Modern educational technologies in teaching chemical disciplines at a pedagogical university

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Innovations in education are primarily associated with information and communication technologies (ICT) and e-learning today. Until now, distance learning has been seen as an addition to full-time learning. The 2020 pandemic has shown the need to adapt all educational actors to distance learning using modern ICT capabilities without losing quality.

The achievement of high educational results is greatly influenced not only by the equipment of technical means, but also by the organization of the educational process.

Learning Management System Moodle is used to provide distance learning at the Belarusian State Pedagogical University Named After Maxim Tank. This system offers extensive tools for presenting teaching materials, conducting lectures, seminars and practical classes.

The organization of effective remote training requires teachers to expand their competencies. It is necessary to select carefully the didactic material, organize feedback with students, create to test for examinations. We have developed interactive electronic educational and methodological complexes for such academic disciplines as "General and Inorganic Chemistry", "Organic Chemistry", "Analytical Chemistry", which meet the above requirements. The outcome of training also depends directly on the motivation, independence, abilities and self-discipline of students.

Thus, distance learning is effective when a teacher organizes students' personal knowledge engineering activities. This approach involves the integration of information and pedagogical technologies, ensuring the interactivity of educational actors and the productivity of the educational process. However, a laboratory workshop plays an important role in the study of chemical disciplines.

Video recordings of the experiment, even with the most detailed comments, are an unequal replacement for work in the laboratory. Interactive learning packages based on electronic learning systems can be used to expand the capabilities of traditional face-to-face learning.