

THE WAYS OF IMPLEMENTING INTERACTIVE METHODS IN THE EDUCATIONAL PROCESS OF STUDENTS OF HIGHER EDUCATIONAL INSTITUTIONS

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Annotation. *Purpose:* theoretical basis and practical implementation of interactive methods in the educational process of higher education institutions. *Material:* the study involved 50 students of the Kharkiv humanitarian-pedagogical Academy. *Results:* showing the possibility of introducing interactive teaching method "Joint project." The theoretical study and practical implementation of the method is the process of inclusion of all students in the joint study group (in the form of small groups) work on mastering the content of teaching material. Also, the presentation of educational options to solve their own problems, discussion of the results of joint activities, making optimal decisions. *Conclusions:* the development of theoretical foundations and practical implementation of an interactive method improved the quality of the educational process of students. This is reflected in the involvement of all students in active joint work on learning. Also provide an opportunity for each student to express their own opinions on those tasks. This increased level of theoretical knowledge of each student.

Keywords: teaching, method, interactive method, group, shape, training, method.

Introduction

Dynamic changes in the socio-economic and political life of Ukraine contributed to the actualization of the problem of modernization the higher education system in Ukraine. According to the State program «Education. Ukraine of the XXI century» [On the State national program "Education" ("Ukraine of the XXI century"): the Decision of 03.11.1993, [Electronic resource] / Official site of the Verkhovna Rada of Ukraine. - Mode of access: <http://zakon4.rada.gov.ua/laws/show/896-93-п>] one of the priority directions of educational reform is reaching a new level of specialist training.

To address the leading problems of education in recent times scientists [3, 7] are actively developed interactive teaching methods, which are based on the cooperation not only of the teacher with students, but also between the students themselves. The need for such forms of organization of educational process is confirmed by the results of several studies of domestic (O. Bida and others [1], N. Goncharova, [2], O. Komar [4], O. Pometun and L. Pirojenko [3, 7], V. Revenko, 2011 [6]) and foreign (T. Weert and A. Tatnall, 2005 [9]) scientists.

Despite the existence of objective preconditions for the implementation of participatory methods at the present time their use is sporadic. The study proposed the development of one of interactive methods in teaching called «Joint project», which aims to increase the level of theoretical knowledge of students.

Purpose, tasks of the work, material and methods

The aim of the research is the theoretical justification and implementation of interactive learning methods, «Joint project» in the educational process of students of Kharkiv humanitarian-pedagogical academy.

The goal of the study determined the number of inter-related **tasks**:

1. Identify opportunities interactive method «Joint project» to improve the theoretical knowledge of students.
2. To experimentally test the impact of the interactive method «Joint project» on the level of theoretical knowledge of students of Kharkiv humanitarian-pedagogical academy.

Methods of research. The analysis of the literature, observation, examination of documents, questionnaires, pedagogical experiment, testing, ranking method, methods of mathematical statistics.

The study involved 50 students of the Communal establishment "Kharkiv humanitarian-pedagogical Academy, Kharkiv regional Council.

Results of the research

Interactive method – 1) the process of interaction between teacher and students, between students themselves, resulting in the transmission and assimilation of knowledge, abilities and skills prescribed learning content [5]; 2) method of interrelated activities of teachers and students, which involves the subject-to-subject active interaction between participants in the learning process through collaboration and co-creation and aims to develop in students the necessary competencies, education and overall development as subjects of the educational process.

Compared with traditional methods, the interactive role of the teacher and the student acquires new forms: the teacher passes the initiative in the hands of students and he holds the position of coordinator of the educational process. Interactive method «Joint project» envisages the achievement of learning objectives through collaboration, in which each member of the team must perform a certain amount of work. What this involves is not isolated actions, and coordinated and interrelated cooperation, where the participants' activities are regulated and subject to the laws of existence of team: self-regulation and development of functioning. They reflect two forms of existence is currently in process. Thus, in the general understanding of the laws of staff laid the tension between stability and change, the desire of rest and motion, stability, and flexibility, reasonable conservatism and the necessary innovation, and finally, a desire to preserve established, to protect themselves from risk and the desire for new, progressive. Actually, this is the basic contradiction becomes the impetus for constant flickering mckerrow: anxiety (impaired balance) – forward (finding

balance) – stop (finding balance) – rest (equilibrium) – backward (impaired balance) – anxiety – forward movement. And so the spiral of development, each time keeping their achievements and at the same time denying the results of [8].

