THEORETICAL APPROACH TO A RAPIDLY CHANGING SCHOOL - CRITICAL THEORIES

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Abstract: *In modern society, change is very fast and difficult to manage. Students should be prepared for present and future needs. Therefore, the school must change and adapt to modern needs, and the theoretical level of teachers should be raised to the level of critical analysis of possible and best solutions. The concept of school and work in it must be theoretically grounded. Which theory and which concept of teaching and school organization best suits modern needs? A well-didactically educated teacher will use several theories at the same time, depending on the nature of the material, set goals and tasks, so that there is no universal answer. In this paper, we will look at the importance of critical theories because they point out the importance of autonomy and self-determination of students, their emancipatory demands, critical attitude towards social reality, emphasizing solidarity draw attention to current problems in education. In practice, behavioral, cognitive, constructivist, humanistic theories of learning, etc. are also significantly blunted.*

Key words: *Learning theories; Critical-communicative theory; Constructivist theory.*

Introduction

In modern conditions, education is at the center of problems related to the development of both individuals and society. Such circumstances today require an answer to the question of what education should be in order to meet the challenges of the society in which we live. The ancient Latins had a saying - Tempora mutantur et nos mutantur in illis, ie. Times change and we change

in them. In this post-industrial time of accelerated changes in technology, technology, social relations, way of life, the speed of change is so great that it exceeds man's ability to assimilate them and get used to them. Today, a person has to master a large amount of information in a short time, but since there is too much information, he has to select that information, because his senses cannot accept all that. This means that we must not insist on the amount of information in schools, because the time has passed when it was required to acquire knowledge in school that will be sufficient for a lifetime.

The question is which theories and which conception of teaching and school organization best suits modern needs. There are many theories of learning, some of which different from each other in the principles they stand for and the goals they strive for. There are also very similar theories, so it is difficult to draw a difference between them. The question arises as to how the teacher decides when he is in front of the students, what theory to rely on in order for his teaching to be effective. There is no universal answer that would be valid in all situations. A well-didactically educated teacher will use several theories at the same time, depending on the nature of the material, set goals and tasks, the composition of students in the class, etc.

Critical-communicative theory

This theory arose in the first half of the last century from the Frankfurt philosophical circle, which was very critical of social reality and demanded that current values be re-evaluated and viewed from the perspective of an ideal, emancipated future. Klafki, Schulz and Winkel took the attribute critical (didactics) from the "Frankfurt". One of the most prominent representatives of this philosophical school, Jürgen Haber¬mas, assumes that interest is the key and highest source of knowledge, and there are three key interests; a) technical - the effort to dispose of objects, b) practical - the effort to maintain and strengthen communication between subjects and c) emancipatory - the desire to master the hermeneutic-spiritual knowledge, that the individual realizes himself as a person and that get rid of external determinism and move towards self-determination. He believes that there are three types of science: empirical-analytical, which start from technical interests and apply instrumental thinking for the purpose of social manipulation and control; historical and hermeneutic that popularize practical interests through values derived from communicative actions. In critical theory, the subject is a social being structured in a communication way so that it realizes its emancipatory attitudes through democratic debate (J. Habermas, 1988). The critical science of education (critical-communicative didactics) starts from Habermas' emancipatory interest and understands education as a communicative action and criticizes the existing reality in order to build a better future on that critique.

The main social problem, according to Habermas, is instrumental action that presses people with its powerful rationality. The agreement was pressured and suppressed by production, which turns the world of life into its raw material basis. In contrast to this instrumentalism, which has its roots in the world of work and for-profit business, stands communicativeness, which is the right way to communicate with great emancipatory potential. Thus, communicative activity should help to suppress the limitations of instrumentalism, to pull the subject out of that embrace, to gain freedom. Critical-communicative didactics relies on these ideas. Although R. Winkel is considered the founder of critical-communicative didactics, which is also called emancipatory, the initial idea comes from Klaus Molenhauer, who in his text Pedagogy and Rationality pointed out the situation and suggested that pedagogical action turn its back on dogmatism and focus on autonomy. The main goal of teaching and education should be self-determination and autonomy of students. Emancipation is necessary for that. He accepts Habermas's belief that these goals should be achieved through free communication, through discussion, and demands: that young people be educated for social change; to point out social weaknesses in education and to confront reality with possibilities; that pedagogy is based on rational criticism and does not yield to authorities and skeletal systems; to separate pedagogy by emancipation from metaphysics, relativistic systems and ruling political dictates (K. Molenhauer, 1966).

