Designing a student scientific club in the educational space of a sports university

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Abstract

Objective of the study was to substantiate the creation of a student scientific club "ON START" on the basis of self-government at the Institute of Physical Culture and Sports and substantiate the effectiveness of its functioning.

Results and conclusions. The role of creating a student scientific club on the basis of self-government for the formation of an asset of studying youth, with the aim of uniting them and attracting new members to carry out research activities, is substantiated. Based on the results of a survey of students of the Institute of Physical Culture and Sports, a plan of scientific events was developed, technologies for their promotion were presented to involve them in research activities and increase interest in it. The effectiveness of the work of the scientific student club is substantiated, the quantitative increase in the indicators of club members is presented. The ways of attracting students to scientific work are determined.

Keywords: *student science club, self-government, promotion technologies, research activities, plan, efficiency, resource support.*

Introduction. The need to conduct research work in higher educational institutions is dictated by the main goal - the comprehensive and harmonious development of students, undergraduates, and graduate students who are able to successfully study and acquire a profession. Mastering research skills and the ability to scientifically approach solving a problem is one of the key conditions that guarantees the professional development of future specialists [2]. It should be especially emphasized here that future work will require initiative, research skills and creativity from the graduate. Recently, maintaining the competitiveness of the Russian education system has become more difficult in the system of reproduction of scientific personnel. Due to the constant underfunding of Russian science, this system turned out to be destabilized, and a significant part of young people lost interest in science [1].

However, the ongoing reform of society requires new approaches to organizing research activities and conducting various scientific events in universities, and rethinking views on this process. Here the decisive word belongs to scientists, and, above all, to those who directly teach students and undergraduates, and supervise the research of graduate students and doctoral students. Accordingly, teachers are faced with the task of competently guiding the student's work, stimulating interest in this type of activity not of a one-time nature, but by creating a systematic research need [5].

At the current level of increasing demands on a modern specialist, in particular in the field of physical culture and sports, there is a need to master the most effective and adequate, informative, high-precision research methods. In this regard, universities set certain tasks. This is the creation of an organizational structure for a scientific association of teaching staff and talented youth; creating conditions for improving the quality of research; increasing the number of students and young scientists participating in scientific research; increasing the attractiveness of scientific and educational activities for

young researchers; strengthening and development of inter-university scientific relations aimed at expanding interdisciplinary research activities in the field of priority areas for the development of science and education.

To solve the problems at the Institute of Physical Culture and Sports of the Herzen State Pedagogical University of Russia in 2019, a competition of scientific projects was held among undergraduates to create a scientific club for students, the project of which is being implemented over two years (2021-2023).

Objective of the study was to justify the creation of a student scientific club "ON START" on the basis of self-government at the Institute of Physical Culture and Sports and to justify the effectiveness of its functioning.

The main directions of the club's work were: the formation of student activists and the involvement of students to master the fundamentals of professional and creative activity, methods and techniques for performing research, design and experimental work, the development of research, organizational abilities and readiness for innovative activities. The active members of the club were 12 undergraduates who headed its directions. The structure of the scientific club is shown in Figure 1.

Methods and structure of the study. To determine the effectiveness of the student scientific club, studies were carried out over two years in which theoretical methods (analysis and synthesis of scientific and methodological literature, design) and empirical methods (survey, establishing an experiment) were used. The study took place at the Institute of Physical Culture and Sports of the Herzen State Pedagogical University of Russia (hereinafter referred to as IPhCS). It was attended by full-time and part-time undergraduate and graduate students.

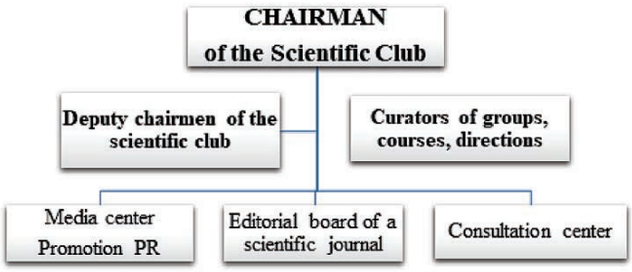

Figure 1. *Structure of the student scientific club "ON START"*

Results of the study and discussion. As part of the first stage of the study, an online survey of IPhCS students was conducted in order to determine their attitude and interest in research activities, as well as the possibility of participating in various events, which made it possible to draw up a plan for scientific events and carry out work to attract students to research activities (RA). The main results of the survey are presented in Table 1.

