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## INTERACTION OF SUBJECTS OF THE EDUCATIONAL PROCESS OF PRIMARY SCHOOL: RESULTS OF EXPERIMENTAL RESEARCH

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**ABSTRACT:** *In this the essence of the problem of organizing interaction of the subjects of the educational process. A review of scientific sources on the research problem is done.*

*Based on empirical research, the results of studying the readiness of primary school teachers to organize interaction in the classroom are presented. The analysis of the survey, in which Ivano-Frankivsk region (Ukraine) teachers participated, was carried out. The subject of the study was to determine the concept of "dialogic interaction", the use of this method in primary school, as well as teachers' difficulties in organizing interactive learning in the classroom: insufficient methodological support, the gap between theoretical knowledge and challenges of school practice. 48.2% of teachers use interaction every day or at each lesson to intensify students' learning activities, to stimulate their cognitive interests, to establish cooperation and co-creation. There are also respondents who do not practice or use this technique very rarely. It was found that some respondents (almost 55%) will have difficulty in organizing interactive interaction in the educational process; 25% - indicated some difficulties using these methods in primary school, 20% - have no difficulty organizing an educational dialogue with students in class.*

**KEY WORDS:** *interaction, educational dialogue, teacher training, primary school, communicative activity of students, educational innovations*

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## **INTRODUCTION**

Public challenges and conditions for the integration of educational systems of different countries into the European space determine the processes of implementing innovative approaches to the organization of education in schools and universities. "In the conditions of a rapid development of the information society, the reformation of education of different countries in the context of integration into the world, it is important to provide an innovative character of pedagogical activity, which has an important place in the development and self-development of a young generation" (Budnyk, 2019). This means that pedagogical systems of different countries need to be reformed taking into account progressive trends in the development of science and technology, the world best teaching practices.

The concept of interaction between participants in the educational process (Littleton & Howe, 2010), cooperative and corporate learning is relevant at the moment. The problem under study is reflected in scientific publications of modern authors, which convincingly prove the effectiveness of interactive learning of children and youth (Beattie & Ellis, 2014; Beauchamp & Kennewell, 2010; Major, Brugh, Froehlig, Walker, Higham & Vrikki, 2018; Fomin, 2020; Vasianovych, 2010).

**The purpose** of the article: to substantiate the essence of interaction in the educational process and on the basis of empirical research to study the readiness of primary school teachers to organize interaction in the classroom.

## **PROBLEM OF RESEARCH**

The term "interactive" derived from the English word "interact": "inter" - is "mutual", "act" - to act. Therefore, "interactive" - means able to interact or be in the mode of conversation, dialogue with someone (person) or with something (eg, computer). In our study, we consider interactivity in a pedagogical context. Beauchamp & Kennewell state (2010), the term "interactive" appears in two distinct strands of educational research discourse: one concerning pedagogy and the other concerning new technologies in education. They research «both theoretically and empirically, links between the concepts of 'interactive teaching' and 'interactive technology'». As interactive learning is a pedagogical approach

that incorporates social networking and urban computing into course design and delivery. We consider interactive interaction to be, first of all, dialogic learning, during which the subjects of the educational process interact.

To organize interaction in the educational process of primary school, it is necessary to prepare properly all participants for active communication. At the same time, the prime role in this process belongs to the teacher, who the results of students' learning, their motivation and anxiety to explore something new largely depend on. "Dialogue teaching is primarily problem-based teaching. After all, in order to stimulate students to solve educational creative tasks, to actively discuss them in a group, it is necessary to create a situation in which the pupils will be interested, and they will have different views on the same problem. Actually, collision of different opinions, their ability to express, defend, listen to each other, analyze, draw conclusions, show tolerance and restraint will make it possible to create interactivity, effective interaction of learners" (Fomin, 2019).

We consider future teachers' readiness for the organization of dialogic learning as a complex dynamic formation, represented by the interaction of subjective (psychological and pedagogical qualities of the future teacher, the level of professional mastery of the future profession and the processes of professional self-development) and objective (educational environment) of reality and specified in theoretically substantiated criteria (Fomin, 2020). Regarding the concept of "readiness", in pedagogical science in the context of professional training, it is interpreted as a result. Our study deals with the professional training of primary school teachers and their readiness to organize dialogic training of students. Therefore, the "readiness of future primary school teachers to organize dialogic learning" is considered as a result of their professional training in a particular context.

