

Teacher and Student's Psycho Type Correlation as Educational Interaction Effectiveness Factor

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Abstract: The article examines one of the aspects of the educational process efficiency. This process consists in the continuity of the direct and inverse interaction of the participants involved in the educational process. The interaction depends on the psycho type of both the teacher and the student. One of the indicators of the teacher's professional competence is his ability to understand the inner world of his students. Using the results of students' temperament diagnosing allows exercising psycho diagnosis with a minimum of training time and sufficiently high informative content. Educational process participants' psycho type correlation stimulates cognitive activities of students, their independence, initiative and creativity.

Key words: Educational process • Psycho type • Teacher • Student • Professional competence • Cognitive activities • Creativity

INTRODUCTION

The predominant condition of effective educational process is the interaction of its participants. A special place in the educational process belongs to the subject-subject interaction. Interaction is a central link in the educational process endowing it with more possibilities if based on the adoption of the students' individuality. Every teacher should be able to determine the vector of students' psycho type and choose the style of interaction and teaching methods that promote cognitive activity of students, their independence, initiative and creativity.

A psycho type is an important characteristic of the man. By defining the psycho types of the surrounding people one can understand what motivates certain things that man does, what makes people behave differently, what are their abilities, interests, habits etc. Hence a psycho type influences the effectiveness of people's activity and future personality socialization [1].

In spite of a great amount of works devoted to various aspects of interaction in the educational process it is necessary to note that the main ones deal with pedagogical activities and different problems a student may have in the educational process in particular. In our opinion there is an insufficiency of special research in teacher-student effective interaction in the educational process with due regard of their psycho types.

Owing to it our research is directed to the study of teacher and student's psycho type correlation as educational interaction effectiveness factor as we consider psycho type correlation to be meaningful and relevant to further improvement of the educational process in modern school practice.

The study of psycho type correlation will help to find out how certain psycho types of teachers and students interact effectively, why some subjects at school come easily to students, while others only after a hard struggle; it will indicate the direction to the most effective way of relationships in the educational process.

MATERIALS AND METHODS

Testing method was used as main in this work. In our research of teacher and student psychological type correlation C.G. Jung's methodology was used to identify the typological features of personality and D. Keirse's methodology to study stable personal characteristics (psychological type). The data obtained by these methods were subjected to mathematical statistical techniques (distribution on a percentage basis, Chi-square test).

Participants: The study involved 48 secondary school teachers and 135 senior students of secondary schools in

Elabuga, Republic of Tatarstan. All the teachers have a university education. There were no underachievers among the sample students. For the purity of the study the samples were corresponded according to the principle of interaction, that is, teachers and students interacted directly in the learning process.

The Main Part: The educational process is a multifaceted and multidisciplinary interaction between teacher and student. Its effectiveness depends directly on the productivity of the interaction between the participants of the educational process.

Interaction is a philosophical category, reflecting the impact of processes of different objects at each other, their mutual conditioning, change of state, mutual transition and is defined as the process of integration activity of the participants, which includes the target, motivation, activity and procedural aspects.

The essence of interaction is its continuity, organic combination of changes of the subjects affecting each other. In addition, the interaction is a complete, internally differentiated, self-developing system.

There are three interrelated components in the structure of interaction: behavioral, affective and cognitive.

N.P. Anikeeva, N.V. Grishina, I.A. Zimnaya, Ju.A. Konarzhevsky, V.S. Lazarev, R.S. Nemov, N.N. Obozov, V.P. Simonov, R. Kh. Shakurov look upon interaction as a highest result of labor, as the process of achieving the aim with a minimum of psychological and energy input and time required as well as the satisfaction with activities, results, themselves, partners [2].

Interaction is productive when the teacher takes into account individual typological peculiarities of the students and differentiates the students into groups. These groups are formed in accordance with students' real learning abilities, which have a direct connection with their psycho types.

