

WORK IN SMALL GROUPS AS A LEARNING METHOD AT TECHNICAL UNIVERSITY

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Annotation

The article considers the interactive method of small groups for work at the Technical University, which increases the effectiveness of the learning process. The authors considered the necessary conditions and rules for conducting a lesson, using group work, to obtain a positive result at all stages of the lesson: choosing a topic, dividing into small groups, issuing instructions for completing a task, presenting the result of the work and grading. The authors concluded that this type of training covers the entire audience, activates passive students in individual work, due to group solidarity. Working in groups, in the process of making a common decision, improves interpersonal communication in the team, developing the ability of students to actively listen, and requires the teacher to use all his pedagogical abilities both in preparation and in conducting the lesson.

Keywords: pedagogical methods, work in small groups, interactive teaching methods, group leader, communication skills, emotional abilities.

Introduction

Throughout the training, the student acquires not only knowledge, but also replenishes his communication skills acquired during his school years, continuing to





shape his personality, which in the future will determine his fate. Therefore, it is very important to use multifunctional teaching methods that can reveal the versatility of each individual.

The goal of the strategy for the development of public education of the Republic of Uzbekistan is "the development of human capital as the main factor determining the level of competitiveness of a student in the labor market and the country as a whole" [1]. To achieve this goal, teachers constantly improve their professional knowledge and apply new pedagogical teaching methods. All classroom activities are conducted by lecturers using interactive teaching methods [2, 3, 4]. One such method is working in small groups.

Work in small groups takes place in four stages: division into groups, receiving the task, the process of doing it, presenting the work, and finally getting the grade. At the first stage, when dividing students, it is necessary to take into account that the group should be in such a quantity that in the allotted time, each participant has time to express his point of view. The optimal number of participants is 5-7 people. Initially, everyone in a small group is equal, but distributing into small groups, the teacher must be sure that the knowledge and skills of the participants will be sufficient to complete the task. As practice shows, the task in small groups should not be carried out in the first classes of the semester, it is better to take a closer look, identify leaders and take this into account when dividing into small groups. The best option assumes that the group has both a generator of creative ideas and a coordinator.

Working in small groups has its pros and cons. Small groups are used to test knowledge, or to accumulate additional skills, or to perform independent work [5]. The listed types of work have two options: the first - all members of the group have the same level of training; the second - one of the group member's acts as a teacher. Let's consider each of them in more detail.

The first reason to use work in pairs is to test knowledge. But pedagogical experience dictates that testing and "blitz-poll" are more effective in this case, which keep the entire audience in suspense and take less time. Working in small groups, in the classroom is a very difficult process to control, even if clear instructions are given about the time interval and amount of work. Any group work provokes noise, which becomes a natural indicator of active work, but negatively affects efficiency. In order not to waste classroom time, the group is used to form a group sitting next to it, but then only the smartest student works. Another significant drawback of the method is conflicts between students. It may be that one of the group does not want to work with the rest. Students with ambition do not allow themselves to be controlled by equals. Sometimes everyone in the group doesn't know the material. Work in small groups



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becomes collective if all participants have a sufficient level of intellectual and emotional development [6]. The main disadvantage of this method is that the teacher cannot constantly control the process. After working in small groups, you have to spend extra time rechecking answers. The use of some principles for constructing an interactive lecture [2] and methods of correctly posing questions [7], correct interaction with problem students [8], and total control of provocations [9] can smooth out the unevenness of the process of conducting work in small groups in the classroom, but, as practice shows, you can't get the perfect result.

The second reason to use small groups is the acquisition of practical skills, using a partner as a "simulator". To avoid these difficulties, students must follow the rules:

- Show respect for everyone's opinion while working in a group;
- Each member of the group can and should have a say;
- Be ready for compromise and cooperation;

•To support;

- If there is a conflict of opinions, bring it up for open discussion;
- Group members must respect each other.

The teacher must constantly monitor compliance with these rules. Continuous monitoring of the teacher is also necessary because the work of the syndicate can be destroyed by the destructive behavior of individual group members. All students in the classroom have an individual character "and, despite this, it is possible to identify several frequently encountered behaviors and appropriate strategies for their control" [8], which the teacher should use when difficulties arise in the work of groups.

At the last stage of work in syndicates, it is very important to correctly reflect on the presentation of the groups. "Any insensitivity when processing answers can result not only in the destruction of contact with a particular student, but also in the refusal of the entire team to cooperate" [7]. In any, even an unsuccessful presentation, you can find positive points, and first focus on them, and only then point out the shortcomings. Evaluating the work, first of all, it is not the correctness of the answer itself that is taken into account, which is necessarily compared with the existing correct one, but the process of finding it. Presentation rules 80 should be discussed in the assignment. They indicate the time allocated, both for work and for the answer, the number of participants who participated in the presentation.