Based on the study of the psychological literature (Moliako, 1989; Krutetskyi, 1972), it was proved that readiness for [professional] activities is interpreted as a function of the psyche; psychological state of the individual, which helps him/her to succeed in the relevant activities; process and result of formation of certain experience, proper attitudes, etc. In the pedagogical literature, readiness for professional activity is defined as: personal education of an integrative structure and "a set of professional and pedagogical knowledge, skills, abilities and personal qualities that ensure the effectiveness of the school

teacher" (Grygorenko, 1991, p. 8). In the structure of readiness for professional activity O. Matviienko distinguished the following approaches: functional (considered as a state of psychological function that stimulates a certain activity) and personal (serves as a holistic personal formation that synthesizes a number of subjective factors regarding professional activity) (Matviienko, p. 167). Thus, teachers' readiness for professional activity is mostly interpreted by scientists as a complex holistic education, which is the result of appropriate training, in our context - to organize interactive learning for primary school students. Thus, based on the study of scientific and pedagogical literature, we concluded that the readiness of primary school teachers to organize dialogic interaction is a set of components, his/her personal and professional values, competencies, experience that enable effective professional activity in this sphere.

## **RESULTS OF RESEARCH**

In order to prove the necessity to improve the system of training future primary school teachers in higher education, we studied the readiness of practitioner-teachers to organize interaction with primary school students. To do this, we used Google online forms to interview teachers, asking questions about their understanding of the concept of dialogic learning, its role in the educational process, as well as personal readiness to organize dialogic learning for primary school students. A total of 60 teachers from Ivano-Frankivsk region (Ukraine) participated in the survey. Among the respondents: teachers who have quite different experience in primary school: 18, 5% (10 respondents) - more than 20 years; 13% (7 persons) - from 3 to 10 years; 11.1% (6 persons) - from 10 to 20 years; 46.3% (25 respondents) - up to 3 years, 3.7% (2 persons) – answered that they are not currently working; the same number of people - without teaching experience; 1.9% (1 person) - pedagogical practice while studying at the university; 1.9% (1 person) - did not answer (54 answers in total).

The problem of value orientations is important in the study (Budnyk & Mazur, 2017), as well as competencies, experience of the teacher who gained authority and respect in the educational environment. The results of the survey are presented in Fig. 1.