V. Schultz, who also accepted the critical-communicative theory, advocates intentional pedagogical interaction, criticizes society for unfair selection for leading positions, demands that the school problematize the existing restrictions on the free development of personality, to point out inequalities. Students, as members of society, should be agreed upon, not persuaded or coerced. He understands the interaction in the classroom as a dialogue between the actors, which should be ensured by a democratic approach of teachers. This is because all beings have the right to freedom and self-realization and that is why they should support each other. This would be possible if the ruling interest groups recognized the right of each individual to live in accordance with their views and enable free confrontation with the inhuman features of society. The emancipation of students is the liberation from the excessive power of teachers and their right to dispose of themselves. Schulz accepts the school's obligation to prepare students for social reproduction, but only with the obligation that they have the right to autonomy, self-determination and independent self-disposition. In addition, Schulz demands that autonomy be accompanied by solidarity, because autonomy without solidarity is in the service of particular interests. Competence, self-determination and solidarity are strongly connected in Schulz. The task of the

school is not only to mediate in the acquisition of knowledge, but also to help students to be autonomous and solidary personalities (V. Schultz, 1994)

In Germany, in the second half of the 20th century, theoretical didactic currents were very alive. There were several didactic directions within which sharp discussions and polemics were held about the goals, contents, organization of teaching, position of students, functions of teachers. We will concentrate in this section on critical-constructive didactics (founder V. Klafki) and critical-communicative didactics (founder R. Winkel). At the core of critical-constructive didactics is the principle of self-determination, solidarity and decision-making of students in accordance with their abilities. It is based on their maturity to represent their own views, to think critically, to communicate. The goal of teaching is to help students develop their abilities, to develop the potential for self-determination and solidarity, in which co-determination is important. Teaching and learning are understood as an interactional process, and learning is through discovery (with understanding). Students are participants in the planning of the teaching process, articulation of the lesson and synthesis of results. Teaching is an interactional process, and it is focused on the democratization of social relations, which is its most important goal (H. Blankerc, 1989).

The essence of critical-communicative didactics was explained by its founder, Rainer Winkel, who said that it was a theory of teaching and learning, that is. systematic, verifiable and useful analysis and planning of teaching and learning processes. It is a theory of school teaching and learning as a communication process, and its goal is to critically reflect on the existing reality and turn it into more demanding possibilities. Critical-communicative didactics is based on the critical science of education. It is critical because it does not accept the uncritically existing reality, but permanently strives to correct it, to translate it into given values. This didactics is also called communicative, which refers to two levels of meaning. Teaching is a communication process for which, as in any communication process, the following 11 axioms apply:

• permanence - we can't help but communicate,
• relationship - each communicated content establishes a certain relationship,
• specificity - in each communication the participants determine the roles in which they communicate at a given moment,
• economy - partners behave economically with regard to the risks and costs of communication,
• institution - communications tend to be established through official or semi-official institutionalization,
• expectations - in order to establish a social identity, expectations are included in all communications,

• rules and roles - communications are either more marked by the equality of partners or their diversity,
• contents and relations - every communication wants to communicate something in a certain way and it only emerges from the situational context whether the real "message" is a certain content or a certain relationship between communicators,
• control - all communications always contain (partially latent) instructions, advice, wishes, opinions, etc ..., by which the participants insure each other,
• interference - all human communication is in principle subject to interference that can go all the way to communicatively abnormal, sick behavior,
• means or own goal - communications have either a more instrumental or more consumptive character, and are ultimately more a means to an end (eg information, lessons) or are an end in themselves (say in entertaining storytelling) (V. Klafki et al., 1994).

According to R. Winkel (1994), critical-communicative didactics is the only didactic theory that firmly connects analysis and planning so that external norms become superfluous, because instead planning grows out of analysis, and this in turn enables better planning. This didactics is aimed at the student. The entire class community, both students and teachers, act as equal participants in the process of teaching communication. The instrumental-subjectivist evaluation is rejected in order to focus the achieved results in learning on the improvement of human conditions. This didactics relies on the critical theory of school and upbringing, and understands teaching and learning as solidary acts of human emancipation, ie. as liberation from ignorance and wrong knowledge, from inhuman life, bearing in mind as a goal the constant democratization and humanization of social practice (Klafki, Winkel, 1994).