Independent work of students is the best option for using work in pairs. In many technical disciplines, the program includes a course project, course work, or calculation and graphic work, which is performed by each student individually, and causes many difficulties. Many students, who are considered by psychologists to be people who perceive the world around them through sounds and feelings, are



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reluctant to work with textbooks, it is easier for them to hear and feel, and the teacher's terminology can be difficult, and then a partner comes to the rescue. Knowing this in advance, the teacher can begin to set the first tasks in the classroom, in disciplines that include a large amount of independent work, dividing the audience into stable pairs. Since tandems are created in the first lessons, and the teacher does not yet fully know the capabilities of each, the basis for division may be the assessment that the student claims. The initial differentiation of students should be only voluntary, that is, the student agrees in advance to the role of either "leader" or "slave", which may affect the final grade, but not knowledge. The most active students, with a high level of knowledge, usually agree to the role of "leader", with the condition that for the correct answers of the "slave" they will receive additional points. The rules for mutual assistance and evaluation of results are discussed in advance, and in one group, for each pair, they can have a specific individual character. It is possible that not the whole group agrees to permanent cooperation, and then the couple works only during one classroom session. If you follow all the rules, then working in small groups gives great results:

- There is an exchange of both information and opinions;
- Mutual learning occurs;
- Responsibility appears;
- Experience in working in a group;
- The skill of finding a solution to the problem through discussions;
- Opportunity for everyone to show their best side;
- A skill is born to respect and listen to each other;
- Students do not depend on the teacher in their reasoning,
- Each student is involved in the learning process.

Most importantly, there is cooperation between the students themselves, the student and the teacher.

It can be concluded that work in small groups covers the entire audience, and turns the learning process into an interactive one. As an additional element of the educational process, it is innovative, with individual approaches. When working in small groups, students improve their communication and emotional skills, form themselves as a full-fledged personality. In the Republic of Uzbekistan, one of the main, promising tasks is "raising the spiritual, moral and intellectual development of the young generation to a qualitatively new level, introducing innovative forms and methods of teaching into the educational process" [10]. The considered method meets the tasks set and can be used in the process of teaching at the University.





References

- 1. Указ президента Республики Узбекистан об утверждении концепции развития системы народного образования Республики Узбекистан до 2030 года. URL: https://lex.uz/docs/4312783 (дата обращения: 15.06.2022)
- 2. Авдеева Анна Николаевна Принципы построения и проведения интерактивной лекции // Вестник науки и образования. 2020. №8-1 (86). URL: https://cyberleninka.ru/article/n/printsipy-postroeniya-i-provedeniya-interaktivnoy-lektsii (дата обращения: 15.06.2022).
- 3. Авдеева А.Н. Бинарное аудиторное занятие как форма мастер класса // СОВРЕМЕННЫЕ ИССЛЕДОВАНИЯ В ПСИХОЛОГИИ И ПЕДАГОГИКЕ. –

 2021.
 –
 С. 24-27.
 URL: https://a6db36ac-f9e1-45a3-9eeb-7970bd1fd2a8.filesusr.com/ugd
 /b06fdc_16477f8308314fe7b58bb19 2afb40a31.pdf?index=true (дата обращения: 15.06.2022)
- 4. Avdeeva A.N., Filimonova L.Y. Interdisciplinary binary lecture as a method of teaching at technical university // ACADEMICIA: An International Multidisciplinary Research Journal. 2021. Volume 11, Issue 4, April 2021. p.1385 138
- 5. Шорохова Елена Николаевна. Работа в парах, как одна из форм группового метода обучения в процессе формирования коммуникативных учебных действий. Электронный ресурс. Режим доступа: https://multiurok.ru/files/ispolzovanie-raboty-vparakh.html/ (дата обращения: 10.11.2021).
- 6. Дьяченко В.К. Новая дидактика. М.: Народное образование, 2001. 496 с.
- 7. Авдеева Анна Николаевна. Некоторые аспекты метода постановки вопросов и ответов при проведении аудиторных занятий // Вестник науки и образования, 2020. № 20-2 (98). Электронный ресурс. Режим доступа: https://cyberleninka.ru/article/n/nekotorye-aspekty-metoda-postanovki-voprosov-iotvetov-pri-provedenii-auditornyh-zanyatiy/ (дата обращения: 10.11.2021).
- 8. Авдеева Анна Николаевна. Взаимодействие с проблемными студентами в процессе аудиторного обучения // Научные исследования и разработки 2020 ГОДА: материалы II международного научно-исследовательского конкурса (22 апреля 2020 г., Саратов). С. 57-60.
- 9. Avdeeva Anna Nikolaevna. DISPUTED KINDS OF INFLUENCE IN THE PROCESS OF LEARNING AT THE UNIVERSITY // EPRA International Journal of Multidisciplinary Research (IJMR), 2020. Volume: 6 Issue: 10 October. P. 496–498.





