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# THE USE OF INTERACTIVE, SIGN-CONTEXTUAL, AND PARTIALLY EXPLORATORY TEACHING METHODS AS EDUCATIONAL INNOVATIONS

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**Abstract.** The main methodological innovations today are associated with the use of interactive teaching methods. Consequently, interactive learning is, first and foremost, dialogic learning, involving interaction between the teacher and the student or between students. Interactive learning is a type of active learning.

**Keywords:** Interactive learning, methodological innovations, interactive teaching methods, active learning forms.

**Аннотация.** Основные методические инновации связаны сегодня с применением интерактивных методов обучения. Следовательно, интерактивное обучение -- это, прежде всего, диалоговое обучение, в ходе которого осуществляется взаимодействие преподавателя и студента или студентов между собой. Интерактивное обучение является разновидностью активного обучения.

**Ключевые слова:** интерактивное обучение, методические инновации, интерактивные методы обучения, формы активного обучения.

**Annotatsiya.** Bugungi kunda asosiy metodologik yangiliklar interaktiv o'qitish usullaridan foydalanish bilan bog'liq. Binobarin, interaktiv o'rganish, birinchi navbatda, o'qituvchi va talaba yoki talabalar o'rtasidagi o'zaro ta'sirni o'z ichiga olgan dialogik o'rganishdir. Interaktiv o'rganish faol o'rganishning bir turidir.

**Kalit so'zlar:** Interaktiv o'qitish, metodologik yangiliklar, interaktiv o'qitish usullari, faol o'qitish shakllari.

## INTRODUCTION

A new quality of learning and teaching in general, is an absolute priority for education. The teachers and students, in most universities that have used the traditional lecture in courses, have revealed the limited effectiveness in both teaching and learning. The teacher must use methods to encourage discovery learning, heuristic and research methods. Using interactive techniques and strategies, the students become more engaged in learning; retain more information, thus becoming more satisfied.

The interactive teaching and learning strategies described in this section are used to engage students in the resilience and wellbeing, drug education and road



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safety content included in each focus areas of this resource. Strategies are indicated in bold text in the learning activities. Teachers should refer to this section of the resource for an explanation of the purpose and how to implement the strategy with their students.

## METHODS

Active learning forms are classified as educational technologies defined as "technologies for modernizing learning based on activating and intensifying student activity." Active learning forms are methods that encourage students to engage in active thinking and practical activity while mastering the educational material. The key undeniable advantages include a high degree of independence, initiative, the development of social skills, the ability to acquire knowledge and apply it in practice, and the development of creative abilities.

Sign-contextual (or simply contextual) learning is a form of active learning intended for use in higher education, focused on the professional training of students and implemented through the systematic use of a professional context, gradually saturating the educational process with elements of professional activity.

The concept was developed by A.A. Verbitsky in 1991. Contextual learning is based on activity theory, according to which the acquisition of social experience occurs through the active, passionate engagement of the subject. It embodies the following principles: personal agency; problem-solving; the unity of training and education; and consistent modeling of the content and conditions of specialists' professional activities through the forms of students' learning activities. The teaching of general education subjects is proposed to be interpreted within the context of professional activity, departing from the academic presentation of scientific knowledge.

## ANALYSIS AND RESULTS

The essence of contextual learning is defined as the organization of activities that require the acquisition of new knowledge and its subsequent application, explaining and justifying the effort expended on its assimilation.

A contextual task is a motivational task whose conditions describe a specific life situation that correlates with the students' existing sociocultural experience (known, given); the requirement (unknown) of the task is the analysis, understanding, and explanation of this situation or the choice of a course of action in it, and the result of solving the task is an encounter with the learning problem and an understanding of its personal significance.An example of contextual learning technology is cognitive instruction. Its essence lies in presenting information to the learner in a symbolic, visual, and graphical form (book texts, flashcards, drawings, diagrams, charts, and tables) to solve a learning and cognitive



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task, complete a practice-oriented assignment, and, in some cases, to assimilate new educational material.

Cognitive instruction is carried out using guiding texts, the didactic value of which lies in their focus on the effective acquisition of knowledge and the development of competencies. The essence of a guiding text is the encoding, storage, and communication to the subject, using verbal and symbolic means, of relatively uniform information of a relatively small volume suitable for individual perception.

The following general requirements apply to guiding texts:

◆ the didactic material used in guiding texts should contribute to the development of social, professional, and methodological competencies;

◆ particular importance is attached to the rigorous, scientific reliability of the educational material in the guiding text, i.e., Its compliance with modern advances in science, technology, and production technology;

Guiding texts should promote awareness and active learning, strengthen knowledge acquisition, and develop professional skills and abilities. Therefore, they are most often used to connect theory with practice, as the application of theoretical knowledge in practice promotes a deeper and more conscious understanding of the material being studied.

To better understand the information contained in the guided text, it should be illustrated with diagrams, drawings, photographs, and tables, i.e., made more visual.

Guiding texts should be structured so that they can be used to individualize group learning.

