

### INTERACTIVE METHOD OF TEACHING CHEMISTRY

### Maerbek Zhibek

Student, Taraz Regional University named after M. Kh. Dulaty, Kazakhstan, Taraz

## Shaidazimova Aliya

Student, Taraz Regional University named after M. Kh. Dulaty, Kazakhstan, Taraz

## **Mazhibaev Asylzhan**

научный руководитель, Scientific director, Cand. Chem. Sciences, Associate Professor, Taraz Regional University named after M. Kh. Dulaty, Kazakhstan, Taraz

# интерактивный метод обучения химии

## Маербек Жибек

студент, Таразский Региональный Университет имени М. Х. Дулати, Казахстан, г. Тараз

### Шайдазымова Алия

студент, Таразский Региональный Университет имени М. Х. Дулати, Казахстан, г. Тараз

### Мажибаев Асылжан Кенжекереевич

научный руководитель, канд. хим. наук, доцент, Таразский Региональный Университет имени М. Х. Дулати, Казахстан, г. Тараз

**Abstract.** This article suggests the use of an interactive teaching method in chemistry teaching, which fully mobilizes students to classes. This method provides for working with subgroups and pairs using the achievements of information technology.

**Keywords:** interactivity, interactive learning, interactive method, brainstorming, pair work, "jigsaw" method, "snowball" method.

Methodological approaches that help to increase the activity of our students are called interactive. Although these methods are very easy to implement from the outside, they also have their own peculiarities and complexities. Interactivity-comes from the English word "interaction".

But interactive learning requires a lot of time to assimilate relevant data, the application of new, complex criteria for evaluation and gives a lot of trouble to teachers who do not have sufficient experience in monitoring the cognitive activity of a student [1]. Interactive learning takes into

account the needs of students, their personal experience is taken into account, positive results are achieved, freedom of choice and independence are realized, students differentiate their actions. During the learning process, there is a complete change in the relationship between the participants, in communication with the teacher and with peers, the student will feel more at ease [2].

The interactive method forms the types of interactions and tasks of a large scale. Nevertheless, whatever the methodological approaches, the main source of knowledge is considered to be the experience of students in their own lives. During the learning process, interaction with students takes place:

- with the teacher (i.e. when the student answers the teacher's question);
- with other students (pair work);
- in the younger group (3-5 students);
- in large groups (role-playing games/discussions, classroom analysis, etc.);
- a group of students and the population (students conduct social inquiries);
- types of equipment (for example, with computers) [3].

To solve the educational and educational tasks of the teacher , the following interactive forms are implemented:

"Brainstorming". To solve the problem, participants will be asked to find as many lines, ideas, suggestions as possible, one by one to write on the board or on paper. After the preparation of such a "bank of ideas", an analysis and discussion is carried out.

"Learning-learning". The material of the topic is provided individually according to the number of students in the group. Students work and share data, prepare temporary pairs, after which the discussion and consolidation of educational material is carried out.

"Joint project". All groups are working on doing a lot of different theme tasks. After completing the work, each group will demonstrate their research, as a result of which everyone will get acquainted with the topic.

Of these, it would be a mistake to stick to one model. It is worth including these learning models in order to achieve the effectiveness and quality of the educational process. Let's focus on the main forms of interactive learning used during the lesson.

The "jigsaw" method. Here, divided into subgroups, each student sets himself a specific task. These are: group leader (leader), speaker (speaker), secretary, assistant secretary, time-saver (time-hyper). The tasks of a certain chapter are divided into groups. After the groups have read this assignment, the group leader will explain to the group members. The team leader then directs the members of his group as representatives to other groups. And the head of the group explains his assignment to a representative from other groups. Representatives of the group, having understood the instructions of other groups, tell the group leader. Finally, united, he defends the task by placing it on a poster.

The "snowball" method. In this method, it is divided into small groups. However, tasks are given individually from each person in the group. Each student is assigned special letters (for example: group A. A-1, A-2, A3, A4, A5 in other groups, etc.). Routing sheets are distributed to each student. Students get up from their seats, each of whom sits in new places according to their own guidance sheet (for example: a-1, B-1, C-1, D-1, E-1, etc.). Those at the table take turns explaining their assignments, listening to other students. After the group members listen, each student gives the name "best speaker" to the student who pronounces his answer more interestingly and well. At the end of all rounds, students must resume their original places, the teacher collects their itinerary sheets and writes the results on a common sheet. Through this general page, the strongest player

and the strongest team becomes known.

**The spider game**. The class is divided into groups of four or five students, and the students in each group are numbered. A spider web is drawn on the board, and tasks are recorded on three levels. Each student prepares for a task depending on their number. After completing the task, students with the same number are grouped, analyze the questions and evaluate themselves. The teacher gives correct answers to the tasks. With correct answers, students evaluate each other. They come back to their groups, explain their materials on their questions and evaluate each other.

Using the methods, students create opportunities such as stability, strength of knowledge, interest in learning, increased activity, the ability to evaluate themselves [4].

Summing up, it should be noted that modern teachers, when working with students in chemistry lessons, use many interactive teaching methods, as they are productive, allow organizing forms of learning and means of evaluating results.

When preparing students, it can be concluded that interactive teaching methods complement and develop long-known scientific pedagogical methods, therefore, their rapid introduction into the educational process takes place. Undoubtedly, interactive teaching methods are an interesting, creative, promising direction of pedagogy.

### List of used literature:

- 1. https://kk.wikipedia.org/wiki
- 2. Пометун О.І., Пироженко Л.В. Сучасний урок. Інтерактивні технології навчання. К.: А.С.К., 2004.
- 3. Құтпанбаев Ә, «Оқушының білімін бағалау дұрыс па?» Бастауыш мектеп №6,2001ж.
- 4. Дьяченко В.К. Сотрудничество в обучении: о коллективном способе учебной работы. М.: Просвещение, 1991. 192 с.