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BODY TEXT



Chemistry

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<u>TAHRIR HAY’ATI</u>	<u>TAHRIRIYAT A’ZOLARI</u>
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CONDUCTING GAME METHODS IN CHEMISTRY LESSONS

Mahmadrazhabova Muzhgona Bakhtiyorovna – 2nd year student

of Jizzakh State Pedagogical University,

tunikom57@mail.ru

Annotation. The article presents the experimental pedagogical work the school teachers used when writing papers for the highest qualification category. The educational products of the internship site are not only the expositions created, the lessons conducted, but also the speeches of teachers at scientific and practical conferences of various levels, written abstracts on this topic, seminars for practical teachers.

Keywords: Modern lesson, methodical association, schoolchildren, knowledge quality, communication skills.

Аннотация. В статье приведены экспериментальной педагогической работы учителя школы использовали при написании работ на высшую квалификационную категорию. Образовательными продуктами работы стажерской площадки являются не только созданные экспозиции, проведенные уроки, но и выступления педагогов на научно-практических конференциях разного уровня, написанные тезисы по данной теме, семинары для учителей-практиков.

Ключевые слова: Современный урок, методического объединения, школьники, качества знаний, коммуникативность.

The transition to new educational standards requires new forms and methods of organizing the educational process from all categories of teaching staff. But still, the main form remains the lesson. According to the requirements of the Federal State Educational Standard, the requirements for a modern lesson have also changed. The motivation for conducting lessons in an unconventional form for the staff of our

school was the words of the teacher and scientist J. Dewey: "If we teach today the way we taught yesterday, we will steal from the children tomorrow."

The modern lesson is variable, the classification comes to the fore not according to didactic goals, but according to the activation of cognitive activity and teaching methods. These are lessons-conferences, round tables, excursions, research, projects, seminars. Conducting such lessons requires from the teacher not only serious additional training and the use of additional material and technical base, but also the involvement of resource centers in the work. And this opportunity is not always provided. We have found a way out of this situation. For several years, teachers of the school methodical association of the natural science cycle have been organizing a series of meta-subject exhibitions.

The creation of the exhibition can be considered as a long-term collective interdisciplinary project in which participants participate:

- Subject teachers acting as coordinators and tutors;
- students of different ages – designers, organizers, guides;
- Parents who provide assistance in the selection of exhibits.

These exhibitions are not for the sake of exhibitions. On the basis of the created expositions, subject teachers conduct integrated lessons that are aimed not only at achieving subject, but also personal and meta-subject learning outcomes. Students are thoroughly acquainted with such interdisciplinary concepts as "measurement", "observation". The basic concepts of "substance" and "chemical element" are considered from all aspects. The exhibits of the exhibition, prepared and conducted excursions, act as elements of source education, expanding the possibilities of studying school subjects.

I am convinced that the systematic organization of the process of individualization of education contributes to improving the quality of students' knowledge in chemistry in the implementation of didactic conditions (including students in the performance of multi-level tasks containing regional, historical,

environmental information) and methodological principles (individualization, scientific, systematic, cooperation, etc.). The quality of knowledge and educational skills of schoolchildren in the process of teaching chemistry is established by the teacher on the basis of the current "State Educational Standard in Chemistry".

Individual learning tools include specially structured manuals, flashcards for solving computational problems with step-by-step detail, logical and semantic models. When organizing technological training, the teacher must study the subject together with the students. Therefore, designing based on the results of diagnostic sections becomes important in the activity of a teacher. Diagnostics is necessary to obtain individual and personal characteristics of students: socionic type, type of thinking, levels of learning ability. Of all the variety of personal qualities, she focused on those that were proposed by E.F. Zeer: originality (the ability to preserve and put into practice original, unique skills, unique properties), independence (the ability to independently organize and rationalize their activities), mobility (willingness and ability to quickly change activities, the ability to quickly adapt to new ones conditions, responsibility (control), communication skills (the ability to build relationships with other training participants correctly). When organizing technology, the teacher differentiates students and the variable content of tasks by difficulty levels. В своей работе использую общие методические показатели качества знаний, разработаны по следующим уровням:

- 1 – recognition level;
- 2 – Playback level;
- 3 – applying knowledge in a familiar situation;
- 4 – applying knowledge in an unfamiliar situation;
- 5 – creative level.

From the generally accepted characteristics of chemical knowledge, I take into account the following parameters of knowledge quality (completeness, depth, flexibility, systematicity, awareness). After the lesson or by the end of studying the

topic, it is important for the teacher to comprehend and evaluate the learning process. It is necessary to analyze and adjust the thematic planning and compiled methodological materials, as well as draw conclusions about how successfully the students worked on the topic.

The result of the work of the internship site is the theoretically grounded experience of teachers, which the teachers of our school are happy to share with colleagues. On the basis of the school, together with the Department of Natural Science Education of the Nizhny Novgorod Institute of Educational Development, methodological seminars on the exchange of experience for teachers of natural sciences are held. The teacher should not only lead the educational process, but also engage in methodological research. For methodical work, it is mainly necessary to know the subject of teaching - chemistry. A chemist can always become a teacher and a methodologist. A systematic approach to determining the subject content of the general chemistry course and organizing activities for its assimilation is an effective method of improving chemistry teaching and forming the creative thinking of future specialists.

The results of the experimental pedagogical work of the school teacher were used when writing papers for the highest qualification category. The educational products of the internship site are not only the expositions created, the lessons conducted, but also the speeches of teachers at scientific and practical conferences of various levels, written abstracts on this topic, seminars for practical teachers.

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