Interactive method «Joint project» involves the distribution of tasks between team members, who take part in it, their decisions and the report of the results of each participant. In order to implement the specified method is assistance to increase the level of theoretical knowledge of students. Therefore, the question arose about the necessity of additional training environment, namely the establishment of close relationships between the educational process in a higher educational institution and pazaudeto work that best matches the capabilities that provides an interactive method «Joint project». Also a necessary component of the implementation of the «Join project» is not only an individual search and processing of the material, but also the knowledge of all other constituent parts of the overall project and exchange information with other participants. This should be done in extracurricular work when the phase retrieval and processing by each participant completed and you should see the results of work in General and to establish links with other team members.

To determine the impact of the interactive method «Joint project» on the level of theoretical knowledge of students conducted an experimental study that was conducted in several stages during the 2013-2014 based on almost the same level of theoretical knowledge of students in the course of ascertaining experiment identified two academic groups at twenty-five people each. One group identified as experimental, the second as a control. It is revealed that in the experimental group the number of ratings of «unsatisfactory» is 24 % (6 of 25), «satisfactory» - 44 % (11 students from 25), «well» - 24 % (6 of 25), «excellent» - 8 % (2 students out of 25).

Results in the control group the following: «unsatisfactory» - 20 % (5 students out of 25), «satisfactory» - 56 % (14 students out of 25), «well» - 20 % (5 students out of 25), «excellent» - 4 % (1 student out of 25).

During the formative stage of the experiment in the training of the experimental group was implemented interactive method «Joint project» and in the control group the training was carried out in conventional manner (during two month). The content of the method of «Joint project» provided for engaging students in active cognitive and educational activities through partial delegation of authority of the teacher, students, raising initiative of students, increase collective and individual search and information processing, improvement of professional skills of students through increasing the role of the group form of organization of students.

During the experiment we have implemented the following features of the «Joint project»:

- involvement of students in all groups to study specific conceptual components of the partition that is being studied;
- providing opportunities for each student to express the draft decision considered problem;
- the combination of theoretical training in a higher educational institution with pazaudeto search operation;
- the collaboration of the students during the educational process in a higher educational institution, but also in extracurricular time;
- chance election of the speaker before the presentation of the results of the joint project.

Performance test after each session, the experimental group are presented in table 1 and the control in table 2.

Table 1

Performance test after each session, the experimental group

Point scale of assessment	Learning session № 1, quantity of students	Learning session № 2, quantity of students	Learning session № 3, quantity of students	Learning session № 4, quantity of students	Learning session № 5, quantity of students	Final control, quantity of students
Unsatisfactory mark	8	5	3	3	2	4
Satisfactory mark	9	9	7	7	9	9
Well	5	10	11	12	10	9
Excellent	3	1	4	3	4	3

Table 2

Performance test after each session, the control group

Point scale of assessment	Learning session № 1, quantity of students	Learning session № 2, quantity of students	Learning session № 3, quantity of students	Learning session № 4, quantity of students	Learning session № 5, quantity of students	Final control, quantity of students
Unsatisfactory mark	6	6	5	4	5	5
Satisfactory mark	11	13	11	12	11	10
Well	7	5	6	7	7	8
Excellent	1	1	3	2	2	2

Comparing the results of the experimental group before the start of the experiment and after it can make the following conclusions: the number of students with a score of «unsatisfactory» decreased from 24 % to 16 %; with a score of «satisfactory» decreased by 8 % (from 44 % to 9 %); increased the number of students who earned a score of «well» (from 24 % to 9 %) and «excellent» (from 8 % to 12 %).

In addition, subjectively increased volume of new professional terms and increased the quality of their use by students.

At the same time in the control group had the following changes: the number of students with a score of «satisfactory» has fallen from 56 % to 40 %; with a score of «well» increased by 12 % (from 20 % to 32 %); the number of students with «excellent» increased from 4 % to 8 %.

Conclusions.

The development of theoretical foundations and practical implementation of the interactive method «Joint project» has improved the quality of the educational process of students. This is reflected in engaging all students in active collaboration in learning, providing opportunities for each student to express their own opinion on solving problems and as a consequence to increase the level of theoretical knowledge of each student.