Winkel does not accept that external demands are imposed on schools, so, in accordance with that, he adopts Schaler's assessment that student success is instrumentalized and that it serves qualification and selection, career needs and competition. Winkel further says that learning should not be left only to economic interests, that the school should focus not only on the contents but also on the relations in the classroom, the relations between society and students, on social behavior (Koenig and Zedler, 2001).

The structure of R. Winkel's critical-communicative didactics can be imagined in pyramidally placed levels. The first and broadest level is axiological. It is intended for the analysis of existing social norms, institutions, values that the school as a more important social institution is obliged to mediate. Operating with such notions as "fundamental values", "existing values of our society", "values that young people should strive for", "contradictory views and personal experience", R. Winkel determines the totality of worldviews, ideas that are at the base of the pyramid. At the same time, he emphasizes that in the

critical attitude of these institutions and the needs of the student's personality, the necessity of self-development can be seen starting from the existing and going towards what can be achieved in relation to others. The second level consists of processes arising from school activity. Within the framework of didactic projections that make up the basic content of that level, the question of how to concretize the goals and values from the first novelty in a specific school practice should be considered and resolved. He advocates the inculturation of every student. On the one hand, the student is focused on his interests and needs determined by socio-cultural, age and other factors that the school as a social institution does not respect enough but turns more to official programs, norms and standards. Such a position, according to Winkel, reduces the real goal of learning to addiction. On the contrary, at the same level, he points out that attention should be paid to the basic values that students should adopt, to democratization and humanization. The school is assessed as a shaping environment that enables the future citizen, not only on a reproductive level, to adopt the value system of a democratic society, but also to initiate motivational mechanisms for improving future life practice. That level is marked by the expression school - possibility.

At the third level in the structure of critical-communicative didactics, attention is focused on the problem of planning the learning process, which is subordinated to the goal of forming a democratic personality, which should be achieved in stages, step by step. Winkel points out that it is a complex process of didactic organization to achieve this goal and agrees to pay attention to the structural solution of planning proposed by V. Klafki and further developed by Lencen with a critical approach to their approach. From the critical analysis, the concept of stage planning can be developed, which, step by step, follows the real realization of emancipation through numerous educational goals.

The top of the pyramid comes as a consequence of the previous steps and should lead to the goal - adoption of a solution - careful participation - asymmetric reaction - symmetrical action. This is realized on the basis of the analysis of the sample, which starts from the content, the peculiarities of the relationship between students and teachers, the share of factors that make communication difficult, as well as the nature of switching (replacement). Starting from the hierarchical scheme of the relationship between the structural elements of critical-communicative didactics, Winkel gives a vector that determines the development of this theory.

The model of critical-communicative didactics was created on the logic of antinomies. At each level of the proposed model, they are consolidated and strengthened in the form of the author's term contradictions, inconsistencies, inharmoniousness in pedagogical theory and practice. The overall structure of Winkel's model reflects the strained relations in social

critique and the attempt to establish didactics in the context of the idea of emancipation.

Winkel criticized the theory of education and the theory of teaching that they neglect disturbed, contradictory and hidden teaching processes, and that they are far from everyday school life. He rebuked curriculum theory and cybernetic-information didactic theory for unscrupulously neglecting critical-emancipatory moments and for openly advocating manipulative techniques. Christina Meller, a supporter of behaviorism, emphasized that, unlike her concept, critical-communicative didactics is about such learning in which students themselves determine and co-decide (Klafki, Winkel et al., 1994).

But even his theory did not pass without criticism. T. Grames reproaches her for not becoming really stimulating for the development of the structural components of the communicative didactic conception. He advocates a variant that he calls the subject communicative didactics. He believes that Winkel's approach is too abstract, which was present even in the constructions of Schaefer and Schaler, who insufficiently and unsystematically tested their ideas in practice. Grames relies on data from B. Benikovski's research and focuses on the analysis of communicative acts observed in real pedagogical practice in school. Communication in the educational process does not flow linearly and one-way, students cannot focus their attention on a topic for a long time, the realization is accompanied by many obstacles, exchange of opinions and many unplanned aspects of the problem. In communicative didactics this is neglected. In class, the teacher is obliged to "on the go" situationally and alternatively plan in order to eliminate obstacles and direct students to productive adoption of the exhibited material. Grames also criticizes communicative didactics for the fact that in the thematization of "subject-object relations" it tendentiously bypasses the time factor that objectively exists in the learning process (T. Grames, 1998).

