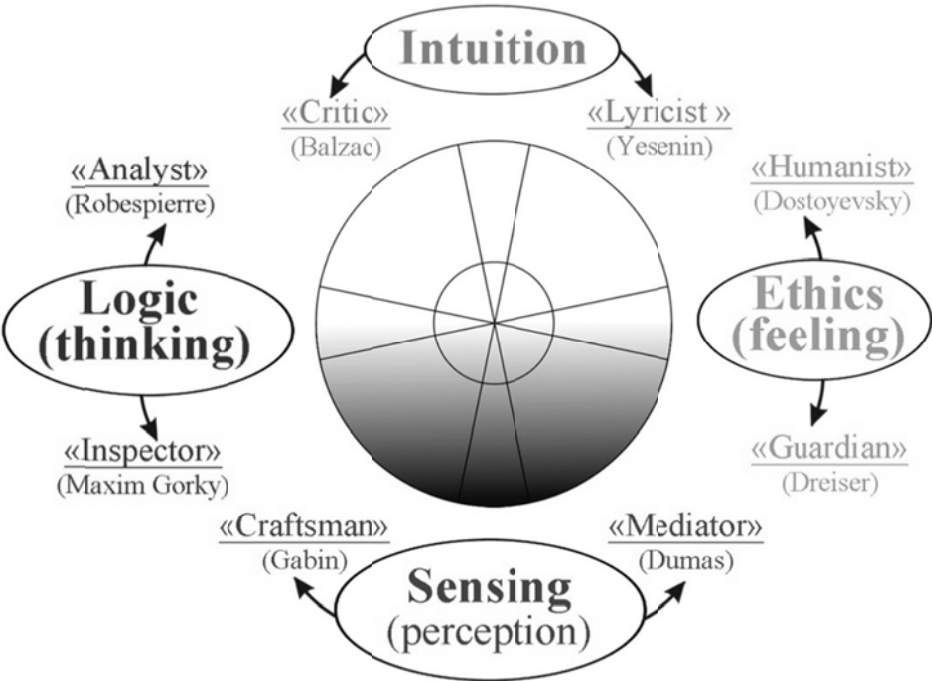


Fig. 1. Introverted sotciotypes

Personality typology system is based on the predominance of one of mental functions – thinking, feeling, sensation and intuition. There also can be determined

an auxiliary function, which is adjacent to the dominant one. This typology was developed by the Swiss psychiatrist C. Jung [5].

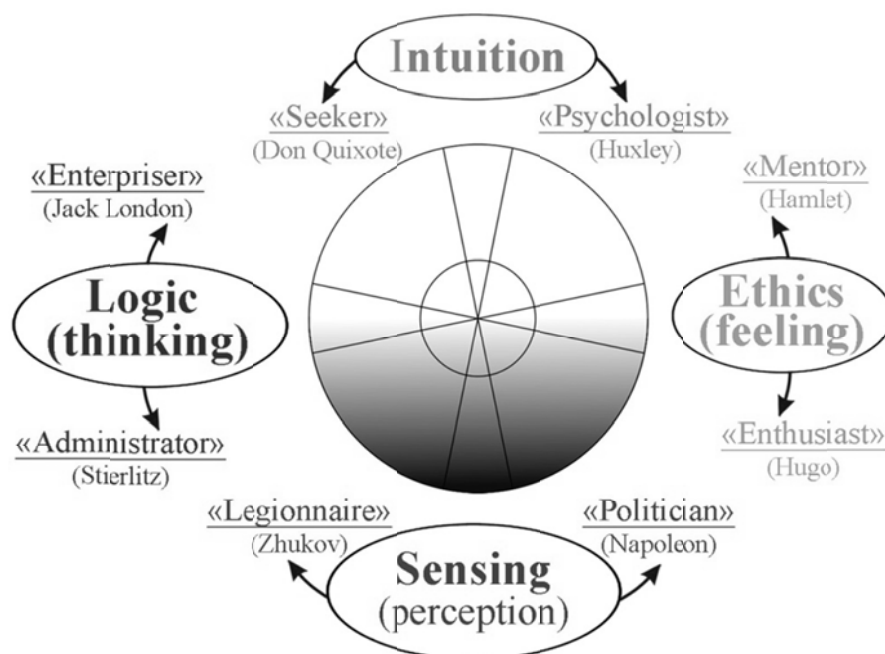


Fig. 2. Extraverted sociotypes

He considered that individuals are inclined to a certain type of adjustment, and also he divided them into groups: extraverted (focused on the perception of the outside world) and introverted (perception is focused on the inner mental activity).

The practical value of the sociotics for teachers lies in understanding how to create relations among the sociotypes. Interrelations in partnership depend on the extent of complementarity sociotypes each other. Collaboration of the people is more efficiently, emphatically, purposefully and productively when they have psychological support in people with another type of perception and behavior style.

Some scientists noted efficacy of the implementation of socionic methods in the educational process. Rational application of TIM in pedagogical practice allows to simulate the process of formation general and professional competencies; promotes the development of certain personal qualities: will, self-organization, responsibility, etc.; improves the mindfulness of perception; motivates disclosure of personal potential; increases the efficiency of individual, group and independent work of students; helps to reduce a conflict level in the group. These organizational forms of education have an important significance. Professor P. Stefanenko noted that independent work of students under the teacher's supervision become significant as the dominant method of education in high school [3, p. 120-121].

Undoubtedly, the given forms of work lead to increasing efficiency in the performance of educational tasks. However, it should be noted that the effectiveness of the results is closely related to the teacher's professional level and the quality of their work. These suggests make it necessary to form a new generation of teachers, who have a deep psycho-pedagogical knowledge and understanding individual psychological characteristics, can influence to the social

situation. Teacher's psycho-pedagogical competence is capable to help students to express themselves in a future profession, become self-reliant, creative and self-confident people, and achieve high results in life.

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