# Evaluation of the Effectiveness of the Knowledge Acquired by Students using the "Collaboration" Interactive Teaching Method

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**Summary**: This article examines the effectiveness of teaching the subject clinical pharmacology using the "collaboration" method in medical universities. During the learning process, students have the opportunity to acquire knowledge together in teams, small groups and pairs to ensure mutual development.

**Key words**: practical training, clinical pharmacology, interactive teaching method, collaborative learning, effectiveness of collaborative learning technologies..

## Relevance of the topic:

In modern conditions, the education of cooperation, its organization is of particular importance. In addition to the above ideas, the essence of the collaborative learning method lies in the idea of step-by-step (inertia of ideas, separation of important ones, design revision) and implementation of problem-solving processes based on teamwork [2,7, 9,12,15]. Ultimately, collaborative learning fosters conscious discipline in the learner, sees its success as a group success, sets the stage for peer assignments, peer partnerships, peer support, and finally serious mental work. Collaborative learning is a process where students learn in groups, small groups, and pairs. Mutual development is education, which is the joint organization of teacher-student (s) relationships, the main idea of which is to perform learning tasks in a team, in small groups or in pairs, in cooperation. The ideas of this type of education were formed in the 80s of the last century on the basis of the views of J. J. Rousseau, K. Ushinsky, V. Sukhomlinsky, A. Makarenko and innovative teachers [1, 3,8, 10,13,14].

# **Purpose of the topic:**

Joint training of students contributes to the formation of a worldview based on the development of spiritual, moral, intellectual physical abilities, interests, motives. This type of learning differs from Cooperative Learning in that it allows students to work in teams through pairs and small groups [4,5,6,11].

make sure they have the skills. This type of training is organized in different directions, including:

- > organization of relations on the basis of educational cooperation;
- An individual approach to students based on humanistic ideas;
- Achieving professional and spiritual unity in the educational process

#### Materials and methods.

In the transition to clinical pharmacology, as in any education, coeducation is also based on certain priority principles. These principles serve to highlight the most important foundations for collaborative learning.



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## Important features and components of collaborative learning.

Collaborative learning, which serves to determine the interaction of participants in the educational process, also has certain characteristics.

- > pay attention to the personality of the student;
- > mastering ready-made knowledge and refusing to process it;
- development of students' independent and critical thinking;
- Ensuring a positive attitude towards the teacher and peers;
- > Development of students' cultural communication skills;

The creation of an environment based on cooperation and mutual equality will have its own set of components [16,17,18,20].

## Results and their analysis:

Collaborative learning technologies - in the learning process, students learn together in a team, small groups and pairs, develop each other, it also contributes to the effective and successful acquisition of knowledge that has educational value, which ensures the joint organization of the teacher-student relationship.

Scheme, table, basic designation, graphic drawing, basic material, material based on logical presentation, system-structural approach serve to systematize educational material. The use of basic materials in higher education opens up the following opportunities:

- rees students from boring mechanical recording of theoretical information presented by the teacher in lectures;
- ➤ allows the teacher to communicate more with students in the class;
- ➤ Provides effective perception of educational materials by students through words, visual and visual means;
- ➤ Increases the effectiveness of students' effective implementation of educational tasks in the educational process based on discussion;
- > makes it possible to control the process and quality of the assimilation of new knowledge by students;
- helps students to organize their knowledge;
- ➤ By coding educational information, students can thoroughly master complex sections, concepts and concepts of the subject;
- reduces the time spent on studying the material, allowing students to do more practical and analytical work;
- ➤ teaches students the practical use of modern educational technologies in order to improve the efficiency of the educational process;
- decides on mutual cooperation between students;
- > Students work independently with test items

The base material is formed based on the following requirements:

As mentioned above, the main material prepared by the teacher reveals the essence of the basic concepts, important theories, basic rules and effective methods, as well as visual samples, control questions, tasks.

In higher educational institutions, students first get acquainted with the basic material formed by the teacher, and gradually they are taught to independently form such basic materials [7,10,12,13]. If in the



first lesson the students are provided with basic material, in the next lesson the teacher briefly repeats the content of the teaching material based on it. Then communication with students is organized. This communication is a mini-dictation, a blitz survey, an individual question-answer, a pair survey, a quick repetition.

Work with the basic material continues throughout the course and ends with control and correction.

#### Conclusion.

The application of these innovative methods in practical classes increases the level of student involvement in the educational process, creates conditions for students to learn from each other, and allows them to test their knowledge in science. Innovations in modern education are important, more precisely, the use of pedagogical and educational innovations. The effective, active use of pedagogical or educational methods by teachers of higher educational institutions, an innovative approach to professional activity, while ensuring the achievement of the intended goal, contributes to an increase in the quality and efficiency of teaching, and an increase in the cognitive activity of students.