A psycho type refers to "a dynamic, relatively stable integrated system of standard intellectual, social, cultural, moral and volitional values, needs and behavioral norms inherent to the individual ..." [3].

From the position of socionics a psycho type refers to a type of information metabolism, which is determined by the human mental functions processing information [4]. Ways of information collection and evaluation of the information underlie the cognitive activity of the individual [5].

In psychological literature, both domestic and foreign much attention is paid to psycho types. The problems of its structure, functions and the possibility of purposeful

formation are discussed in the works by C.G. Jung, V.G. Koltashev, Isabel Myers-Briggs and Katherine Briggs, D. Keirsey, I.N. Shvaneva, A. Augustinavichute and others.

Psycho types of the individual are classified differently by different scientific schools. However, scientists agree that the human personality is too complex to be accommodated exclusively into one personality type.

Myers-Briggs typology is the typology, formed on the basis of ideas of Carl Gustav Jung in the 40-ies of the XX century and has been widely used in recent decades in the U.S. and Europe [6]. It was developed by Isabel Briggs-Myers and Katherine Briggs on the basis of the work "Psychological Types" by the Swiss psychiatrist C.G. Jung.

C.G. Jung identified and described eight personality types, finding that each of these types has two different orientations-totally he distinguishes between 16 types of personalities.

The types of personality described by C.G. Jung are: extroversion-introversion; thinking-emotionality, sensority-intuitiveness, rationality-irrationality [7].

The Myers-Briggs typology also includes 8 types, united in pairs: E (extraversion); I (introversion); S (sensing); N (intuition); T (thinking); F (feeling); J (judging); P (perceiving). Various combinations are recorded as one of the 16 types, such as: ENTP, ISFJ, etc. [8].

D. Keirsey, developing the ideas of Myers-Briggs, identifies four types, calling them types of temperament: NT, NF, SJ, SP [9].

Diagnosing integrated temperament types is a simple and informative way to understand the behavior of different types of people. According to the research it is diagnosing the temperament that the teachers do most accurately [10].

RESULTS AND DISCUSSION

The ratio of typological personal characteristics of teachers and students was determined through Jung's techniques (Table 1).

According to the data, correlation is observed in the types of the teacher's and student's personalities ($p \leq 0.01$). Extraverts, introverts and amboverts are represented in approximately the same percentage in these samples. Amboversion, a volatile temperament with a changeable scheme of action, which may vary depending on the circumstances, is most common in the studied samples.

Table 1: Typological personal characteristics of teachers and students

Types acc. To Jung	Teachers (%)	Students (%)
Extraversion	6.25	2.2
Introversion	25.00	11.1
Amboversion	68.75	86.6

Table 2: Integral types of temperament in samples of teachers and students

Types of temperament	Teachers (%)	Students (%)
"Dionysus" - sensory-impulsive (SP)	31.25	28.8
"Epimetheus" - sensory-planning (SJ)	37.50	17.7
"Apollo"- intuitive- sensual (NF)	6.25	13.3
"Prometheus" - intuitive-logical (NT)	25.00	40.0

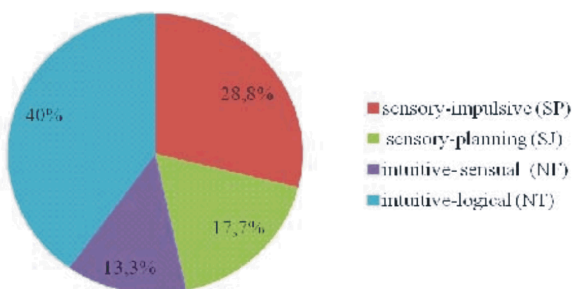


Fig. 1: Temperament types of sample students

Results of the study of stable personal characteristics (psycho type) in the samples of teachers and students are presented in Table 2. Each type differs in the most significant and lasting psychological characteristics-from value-motivational structure to the observed style of behavior.

The integral types of temperament are represented in the studied samples in different percentage.