We believe that the components that exist in classical didactics are not sufficiently specified in communicative didactic theory. The corresponding structural components of the communicative act presented by the traditional sender - information - channel - receiver scheme are also not specified, although there is an indirect relationship between structural data. This suggests that theorists of communicative didactics have not yet fully fulfilled the problem field of their subject. Communicative didactics is connected with the requirements of specific attributes and the tendency to put them in the foundation of the theory, which is a characteristic of all branches of the German humanities.

Critical-communicative theory, by pointing out the importance of autonomy and self-determination of students, its emancipatory demands, critical attitude towards social reality, emphasizing solidarity, drew attention to current problems in education and thus made a significant contribution to

the humanization of educational work. However, teachers must keep in mind that one didactic theory, no matter how comprehensive, cannot solve all teaching problems. For effective teaching, it is necessary to apply elements of different theories, taking into account the goals, nature of the content and the possibilities of students.

Constructivist learning theory

Constructivism as a didactic direction originated within cognitive psychology, which starts from the fact that man is not a passive object and a mere recipient of environmental influences, but an actor, a subject who actively relates to the environment and himself, who receives, seeks and selects information, processes it and transforms into new semantic units, retains them and uses them as a basis in choosing and shaping one's own actions (Potkonjak and Šimleša, 1989). The authors generally agree that cognitive approaches to learning (dating from the first half of the 20th century) are based on the theory of the development of cognitive schemes or thought structures that represent certain external or internal phenomena or processes.

Constructivism in learning cannot be attributed to one author because constructivist theory is based on the postulates of several of them - John Dewey, Jean Piaget, Leo Vigostky, Jerome Bruner and others. Dewey demanded that children acquire knowledge through independent thought activity, and not that it be served to them in a ready-made form. The children's experience and self-help, which Dewey insisted on, play a big role in that. He advocated the application of constructivist procedures because he believed that students should construct knowledge. Learning is a mental activity in which the student constantly evaluates his experiences and based on that sets or changes his own goals. The social environment has a stimulating effect on education because an individual will learn if social conditions stimulate him to do so (J. Dewey, 1966).

Piege's initial position is that the most important participation of students is necessary in the learning process. Knowledge cannot be passed from mouth to mouth. It must be constructed by the student himself. In order to know the world, a student must act on an object because that action helps him to know objects. Piaget talks about the readiness to learn and emphasizes that a child cannot learn something new if he has not reached the required level of maturity, because children at a certain stage of development cannot master concepts that require a higher level of knowledge. According to Ž. Piaget, a consequence of acquiring new schemes or adapting existing schemes to new needs. Assimilation is the process of turning experience into internal representations and new schemes that are shaped to fit existing knowledge. Accommodation is the process of adapting and changing existing schemes in order to accept a new experience (J. Piaget, 1983). This double process of

accommodation allows the student to form a thought structure. Balance enables a person to find a balance between himself and the environment. After a new event, the student's cognitive balance is disturbed to the extent that he is not able to assimilate and adapt new information until he establishes the necessary balance. There are many types of balance between assimilation and accommodation, depending on the new development, depending on the problem to be solved. For Piaget, cognitive balance is a key factor in explaining why some children are clearer than others.

In the philosophy of education, Piaget attaches great importance to the curriculum in the center of which the student is located. Programmed learning does not agree with his ideas because he demanded that the main attention be paid to creating an environment suitable for learning in which to actively explore. Programmed learning with a strict procedure and repetitions is not a favorable environment for active research. Opinion is intensified by the application of assimilation and accommodation, but therefore pedagogical situations should be planned to have both assimilation and accommodation potential. Students should be enabled to research, manage, experiment, ask questions, and seek answers. This does not mean that students should be allowed to do what they want. The teacher is obliged to present the material to them, to create a situation and an opportunity for research. Piaget says that to understand this means to discover or reconstruct with the help of feedback, and these conditions must be considered if the formation of individuals capable of creativity is desired, and not simply repetition.