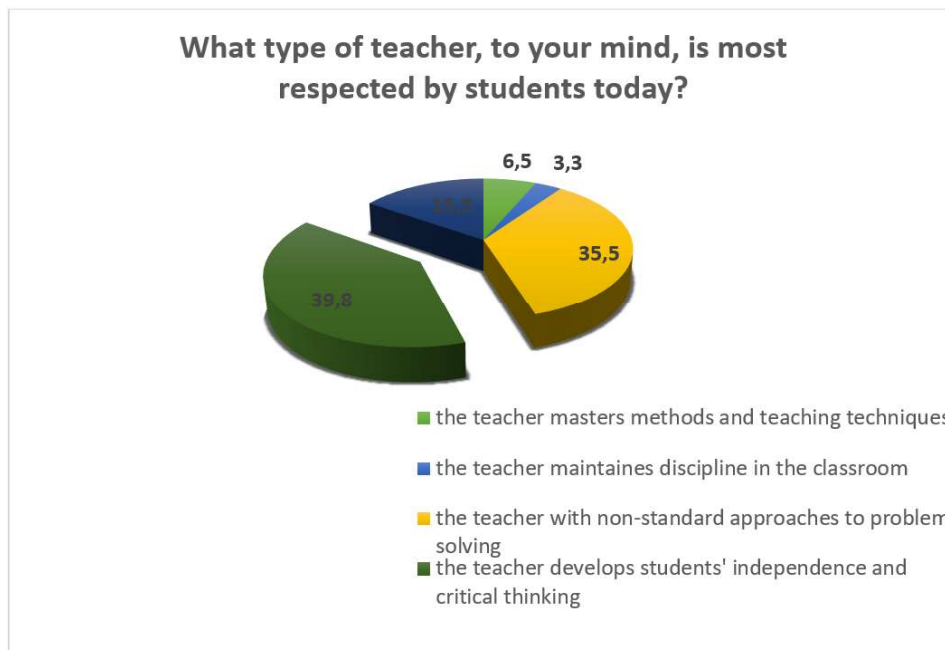


Fig. 1. Practitioner-teachers' reflections on the modern teacher's authority and image

As we can see, there is a widespread opinion among educators that the main factor for increasing the effectiveness of teaching is an innovative approach to teaching, "non-standard solution of problems", as indicated by 35.5% of respondents; "development of students' independence, critical thinking" (39.8% of respondents). Such abilities as: mastery of teaching methods and techniques, as well as maintaining discipline and order in the classroom got last ranks among the characteristics of the ideal teacher.

Thus, the peculiarities of the study of the problem of interaction in primary school and the formation of future teachers' readiness to solve these problems are, first of all, focused on innovative approaches to work, use of non-standard methods and best European teaching practices (Budnyk, 2019), development of child's critical thinking (Fomin, 2020).

At the same time, it is important to know the essence and methods of educational dialogue, the features of the organization of interaction, taking into account individual and age characteristics of students. To the question "How do you understand the meaning of" interactive interaction "?" 49.1% of respondents (28 persons) chose the answer: "joint activities of teachers and students in situational modeling in the form of dialogue, which provides solutions

to educational problems"; 35.1% (20 persons) "a form of interpersonal speech communication in which two communicators take part, as a result of which there is an exchange of thoughts, ideas, creative potential of each student is revealed"; 12.3% (7 persons) – "training aimed at solving problem situations in the process of communicative activities"; 7.2% (4 respondents) – "a type of learning that provides creative assimilation of knowledge by the student through dialogue, specially organized by the teacher", "the child learns to solve problems independently, learns to find solutions"; 1.8% (1 person) – did not answer. To the question: "When studying the content of which educational field in primary school do you most often use dialogic learning?" (55 answers), the majority of respondents (80%) indicated the language and literature subjects, 61.8% – "I explore the world", 36.4% – mathematics, 34.5% – art, 23.6% – foreign language, etc. (Fig. 2). At the same time, the least possibilities for the organization of educational dialogue, according to teachers, in the study of computer science (10.9%), as indicated to us by 6 respondents; technological education (20%), respectively 11 teachers; physical education (9.1%), as well as (1.8%) – civil education and Christian ethics.

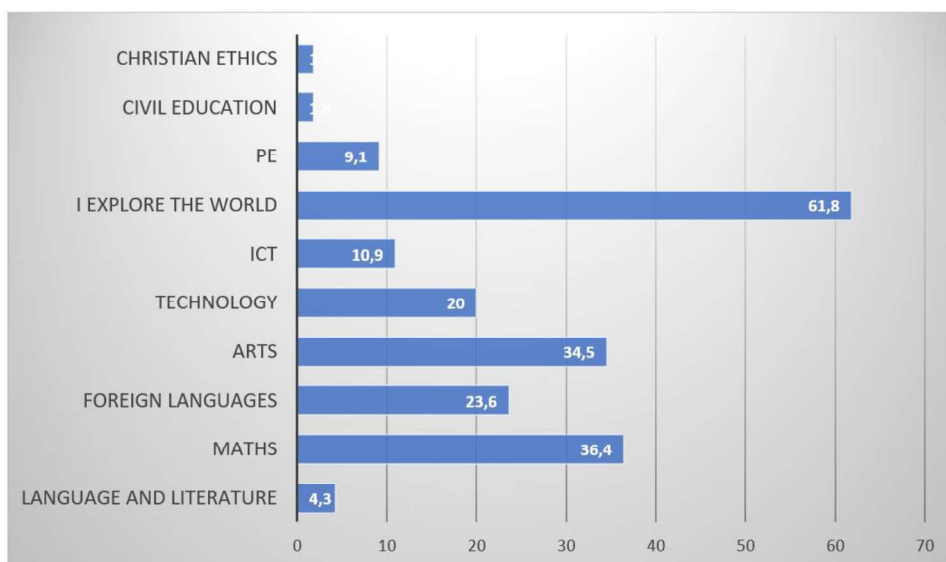


Fig. 2. Pedagogical possibilities for interaction in the educational process of primary school