The most marked type of temperament in the students' sample is intuitive-logical type, which was observed in 40% of cases (Figure 1). This type of temperament is often termed "thinkers-theorists". Students of this type aspire after new knowledge, look for regularities and laws, display ingenuity and abilities to theoretical studies. They are oriented mostly to external criteria, may often be secretive and cold in communication and very self-confident.

Second marked type is sensory-impulsive; it is represented by 28.8%. Students of that type are not prone to sentimentality and romanticism, being practical non-conformists they are difficult to be involved in anything that is routine, known in advance or dull. Sensory-impulsive students are hard to predict, risk-averse, not always disciplined, but practical and realistic at that.

Third marked type is sensory-planning; it is represented by 17.7%. These are practical thinkers, they avoid anything that is unclear and they always think

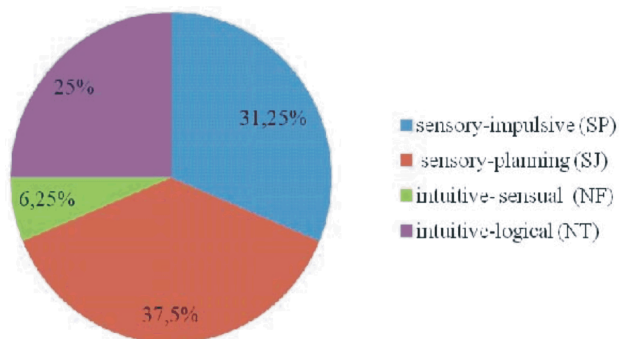


Fig. 2: Temperament types of sample teachers

business trying to bring order, organization and completeness into it. They strictly adhere to social norms and stereotypes, especially to their external, ritual side. They are characterized by serious and responsible attitude towards various kinds of activities and communication which are perceived as fulfilling certain duties that have a rational justification.

Fourth marked type is intuitive-sensual; it is represented by 13.3%. Students of this type are labile; they are emotionally and aesthetically oriented, agreeable, although they sometimes come out of formal behavior in their hobbies. They aim to be themselves, to have value in their own eyes.

Thus, the majority of sample students display competence, ability and skill in a particular activity according to their age peculiarities. Besides they show irrepressible thirst for knowledge in their studies.

Sample teachers research observed sensory-planning (37.5%), sensory-impulsive (31.25%), intuitive-logical (25%) and intuitive-sensual (6.25%) types of temperament (Figure 2).

Every type is distinguished by specific features that are displayed in teachers' professional activities.

Teachers of the sensory-planning type (SJ) are characterized by punctuality, pithiness and accuracy. They appreciate diligence; require their students' full dedication and feedback.

Sensory-impulsive type (SP) is typical of the teachers giving lessons in virtually aimed, vital subjects. They are not attracted by abstract and theoretical areas of knowledge. Such teachers encourage students in their learning activities.

Teachers of the intuitive-logical type (NT) captivate and inspire their students to express their thoughts clearly and distinctly.

Intuitive-sensual (NF) type of teachers is able to make every student feel special and necessary.

The next stage of our research was directed to define teacher-student interaction effectiveness taking into account the students' progress and results in studies. The difference in the students' results of the different psychological type teachers was confirmed at $p \leq 0.01$ significance level. Thus NT psychological type teachers were observed to have had the majority of students getting excellent and good marks in studies ($p \leq 0.05$), SP psychological type teachers were observed to have had the majority of students getting satisfactory marks in studies.

Statistical analysis and the correlation of teachers and students' psychological types show that the most effective are identical types NT (teachers)-NT (students) and SP (teachers)-SP (students). In the identical correlation NT (teachers)-NT (students) information is easily imparted from teacher to student. Subjects to the educational process complement each other, every one of them receiving what he is interested in: the teacher acquires student's good knowledge and the student acquires a stirring instruction in the subject. In this correlation an ability (higher than average) to theoretical learning is displayed.

