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PROJECT METHOD IN THE SYSTEM OF STUDENTS' TRAINING ON "AEROBICS" SPECIALIZATION

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Abstract

The article presents the experience of using the method of projects in aerobics classes at the Peter the Great St. Petersburg Polytechnic University. One of the methods revealing the student's creative skills is the project method. This is a way to teach students to solve problems independently while preparing creative tasks, to work with information, to achieve a target result with its required presentation. The project method integrates search-exploratory and communication techniques in itself, contributes to the development of intrinsic motivation for learning, and constructive critical thinking of students. The main idea in organizing the educational process on the "Aerobics" specialization is to shift the focus from standardized exercises, to intensify the creative activity of students, to create an information environment to stimulate interest in classes. The teachers have developed and tested in practice the criteria for evaluating students' project activities. This study actualizes the use of the project method in the academic discipline "Physical Education" and is promising for the formation of educational and cognitive competencies, creating optimal conditions for self-realization, self-improvement, development of personal qualities necessary for future specialists, and also raises the importance of the subject to the level of other disciplines.

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Keywords: Aerobics, project method, students, creative activity, assessment criteria.



1. Introduction

Modern higher education needs to unlock the potential of students, focused on creative self-realization (Zuykova, Bushma, Lipovka, & Volkova, 2018). For this, it is necessary to use innovative teaching methods in the educational process, which allow forming a mobile, independent personality (Habil, 2017; Konovalova, Gorlova, & Rossoshanskaya, 2013). With active learning, a student is more likely to be a subject of learning activities (Goginava & Rumba, 2014; Lyakh, Rumba, & Gorelov, 2013), engages in dialogue with a teacher, participates in the cognitive process, performs creative, search, problem tasks (Efremova, Ivanova, Plotnikova, & Chaykovskaya, 2016; Gorelov, Gorelov, & Grigorovich, 2015). The participation of students in project activities takes place during the entire period of study and focuses on the following stages: the definition of the project, the setting of tasks; search for data on the subject of the project; specification of the choice of material; design of the project and its detailing; presentation, evaluation, summing up. The level of complexity for performing creative tasks is determined by individual abilities, the level of physical and functional readiness)

2. Problem Statement

One of these methods, revealing the creative abilities of students, is the project method (Bushma, Zuikova, & Lipovka, 2017). The project method allows you to create a creative research atmosphere where each student is involved in the learning process based on the collaborative methodology (Bushma, Volkova, & Zuikova, 2015). Using the method of projects turns a physical culture lesson from a lesson in physical activity only into an educational lesson, puts it in line with other subjects (Mironova, Dementev, Pristav, Ustinova, & Grigorev, 2015; Nikolaenko, Grakhova, & Rakhimov, 2016). Проектная деятельность студентов – это реализация, спланированной учебной программы проектов, требующая исследовательского поиска, практических результатов, самостоятельной деятельности. Структурирование содержания каждого проекта представляет собой технологию, включающую цепочку последовательных действий, направленных на достижение конкретного результата.

3. Research Questions

- 3.1. The introduction of the project method into the educational process on the “Aerobics” specialization.
- 3.2. Determination of the target directions of the project method in training sessions
- 3.3. The formation of students' project competence is ensured by the presence of an educational environment.

4. Purpose of the Study

Generalization of pedagogical experience of applying the projects method in the practical activity of students on the “Aerobics” specialization. The project activity on “Aerobics” specialization in SPbPU is aimed at solving practical problems, allows to realize and control the acquired knowledge, skills and abilities in practice, and also forms the educational and cognitive activity and creative inventiveness of

students. This activity is focused on the disclosure of the student's personality, the development of motivation for classes, and its active implementation is associated with the development of information technologies.