The constructivist theory of learning also incorporates the ideas of LS Vygotsky, one of the most important psychologists from the first decades of the 20th century. He started from the fact that man's mental activity is socio-historically determined and that there are two types of such activities - external (man physically acts on external objects) and internal (imaginary images that replace real objects), where external are dependent on because they were previously invented by man. The word is a mediator between the acting subject and the object on which he acts. It has a double role - for the subject to mark the object with it and to ascribe the appropriate meaning to the objects. Teaching is a psychological process of student transformation and is determined more by the mediated content than by the degree of student development and it can accelerate student development. Vygotsky distinguished everyday (spontaneous) from scientific concepts, with the latter coming after the former, when children are more mature. He disputed Piaget's claim that only spontaneous notions are a feature of children's thinking, because a child mentally processes not only spontaneous but also scientific notions that he acquired under the influence of the elders. In teaching, as an important factor in the progressive socialization of the child, scientific concepts are acquired which are also a feature of the child's opinion. It is

important that teachers know the process of children's thinking, because scientific concepts are created through thoughts. He did not accept Piaget's claim that a child's thinking goes through certain developmental stages, regardless of whether the child is trained or not, because he believed that a child's mental development should be evaluated not by what he knows but by what he thinks in an area unknown to him. . The most important zone for learning is the next development, the category that Vygotsky introduced into developmental psychology. He claims that the child's mental development should not be inferred from what has already matured in him, not only from the already formed mental functions, but also from those that are still in development. It is a zone of further development. That is why teachers should give students such tasks that provoke the zone of further development in order to accelerate their intellectual progress. In that mental effort, the student develops, and the teacher should guide him and help him minimally. Giving such tasks, which are only at the level of the student's already achieved development, does not encourage mental progress (L. Vygotsky, 1977).

A significant contribution to the constructivist theory of learning was made by J. Bruner who did not accept the position of Ž. Piaget said that mental development depends only on biological age, but, like Vygotsky, he believed that the influence of the social environment on the development of an individual is great and that it can accelerate but also slow it down. He developed a concept of three ways of presentation that each individual goes through: action (preschool child reduces his activity to actions and movements, a little story and a little imagination), iconic (thinking in pictures) and symbolic (hierarchical concepts). He believed that the structure of knowledge and the logical arrangement of information by thematic units is important in teaching. The teacher should not serve the students with ready-made knowledge, but instruct the students to master it independently, because the real learning is the construction of knowledge. It is best learned through interaction (Radulović et al., 2016; Radulović & Stojanović, 2019; Trivić et al., 2019). While learning, new ideas are born to the student, which he tries to fit into already existing knowledge and experiences, thus enriching them (Jovanović et al., 2017). He builds new ones on the already existing knowledge, creating logical connections between them. Thus he expands and reorganizes the existing thought structure (J. Bruner, 1976).

M. Mušanović states that J. G. Brooks and M. G. Brooks tabulated traditional and constructivist departments. There were differences in all elements of the teaching process in understanding the program and its implementation, sources of knowledge, teacher's approach and style of work, requirements for students, assessment and social relations.

Table 1. Constructivist teaching according to Mušanović, (2005).

Traditional departments	Constructivist departments
The program is a presented part of the unit with an emphasis on basic skills	The program is a whole part of the program, and the emphasis is on the most important concepts
Strict adherence to the prescribed program is highly valued	Asking questions is highly valued
Program activities rely heavily on existing textbooks and manuals	Program activities rely heavily on primary sources of knowledge and manipulative teaching aids
The student is perceived as an "unwritten board" on which the teacher imprints information	The student is seen as a person who thinks and creates his own concepts of the world
The teacher teaches by passing information to students	The teacher has an interactive work style and creates an environment conducive to work for students
The teacher requires the correct answer to assess the student's knowledge	The teacher asks the student to say what he thinks about the topic in the continuity of the student's current conceptions that he uses to process the lesson.
Checking and assessment is seen as a separate part of teaching and is always performed by testing	Checking the progress of students is built into the course of learning and is always achieved by observing the student's activities, exhibitions and works
The student usually works alone	Students primarily work in groups

The principle of significance of the topic. The teacher asks questions for reflection. Student responses provoke new questions and new considerations. Reasoning students actively adjust their knowledge and views to these logically constructed questions. In the process, they can make mistakes, go the wrong way, come back, and start over. They express the scientific determination of meaning in their personal terms. In a loud exchange of thoughts, they correct, regulate, enrich, and create a new structure of knowledge.