In the identical correlation SP (teacher)-SP (student) we may observe more interestedness in learning of virtually aimed subjects than theoretical ones. It is in virtually aimed subjects that both the teacher and student get mutual satisfaction. Nevertheless these identical correlations make high demands on the teachers who have to undergo the process of constant self-improvement.

In addition to identical types, the following types of correlation can be called effective: NT (teachers)-NF (students), NT (teachers)-SJ (students), NT (teachers)-SP (students) and SP (teachers)-SJ (students).

In reference to the correlation NT (teachers)-NF (students) the research showed that pupils of NF type are prone to please their teachers, but they take criticism too close to heart. The intuitive logician-teachers' speech clarity, precision and pithiness captivate and inspire their students, though sometimes it is deterring. Such teachers want students to be involved into discussion as this allows both parties to learn more. The teacher and the student come to mutual understanding as to the creative potential in their interaction, their relations develop calmly, but upon the whole the aims of their interaction are different. The teacher of the intuitive-logical type must be able to keep the distance and hold his relations with the students under control.

In case of the interaction NT (teacher)-SJ (students) the informative speech of the intuitive logical teacher grasps the students and captures their attention. Nevertheless the students being conservative may become an obstacle in acquisition of new knowledge. Still the teacher in this correlation is a significant participant and his directions and orders are fulfilled unconditionally.

In quasi-identical correlation NT (teachers)-SP (students) the subjects to the educational process can discuss common topics, but every one of them has his own way of deciding difficult problems. Conflicts are rare. The students' interaction develops according to the principle "here and now".

In the correlation of SJ (sensory-planning type)-SP (sensory-impulsive type) SJ-type students obey and respect orderly teachers who keep their promises. But students' conservatism may become an obstacle in the acquisition of new knowledge. Teachers of SP-type are best in instructing virtually aimed, vital subjects. In the beginning the relationships of these types are friendly, but as time goes on everything that the student does or says seems unimportant to the teacher hence the student tries to be disengaged from the latter. Consequently it is important for the teacher to take notice of the student's words and doings to avoid further misunderstanding on his behalf.

Output: In this study, while determining psycho types of the participants of the educational process, differences in the way of perception expressed through intuitive and sensory were taken into account.

The integral types of temperament in the compared samples were treated in accordance with the function of collecting information (schematically or speculative), evaluation of information received (objectively or subjectively). Two groups of intuitive temperaments-these were NT and NF-were examined in the basis of the study and two main groups of sensory temperaments-SP and SJ.

Concerning the whole of the sample students it is necessary to note that the majority of them comprise intuitive-logical type (NT). Students of this type collect data, consisting primarily of abstractions and capabilities and on the basis of these data, start the process of objective decision-making. The driving force of their continuing commitment to competence is their ability to philosophize and theorize on any topic.

In the sample teachers the sensory-planning (SJ) and sensory-impulsive (SP) types are mostly represented. The process of gathering information the teachers adhere to, is marked by the fact that it is practical and realistic and the teachers' purpose is to endow this information with clarity and order, as it helps to focus on the reality of the moment and see all the possibilities that this reality conceals.

The study found out that students with different academic performance give preference to teachers with a specific psycho. "Smart" students prefer or understand better teachers of the NT type whereas "poor" students prefer the SP type.

Psycho type correlation of the participants of the educational process shows that the most effective educational interaction is ensured by two identical basic psycho types. The identical type in comparing teachers and "smart" students is the ratio NT (teacher)-NT (students) and for those with just a satisfactory progress the ratio is SP (teacher)-SP (students).

In addition to the identical type of effective correlation, the effective interaction for the "smart" students include the following types: NT (teacher)-NF (students), NT (teacher)-SJ (students), NT (teacher)-SP (students); for the "poor" students they are: SP (teacher)-SJ (students) psycho types.

CONCLUSION

Teacher-student psycho type correlation in the educational process provides the effectiveness of subject-to-subject interaction.

The ability to take into consideration the integral types of temperament when planning the educational process is one of the prominent indicators of the teacher's professional competence.

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