5. Research Methods

5.1. Project method

5.2. The Poll.

5.3. The Questionnaire.

6. Findings

Aerobics as an academic subject has great potential for the implementation of independent activities of students in practical classes (Obraztsov, Uman, & Fedorova, 2018; Wójcik, 2017). A program of independent work has been developed on the Aerobics specialization at SPbPU, the task of which is to create conditions for the creative self-realization of students, to create a basis for continuous self-education and advanced training within the chosen discipline (Zuykova, Bushma, Lipovka, & Cherkasova, 2018). This program is designed for the entire period of training students and is a set of phased implementation of projects, which are based on the creative tasks of students. The content of each project is adapted to the implementation of the training sessions, structured in detail, has the final practical result. The project method in this case has several advantages: the learning process is as close to the practice as possible; the student's search position is activated; the necessary information is assimilated by means of aerobics and new practical skills are formed; communicative and informational competences are improving on the basis of the creative activity of students (Paulino, Sá, & Lopes da Silva, 2016; Razuvanova, Koshelskaya, Karpova, & Medvedeva, 2016; Zohreh, 2017).

The study was conducted in the period from 2016 to 2018 academic year, the study involved 252 students of 1st and 2nd courses. During their studies, students performed a series of mini-projects and a final project at the end of each academic year.

- 6.1. At the beginning of the first year of study, knowledge of the fundamentals of the methodology for building a lesson and its individual parts takes place, learning basic aerobics and modern dance movements, special exercises of power aerobics, shaping, stretching; sets out the basics of aerobic training, specifying the features of the development of physical qualities and individual muscle groups. Students start the implementation of creative tasks and mini-projects at the end of the first term. Many years of practical experience allowed us to build an algorithm of creative tasks and determine the optimal sequence of mini-projects for the entire period of students' training on the "Aerobics" specialization (table 01).

Table 01. Examples of short-term mini-projects and creative tasks for first-year students

Mini-project №1	Mini-project №2	Mini-project №3	Mini-project №4	Mini-project №5
independent combination of 3-4 exercises of basic aerobics	compilation of a complex for the development of flexibility using stretching exercises	drawing up a set of exercises with advancement in various directions	drawing up a set of exercises for the aerobic part of the lesson, with a pulse value ranging from 140 to 160 beats per minute	Holding lesson fragments with musical accompaniment in a group of students consisting of 4 people on the loop in the preparative, aerobic and strength parts of classes
individual and in a group of 2-3 people warming-up in the preparative part of the lesson	individual and in a group of 2-3 people holding a hitch in the main part of the lesson	drawing up a set of jumping exercises individual and in a group of 2-3 people conducting a fragment of the main part of the lesson	individual and in a group of 2-3 people performing a set of exercises on a loop	

6.2. In the second year of study, extent of independent tasks increases, and their content largely reflects the specifics of the “aerobics” discipline; attention is focused on the technique of performing the exercises, students' possession of teaching methods. The project method is used as a means to improve acquired skills in practical tasks. The content of creative tasks and mini-projects is determined independently by the students themselves, thus creating the conditions for the development of the initiative, the self-expression of the student. The project activity is aimed at the implementation of the final result and is made out in a complete form represented by: workouts, dance compositions, power complexes.

The final project of the second-year study group is evaluated at the test lesson, where students demonstrate the level of integrated competencies of project activities.

On the "Aerobics" specialization criteria for evaluating the final project have been developed (see table 02).

For the student, the final project is the possibility of maximizing his creative potential. Estimations for the presentation, received at the end of the first and second year of study by study groups, as well as observation of project activities, allowed us to rank the creative activity of students, defining several levels:

- a high level at which the desire for creativity is manifested (21-25 points);
- medium, where creativity was limited to motor skills acquired in the framework of the curriculum (14–20 points);
- low, when the project is completed with a standard selection of physical exercises (7-13 points).

Table 02. Criteria for evaluating the creative work of students on the "Aerobics" specialization

Musical accompaniment and choreography of movements	Method of exercises' execution	Complexity and coordination of movements	Evaluation of the creative component	Artistry
(music has a beginning, ending, phrases, accents, exercises are consistently combined with each other in	correct body position, posture when doing exercises,	simultaneous participation in the exercise of a large number of body parts, the use of	The work included not only familiar exercises, but also new and	expressive and emotional performance, with dedication and energy, the

coherence with the structure of music and performed in full accordance with the style and character of the selected music).	exercises are performed with maximum accuracy, a clear trajectory, both from the right and from the left leg	asymmetric movements, changing directions of movement, changing the rhythm or amplitude of movement	unique movements, combination of exercises into bundles, originality of the presentation of independent work.	exercises are performed leaving an impression of lightness and cohesion, with a high degree of perfection and virtuosity
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6.3. At the end of the second year of study, a pedagogical survey was conducted among students of the Aerobics specialization.