Each series of guided texts should include texts of three difficulty levels: the first level is designed for weak students, the second for average students, and the third for strong students.

When selecting material for guided texts, both intra- and interdisciplinary connections must be considered.

Guiding texts can be designed to provide a differentiated approach to students during their independent work, to monitor their knowledge and skills.

An example of a simulation learning model is the case study method. The case study method is an intensive, active learning technique; it is interactive, focused on collaboration and partnership, as work takes place in groups. The goal of a case study is to jointly analyze a situation arising under a specific circumstances and develop a practical solution. The best solution in the context of the problem is selected through situation analysis and evaluation of the developed alternatives.



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The case study process consists of several stages:

◆Analysis of the practical situation in a subgroup. This stage involves independent student work. If the number of students is small, they can be divided into pairs. The main task of the subgroup at this stage is to prepare to formulate their findings and conclusions before the intergroup discussion. The small group can prepare: a list of key events over time; a table of tasks and decisions; a consequence diagram; graphs of changes in technical and economic indicators; visually presented solutions in the form of symbols; classification groups of actions and events, tables, and graphs.

◆Preliminary discussion of the situation in the classroom. This stage is necessary for the instructor to ensure that the students have mastered the material and that everyone present understands the problems posed by the situation. The instructor answers questions raised by the participants in the analysis. Only questions that seek clarification of events or facts are permitted, not explanations of causes or possible solutions and actions, if any. The subgroup's presentation includes an assessment of the positive and negative consequences of possible solutions, a list of risks and potential problems, and assumptions about possible subsequent developments.

◆Intergroup discussion. This stage is conducted based on the subgroups' presentations. Representatives delegated by each subgroup to present the final material present their analysis and proposed solutions, while participants from other subgroups act as opponents. The instructor controls the situation and acts as the facilitator and leader of the discussion, and, if necessary, as an opponent and critic, facilitating and directing the discussion. It's most effective to organize a discussion between the participants in the analysis, so you can "redirect" questions to other students.

◆Summarizing. This is done first by those in the audience who wish to speak, and then by the instructor leading the lesson. The instructor evaluates the conclusions of the subgroups and individual participants, as well as the overall course of the discussion. Simultaneously, unsuggested options are formulated and justified, along with any mistakes made, and particularly productive solutions are highlighted.

One form of active learning is problem-based learning—a type of instruction in which the instructor, by systematically creating problematic situations and organizing students' activities to solve learning problems, ensures an optimal combination of their independent research activities and the assimilation of established scientific conclusions.



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In pedagogical practice, three types of problem-based learning are distinguished, each characterized by its own methods of action for the instructor and students: problem-based presentation of educational material; partially exploratory (heuristic); and exploratory.

The essence of problem-based presentation of educational information is that, by creating a problematic situation and posing an educational problem, the instructor not only communicates the final conclusions of the research, but also recreates for students the path leading to the solution of this problem, reveals internal contradictions, and proves the validity of the obtained conclusions through experience or a narrative about an experiment conducted by scientists. This type of problem-based learning is typical of problem-based lectures.

The partially exploratory method assumes that students, under the guidance of the instructor, partially independently solve educational problems.

The essence of interactive learning is that the learning process is organized in such a way that virtually all students are involved in the learning process, enabling them to understand and reflect on what they know and think. Students' collaborative efforts in learning and mastering the material mean that each student makes a unique, individual contribution, sharing knowledge, ideas, and methods. Moreover, this occurs in an atmosphere of goodwill and mutual support, which not only enables the acquisition of new knowledge but also develops cognitive activity itself, elevating it to higher levels of cooperation and collaboration. Interactive learning presupposes a different logic of the educational process: not from theory to practice, but from the formation of new experience to its theoretical understanding through application. The experience and knowledge of the participants in the educational process serve as a source of mutual learning and enrichment. By sharing their knowledge and experience, the participants take on some of the teacher's teaching functions, which increases their motivation and promotes greater learning productivity. Interactive learning forms and methods can be divided into:

◆Discussion-based: dialogue, group discussion, case studies, moral choice analysis, etc.;

◆Game-based: didactic and creative games, including business (management) games, role-playing games, and organizational activity games;

◆Training-based learning (communication training, sensitivity training), which may include discussion and game-based teaching methods.

A business game is a method of teaching and assessing competencies used in secondary, general, secondary vocational, and higher education, and is also actively used in the professional development of specialists with higher education.



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## CONCLUSION

Currently, the challenge of improving the quality of domestic education necessitates the refinement of educational technologies. The new demand for highly qualified specialists cannot be met without a significant overhaul of the professional training system. Therefore, the need to integrate modern teaching technologies into the educational process that develop students' creative abilities and increase their engagement in learning is undeniable. In my opinion, the educational process should be engaging and productive, i.e., aimed at maximizing the achievement of stated goals. Experience shows that the use of active learning methods not only improves the level of professional development of students, which is the end result of the educational process, but also makes the process more interesting and productive.

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