References

- Kalic'ko N. G., O Bida. A., Voloshina G. P. *Vikoristannia interaktivnikh tekhnologij navchannia v profesijnij pidgotovci majbutnikh vchiteliv* [The use of interactive learning technologies in training future teachers], Kiev, Scientific World, 2003, 138 p.
- Goncharova N. N. Aktivnye metody obucheniiia kak osnova intensifikacii uchebnogo processa [Active learning methods as a basis for the intensification of the educational process.]. *Tendenciyi ta perspektivi suchasnoyi universitets'koyi osviti* [Trends and perspectives of modern university education], Donetsk, 2006, p. 391.
- Dragniev Iu. V., Iermakov S.S., Chekunov M.V. *Informatizaciia vishchoyi fizkul'turnoyi osviti: stan ta perspektivi* [Computerization of higher physical education: status and prospects], Lugansk, LNU, 2012, 202 p.
- Iermakov Sergii. *Nauka v olimpijskom sporte* [Science in Olympic Sport], 2005, vol.2, pp. 117-127.
- Iermakov S.S. *Teoriia i metodika fizichnogo vikhovannia i sportu* [Theory and methods of physical education and sport], 2006, vol.3, pp. 89-93.
- Pometun O. I., Pirozhenko L. V., Kobernik G. I. *Interaktivni tekhnologiyi navchannia* [Interactive learning technologies], Kiev, Scientific World, 2004, 85 p.
- Komar O. A. Nove pokolinnia obiraie interaktivni tekhnologiyi navchannia [The new generation chooses interactive learning technology]. *Pidgotovka pedagogichnikh kadrov u vishchikh navchal'nikh zakladakh u konteksti procesiv globalizaciyi* [Preparation of teaching staff in higher education institutions in the context of globalization processes], Kiev, Millennium, 2005, 212 p.
- Revenko V. V. *Didaktichni umovi zastosuvannia interaktivnikh tekhnologij u procesi navchannia majbutnikh uchiteliv gumanitarnikh special'nostej* [Didactic conditions of use of interactive technology in teaching future teachers of humanities], Cand. Diss., Krivoy Rog, 2011, 20 p.
- Roters T.T. *Fiziceskoe vospitanie studentov* [Physical Education of Students], 2013, vol.4, pp. 72-76. <http://dx.doi.org/10.6084/m9.figshare.663624>
- Surovov A.A. *Fiziceskoe vospitanie studentov* [Physical Education of Students], 2013, vol.3, pp. 55-59. <http://dx.doi.org/10.6084/m9.figshare.663627>
- Pometun O. I., Pirozhenko L. V. *Suchasnij urok* [Modern lesson], Kiev, ASK Publ., 2004, 192 p.
- Abishova G., Bostanova A., Isaev A. Teaching Practice Using Interactive Methods at the Higher Educational Establishments. *Procedia - Social and Behavioral Sciences*. 2014, vol.143, pp. 630-633. <http://dx.doi.org/10.1016/j.sbspro.2014.07.450>.
- Donche V., Van Petegem P. Teacher educators' conceptions of learning to teach and related teaching strategies. *Research Papers in Education*. 2011, vol.26(2), pp. 207-222. <http://dx.doi.org/10.1080/02671522.2011.561979>.

14. *Information and communication technologies and real-life learning: new education for the knowledge society.* T. Weert, A. Tatnall. New York: Springer, 2005, 285 p.
15. Jones T. Through the lens of home-educated children: engagement in education. *Educational Psychology in Practice*. 2013, vol.29(2), pp. 107-121. <http://dx.doi.org/10.1080/02667363.2012.755614>.
16. Kompaniets Yu.A. Using of innovative methods in physical training of students of higher educational institutions of Ukraine Ministry of Internal Affairs. *Pedagogics, psychology, medical-biological problems of physical training and sports*, 2013, vol.8, pp. 41-45. <http://dx.doi.org/10.6084/m9.figshare.745783>
17. Okita S.Y., Schwartz D.L. Learning by Teaching Human Pupils and Teachable Agents: The Importance of Recursive Feedback. *Journal of the Learning Sciences*. 2013, vol.22(3), pp. 375-412. <http://dx.doi.org/10.1080/10508406.2013.807263>.
18. Veselinovska S.S., Zivanovik J., Petrovska S., Gokik M. Interactive learning in programmed teaching of the subject "Based of nature science" at pedagogical faculties in the Republic of Macedonia (ICT tools in Biology education). *Procedia - Social and Behavioral Sciences*. 2010, vol.2(2), pp. 2253-2259. <http://dx.doi.org/10.1016/j.sbspro.2010.03.318>.
19. Ward L.J., Padgett K. Developing a service user facilitated, interactive case study - A reflective and evaluative account of a teaching method. *Nurse Education Today*. 2012, vol.32(2), pp. 156-160. <http://dx.doi.org/10.1016/j.nedt.2011.10.001>.
20. Wright S., McNeill M., Fry J., Wang J. Teaching teachers to play and teach games. *Physical Education & Sport Pedagogy*. 2005, vol.10(1), pp. 61-82. <http://dx.doi.org/10.1080/1740898042000334917>.

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