235 first and second year university students took part in the survey. The purpose of the pedagogical survey is to determine the attitude of students to the method of projects implemented in the framework of practical exercises in physical culture.

A questionnaire was compiled for the survey, and the answers to the following questions were analyzed:

1. Question: Give an assessment of the organization of training in practical aerobic exercises;
 Survey result. The following assessments were given: 81% of the surveyed students gave a positive rating, 11% satisfactory, and 8% negative.
2. Question: Did the organization of project activities allow you to realize practical skills, individual capabilities, creative potential?
 Survey result: The answer "yes" was given by 73% of the students surveyed, "no" - 10%, "not fully" -17%.
3. Does the algorithm of the performed independent tasks contribute to the acquisition of personal confidence in their implementation?
 Survey result: The answer "yes" was given by 92% of respondents, the answer "no" - 8%.
4. Evaluate the result of your creative work in the performance of independent work;
 Survey result: 68% of the students surveyed gave a positive assessment, 24% satisfactory, and 8% negative.
5. Do the criteria for evaluating creative work stimulate you to further self-improvement?
 Survey result: The answer "yes" was in 87% of respondents, the answer "no" - 13%.

7. Conclusion

Project activity has a positive effect on the motivational component and contributes to the revitalization of students' independent work (Raitina, Yurmazova, Plankina, & Raitin, 2016; Sílvia, Bernardo, & Feliciano, 2017; Steinberg, 2017; Volkov, Volkova, & Lutchenko, 2014). A survey of students showed that the organization of project activities on the Aerobics specialization allowed them to: realize their individual capabilities - 73% of respondents, independently perform creative tasks - 92%, positively evaluate the results of their activities - 68% of respondents. The technology of the project activity, implemented in the educational process of the Aerobics specialization, creates optimal conditions for enhancing the search activity, enhancing the creative activity of students, implementing acquired

knowledge, practical skills in training sessions, develops communication skills, the ability to cooperate, promotes personal confidence of each participant

The organization of the educational process at the 1st and 2nd courses, focused on independent project activity of students, forms educational and cognitive competencies, provides the educational direction of the "aerobics" discipline, which is confirmed by the positive dynamics of stage-by-stage target results in practice in the first year, high assessment of the final presentations in all educational second year groups. The structure of the students' project activity at each design stage, the program of independent, creative works, information support of the project environment has been developed.

The proposed algorithm for performing practical tasks takes into account the individual capabilities of each student, his level of physical fitness and functional status. The technology of their implementation is aimed at developing students' ability to analyze, select the necessary information, thus enhancing learning and cognitive activity, developing a sense of responsibility for the work done.

- 7.1. The introduction of the project method into the educational process on the specialization "Aerobics" increases the efficiency of training, creates optimal conditions for the implementation of acquired knowledge, practical skills in the training sessions, develops communication skills, the ability to work together, enhances the personal confidence of each participant, forms the competencies of students for personal and professional development.
- 7.2. Target directions of the method of projects in training sessions, the stages of its implementation by means of aerobics are defined. The structure of mini-projects and creative tasks for the entire period of study, aimed at enhancing students' independent creative activity, have been developed.
- 7.3. The formation of students' project competence is ensured by the presence of an educational environment that includes computer technologies, methodological support, and pedagogical support from the teacher.
- 7.4. The organization of the project activity is adapted to aerobics discipline, aimed at obtaining a concrete practical result, provides for the integrated nature of the activities of all its participants.
- 7.5. Criteria to assess the level of formation of the student's project competence, his personal growth, creative self-realization in the final presentation have been developed.

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