It was important to find out how often teachers use dialogic learning in their practical work with students. We received the following answers to this

question (56 answers in total): 37.5% – 2-3 times a week; 28.6% - daily; 19.6% – at each lesson; 3.6% – very rarely; 7.1% – do not practice; 1.8% – had the opportunity to use in pedagogical practice at school; 1.8% (1 person) - did not answer. Thus, 48.2% of respondents use the educational dialogue every day or at each lesson to intensify students' cognitive activity, to establish partnership in learning. At the same time, there are teachers who do not practice or use this technique very rarely. Obviously, this is due to the lack of proper empirical experience or knowledge of the methods of using dialogic learning in primary school. Therefore, it is no coincidence that, according to the results of our survey, teachers answered they experience some difficulties in organizing dialogic learning. More than half of the respondents (55%, which is 33 out of 60 people), will have difficulty in dialogic training of primary school students. The rest of the respondents, who were practitioner-teachers, answered that sometimes they face certain difficulties in using these methods (25%, respectively 15 persons) and 20% (12 teachers) have no difficulties and imply educational dialogue. Taking into consideration the fact that among the surveyed teachers 46.3%, which is 25 persons with school experience school up to 3 years, as well as several people indicated that they do not yet have teaching experience, such results are obvious, especially taking into account the current challenges of education system reforms. Therefore, the following question of the questionnaire was natural: "What difficulties do you feel in the organization of interaction of primary school students" (55 answers) (Fig. 3).

Among the predicted difficulties, we identified the following:

- 1) difficulties of didactic nature (management of students' cognitive activity, selection of optimal means and methods to stimulate students to dialogue, creating a situation of novelty, creativity, independence, etc.) – 36.4%, ie 20 respondents, admitted this;
- 2) difficulties of a psychological nature (creation of moral comfort, positive atmosphere for dialogue, display of tolerance, restraint, etc.) - 36.4% (20 persons);
- 3) organizational difficulties (creating a dialogical situation, ensuring the activity of children, etc.) - 25.5% (14 respondents);
- 4) difficulties of communicative nature (ability to conduct a productive educational dialogue with students, comprehensive disclosure of opinion,

adherence to the logical sequence in the dialogue, pedagogical etiquette) - 21.8% (12 teachers);

- 5) difficulties of interpersonal-reflexive orientation (adequate perception of the situation, understanding of students, etc.) - 18.2% (10 persons).

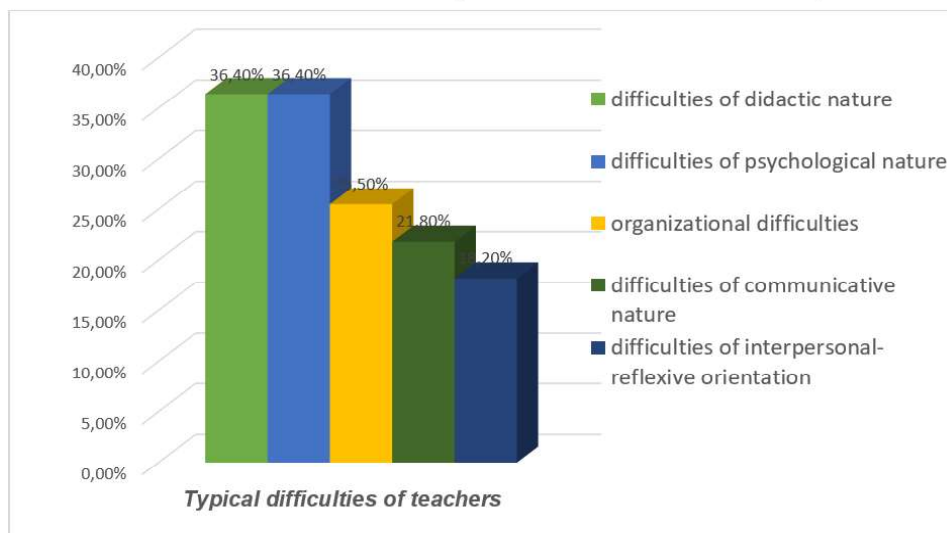


Fig. 3. Typical difficulties of teachers in organizing interaction of students in the classroom