### **LITERATURE**

- 1. Orziev, Z. M., M. R. Rakhmatova, and V. Z. Zhalolova. "Influence of interactive teaching methods on the formation of the level of clinical knowledge." Bulletin of the International University of Kyrgyzstan 3 (2018): 163-167.
- 2. Orziev, Z. M., et al. "Criteria for the effectiveness of the level of knowledge of students acquired by interactive teaching methods." Diary of the Kazan Medical School (2019): 38-42.
- 3. Orziev Z. M., Rakhmatova M. R., Zhalolova V. Z. Differentiated influence of interactive training methods for forming the level of ckinical knowledge //Дневник казанской медицинской школы. 2017. № 4. С. 12-14.
- 4. Klichova, F. K., Raxmatova, M. R., Jalolova, V. Z., & Mustafaeva, S.. Efficiency Of Methods Of Dactic Playing In Developing Professional Skills //Новый день в медицине. 2020. №. 4. С. 528-529.
- 5. Rakhmatova M.R., Jalolova V.Z., Jumaeva G.A., Nazarov C.E. The level of knowledge of students acquired in interactive ways "Blitz method" and "Case study"// « Тиббиётда янги кун» 4 (28) 2019 С 69-73
- 6. Rakhmatova M.R., Jalolova V.Z.. Effectiveness of the combined application of interactive methods "debats" and "a weak link" in the conduct of the lesson// Electronic science journal "Biology and integrative medicine". 2018. №4. C 225-131
- 7. Rakhmatova M. R. et al. «Blits Metod» Va «Case Study» Interfaol Usullarida Talabalarning Olgan Bilim Darajalari //Новый день в медицине. 2019. №. 4. С. 69-71.
- 8. Rakhmatova M.R., Jalolova V.Z.. "The place of innovative technologies in training of highly qualified personnel in the highest medical educational institutions// Electronic science journal "Biology and integrative medicine". 2018. №3. C. 234-247.
- 9. Rakhmatova M. R. et al. Interactive methods "blitz method" and "case study" factor affecting the level of knowledge //Academicia: An International Multidisciplinary Research Journal. 2021. T. 11. №. 2. C. 807-810.
- 10. Sharafutdinova R.I., Muratova G,S., Tursunbayeva M.T. Concepts of ecological thinking and education and their formation in the minds of students// Electronic science journal "Biology and integrative medicine". 2020. №4 (44). C 156-161
- 11. Sharafutdinova R.I., Muratova G,S., Mustafayeva SH.A. Tursunbayeva M.T. Collaborative learning methods and their application during practical exercises // Electronic science journal "Biology and integrative medicine". 2020. №4 (44). C 162-173



- 12. Жалолова В.З., Рахматова М.Р., Кличова Ф.К., Назаров С.Э. Роль инновационных методов обучения на развитие уровня знаний студентов// Тиббиётда янги кун 4 (28) 2019.- С. 32-35
- 13. Орзиев З.М., Рахматова М.Р., Жалолова В.З., Кличова Ф.К. Критерии эффективности уровня знаний студентов, приобретенных интерактивными методами обучения// «Дневник казанской медицинской школы» 2019, июнь С. 38-42
- 14. Орзиев З.М., Рахматова М.Р., Жалолова В.З. Влияние интерактивных методов обучения на формирование уровня клинических знаний// Вестник Международного Университета Кыргызстана 2018 №3- С. 163-167
- 15. Орзиев З.М., Рахматова М.Р., Жалолова В.З. Интерактив методларни бирлаштирган холда дарс утиш самарадорлиги/ «Современное состояние, проблемы и перспективы медицинского образования» международная учебно-научно-практическая конференция С 92-95
- 16. Рахматова М.Р., Жалолова В.З., Мустафаева Ш.А., Нурова З.Х.. "Малакали тиббий кадрлар тайёрлашда инновацион педагогик
- 17. Рахматова, М. Р., В. З. Жалолова, Ш. А. Мустафаева, and З. Х. Нурова. "Малакали тиббий кадрлар тайёрлашда инновацион педагогик технологияларнинг ўрни." Тиббиётда янги кун 1 (2020): 29
- 18. Рахматова Мархабо Расуловна, Жалолова Вазира Замировна, Юлдашева Манзура Музаффаровна, Юлдашева Машхура Музаффаровна Талабалар орасида соғлом турмуш тарзини тарғиб этувчи тўгараклар ташкил этишнинг устуворлиги // Биология и интегративная медицина. 2021. №1 (48).
- 19. Шарафутдинова Р.И., Муратова Г.С., Турсунбаева М.Т. Экологик таълим ва тарбия тушунчаларини шакллантириш тамойиллари// Электронный научный журнал «Биология и интегративная медицина» №1 январь-февраль (41) 2020 С 98-105
- 20. Шарафутдинова Р.И., Муратова Г.С., Турсунбаева М.Т. Талабаларда экологик тафаккур ва тарбия тушунчаларини шакллантириш// «Тиббиётда янги кун» ISSN 2181-712X. 1 (29) 2020. С 105-107