Comprehensive scheme of knowledge structure. The structure of knowledge in constructivist learning is presented in a complete scheme. Each studied knowledge structure contains the previous structure and affects the

new knowledge structure. For example, if a number is studied in a language, then the integrity scheme will be set so that the number is in the middle, with the previous knowledge on the left - adjectives, nouns, and the next on the right - pronouns, verbs and adverbs. The result will be: nouns, adjectives, numbers, pronouns, verbs, adverbs. In this complete scheme, number is studied in depth in connection with nouns, adjectives, pronouns and verbs in the system of language integrity. In order to properly structure knowledge in constructivist learning, the teacher is obliged to master a complete view of the content of his subject.

Logical structures of knowledge. Starting from Piaget's logic of wholeness, it is possible to determine the following logical connections, relations and interdependencies among the structures of knowledge.

Harmonization of the knowledge structure (two knowledge structures are harmonized by general relations, unite and form a new knowledge structure). Inverted structures (united by the general relations of the structure, knowledge is reversed and transformed). Associative structures (opinion always preserves the ability to eliminate and find other variants for the solution. The result obtained in different ways is always the same). Annulment structures (the structure of knowledge is annulled, disappears, changes if multiplied by zero). Identical structures (two identical structures can be combined into one complex structure). Logical structures of knowledge are indispensable parts of constructivist learning.

Logical thought operations. When analyzing tasks in the traditional way of learning, it can be seen that the largest part is included in the exercises, ie. in repeated activities for adoption. These tasks are fulfilled within one or two knowledge structures and are focused on a certain level of knowledge, skills and habits. In constructivist learning, in addition to these structures of knowledge, operations of logical thinking are realized. These operations allow students to group knowledge structures, to explain their reciprocity and relationships, to classify them, to enrich them, or to replace them with other structures. By thinking about the structures of knowledge, the student builds the structures of his opinion and the logical structures of his knowledge. Logical knowledge structures are built as a team or with the help of teachers. The classification operation enables students to acquire the intellectual habits of breaking the plural into subgroups according to certain characteristics. Teams and procedures in conducting this operation on knowledge structures can be as follows: classify according to characteristics, make a difference by characteristics and draw a conclusion, throw out the superfluous, checking.

Serial operation. By carrying out the logical operation of serialization in the structures of student knowledge, intellectual habits of grouping knowledge structures and uniting them according to certain characteristics or only one characteristic are formed.

Replacement operation. With this operation, one structure is replaced by another (for example, in mathematics, the number is replaced by the letters 6+7=a+b). It is the most basic logical operation in knowledge structures and an intellectually important habit by which knowledge is reshaped. It destroys the vertical structure of knowledge and helps students to mentally transfer them to a horizontal structure. By conducting this operation in knowledge structures, students enrich their existing knowledge with new knowledge structures and transform it into new knowledge. The request for this operation can be: when you perform an action, replace the numbers with the letter expression, what happened. Multiplicative operations. This operation is performed simultaneously on several knowledge structures that have general characteristics or connections (for example, in linguistic knowledge these are changes of some parts of words - by cases, by numbers. The tasks in this operation are: change suffixes; combine, compare, argue, set, write appropriate).

Conclusion

In our social reality, the issue of educational goals is becoming increasingly relevant due to rapid social change. This raises the question of how to define the concept of education in order to meet the new needs and requirements of the society in which we live. Studies show that each theory has certain positive features, but also corresponding shortcomings. Not all theories are equally in line with the demands and needs of society. Thus, it can be concluded that ideas for application cannot be sought in one theory alone.

The significance of critical theory in education is that it has led to positive trends in this area by insisting on new relations between society and school, between teachers and students, demands to approach the student as an autonomous person, proposals to focus more on development in school students' personalities, and less on the memory of the content. Also, these theories indicate the importance of students' self-determination, their emancipatory demands, critical attitude towards social reality, emphasizing solidarity, drew attention to current problems in education and thus made a significant contribution to the humanization of educational work.

By studying critical theories, we want to raise the level of education of students in order to come to the conclusion that: critical thinking, encourages the development of self-confidence, develops creativity, develops the ability to solve problems and lifelong learning, etc. In didactic practice, preference is given to heuristic methods, research in nature, problem situations and the like.

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Conflict of interest
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