As you can see, the most difficult tasks in the organization of interactive interaction for practitioner-teachers are the actual didactic and methodological principles for determining the content, forms and methods of stimulating and activating creative communication activities of students in the classroom. As well difficult is the establishment of a moral and psychological atmosphere among children, the so-called pedagogy of partnership, which is emphasized in the context of educational reforms. Very common are the difficulties of organizational and communicative character, because it is about the culture of communication, the ability to listen, speak correctly, to catch the attention of a partner, show tolerance, friendliness and other important personal qualities. At the same time, more than half of the respondents (50.9%) said that they experience difficulties due to insufficient educational and methodological support for dialogic learning of primary schoolchildren, 1.8% – sometimes feel the need for such support.

Taking into consideration current challenges to strengthen the practical component of pedagogical education, the approximation of psychological, pedagogical and methodological future teachers' training to real professional



activity, the introduction of the pedagogical principle of partnership, we identified the following questionnaire. "Do you feel a gap between theoretical knowledge about the organization of educational dialogue and the real situation of modeling a dialogic environment while studying specific topics in primary school?" – 56.9% (33 persons out of 58 respondents) answered Yes to this question.

Thus, the principle of practice-oriented learning is relevant at the moment, first of all, in the professional training of future teachers. The essence of this principle is to bridge the gap between theoretical knowledge and practice in the organization of the educational process through the modeling of specific situations of professional activity in the classroom in higher education. According to D. Warneke, the practice-oriented approach is an active form of organization of theoretical and practical training of students, which is realized by "saturation" of the educational process with elements of professional activity (Warneke, 2007). Obviously, this is important in the context of preparing them for modeling different types of educational dialogue in primary school.

## **CONCLUSIONS**

In the process of interaction between subjects of the educational process, information is exchanged, the proper attitude of the interlocutors to each other is formed, which characterizes the communicative aspect of this interaction; knowledge of personal values and opportunities for self-affirmation - perceptual aspect; and the organization of educational interactivity is a dialogical aspect. The organization of interactive learning in primary school requires teachers' high level of skills of pedagogical communication, emotional and volitional stability, professional qualities for effective educational communication in the classroom and in extracurricular activities. After all, in addition to the information function, interactive learning creates appropriate conditions for students to exchange attitudes, experiences, promotes self-affirmation in the group, cooperation and co-creation.

As a result of empirical research it was found that the problem of preparing teachers for the organization of interaction of students in primary school is especially relevant in the period of integration of countries into the European educational space, reforming education systems that require innovation.

Evidences of this are the results of our survey of teachers in Ivano-Frankivsk and the region (Ukraine), which found that 55% of respondents have difficulty in the practical organization of interaction in the classroom; 56.9% noted that these difficulties are due to the gap between theoretical knowledge and the realities of school practice. Thus, the training of future teachers in educational institutions, mastery of educational innovations, the acquisition of skills and abilities of partnership with students in the learning process is time-oriented. 50.9% of respondents explain these difficulties by the lack of proper educational and methodological support for dialogic learning in primary school. In the organization of interactive interaction, modern teachers often have didactic difficulties (management of students' cognitive activity, selection of optimal means and methods to stimulate students to dialogue, creating a situation of novelty, creativity, independence, etc.) and psychological orientation (creating moral comfort, positive atmosphere for dialogue, expression of tolerance, self-control, etc.).

The prospects for further research is the study of the potential of information and communication technologies, the acquisition of digital literacy skills for the organization of educational dialogue in secondary schools and higher education institutions.

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