10. Анна Николаевна Авдеева Техники конструктивного влияния в процессе интерактивого обучения в ВУЗе // МИРОВАЯ НАУКА 2020. ПРОБЛЕМЫ И ПЕРСПЕКТИВЫ: материалы V международной научно-практической конференции (9 апреля 2020г., Москва). С. 31-33 URL: https://www.xn--24-6kcd9abmg8a3bzbzh.xn--

p1ai/_files/ugd/b06fdc_f00c14e13517490492e5034218f4e412.pdf

- 11. Узбекский феномен // Народное слово. 6 Сентября 2019. Электронный ресурс. Режим доступа: https://xs.uz/ru/post/uzbekskij-fenomenu/ (дата обращения: 16.11.2021).
- 12. Tursunov, S. E., & Tursunov, N. Q. (2022). TEXNIK ATAMALARNI DAVLAT TILIGA TO 'G 'RI TARJIMA QILISH MUAMMOLARI. Academic research in educational sciences, 3(TSTU Conference 1), 129-133.
- 13. Gapirov, A. D., Tursunov, N. Q., & Kenjayev, S. N. M. (2022). Talabalarning umumtexnika fanlari bo'yicha ilmiy-tadqiqot ishlarini tashkil etish. Academic research in educational sciences, 3(TSTU Conference 1), 134-139.
- 14. Турсунов, Н. К. (2021). Обоснования требований к сталям ответственного назначения, используемым в железнодорожном транспорте.
- 15. Кучкоров, Л. А., & Турсунов, Н. К. (2021). Исследование состава формовочных и стержневых смесей для повышения механических свойств. Scientific progress, 2(5), 350-356.
- 16. Тоиров, О. Т. У., Турсунов, Н. К., & Кучкоров, Л. А. У. (2022). Совершенствование технологии внепечной обработки стали с целью повышения ее механических свойств. Universum: технические науки, (4-2 (97)), 65-68.
- 17. Туракулов, М. Р., Турсунов, Н. К., & Инсапов, Д. М. (2022). Разработка технологии изготовления формовочных и стержневых смесей для получения синтетического чугуна. Universum: технические науки, (4-3 (97)), 5-9.
- 18. Дауд, А. Д. А., Турсунов, Н. К., & Семин, А. Е. (2017). ТЕОРЕТИЧЕСКИЙ И ЭКСПЕРИМЕНТАЛЬНЫЙ АНАЛИЗ ПРОЦЕССА ДЕФОСФОРАЦИИ ХРОМИСТОГО РАСПЛАВА РЕДКОЗЕМЕЛЬНЫМИ МЕТАЛЛАМИ И ИХ ОКСИДАМИ. In Физико-химические основы металлургических процессов (pp. 61-61).
- 19. Турсунов, Н. К. (2021). Исследование и совершенствование режимов рафинирования стали в индукционных печах с целью повышения качества изделий.





- 20. Турсунов, Н. К. (2021). Повышение качества стали, используемой для изготовления литых деталей подвижного состава, за счет применения модификаторов.
- 21. Туракулов, М. Р., Турсунов, Н. К., & Инсапов, Д. М. (2022). Разработка технологии изготовления формовочных и стержневых смесей для получения синтетического чугуна. Universum: технические науки, (4-3 (97)), 5-9.
- 22. Riskulov, A. A., Yuldasheva, G. B., & Toirov, O. T. (2022). FEATURES OF FLUOROCOMPOSITES OBTAINING FOR WEARING PARTS OF MACHINE-BUILDING PURPOSE. Web of Scientist: International Scientific Research Journal, 3(5), 1670-1679.
- 23. Riskulov, A. A., Yuldasheva, G. B., Kh, N., & Toirov, O. T. (2022). DERIVATION PROCESSES OF FLUORINE-CONTAINING WEAR INHIBITORS OF METAL-POLYMER SYSTEMS. Web of Scientist: International Scientific Research Journal, 3(5), 1652-1660.
- 24. Азимов, Ё. Х., Рахимов, У. Т., Турсунов, Н. К., & Тоиров, О. Т. (2022). Исследование влияние катионов солей на реологический статус геллановой камеди до гелеобразования. Oriental renaissance: Innovative, educational, natural and social sciences, 2(Special Issue 4-2), 1010-1017.