When asked about students' preferences for the proposed types of extracurricular activities, according to the rating of answers, scientific activity took the last, sixth place (7%). In first place are sports activities (43%), in second place are recreational activities (18%), in third place are cultural leisure (15%), fourth place is taken by reading fiction (9%), amateur artistic activities (8%) - in fifth place.

Table 1. *Attitude of IPhCS students to research activities*

No	Questions	Yes	No	I don't know
1	Do you think that scientific research is an important component of the system of training specialists in physical culture?	47%	18%	35%
2	Have you participated with reports in scientific events (conferences, competitions, etc.) of the IPhCS?	14%	86%	-
3	Do student research events held at the university interest you?	16%	46%	38%
4	Would you like to learn how to write scientific articles and give presentations?	38%	20%	42%
5	Would you like to take part in non-traditional scientific events (scientific competitions, quizzes, quests, stand-up, etc.)?	58%	17%	25%
6	Do you read additional scientific literature (not only as part of the educational program)?	22%	66%	12% иногда
7	Do you think it is necessary to involve IPhCS students in research work?	46%	26%	28%
8	Do you think students need their own scientific journal?	58%	15%	27%
9	Do you have a desire to be a member of the student scientific club?	35%	32%	33%
10	Do you want to engage in research activities?	35%	22%	43%

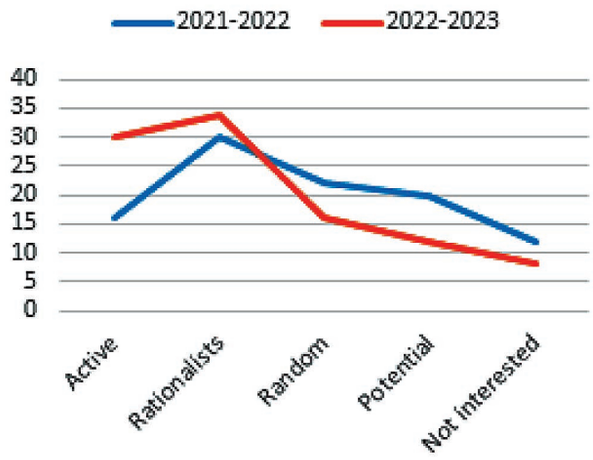

Figure 2. *Dynamics of changes in the involvement of undergraduates in RA*

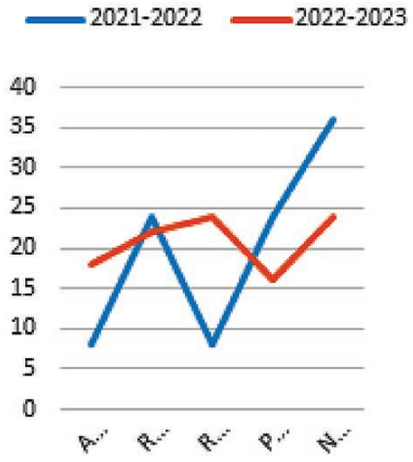

Figure 3. *Dynamics of changes in the involvement of bachelors in RA*

Students of physical education universities are mainly active athletes, and they also actively participate in the social life of the Faculty of Physical Culture and Sports and the university. This can explain that they prefer scientific activity to various other methods of self-realization. Explaining the low rating of scientific activity in their answers, respondents named the main reasons. Thus, 32% of respondents answered that they do not like scientific activity; 21% explained that for them this activity is complex, unclear and not interesting; 19% do not see future prospects for themselves related to science; 11% of students are afraid of failure at events, which will affect their image; 5% of those who took part in the survey developed fear of speaking.

In order to determine the dynamics of student involvement in research work, based on a survey conducted in the 2022-2023 academic year, bachelors and masters were divided into five conditional groups ("active", "rational", "random", "potential" and "not interested").

"Active" are students who constantly participate in various activities, read scientific literature, and are ready to acquire new scientific knowledge. The share of active participants among bachelors (B) was 8%, among masters (M) -16%.

"Rationalists" (B-24%, M-30%) - these students are guided by rational motives: to get a scholarship, pass a test automatically, write a diploma, get additional points for admission to a master's or graduate school.

"Random" (B-8%, M-22%) - this group of respondents does not particularly need knowledge of scientific activities; they sometimes participate in the company of friends or under duress.

Table 2. *Technologies for attracting students to research activities*

Options	Ways to promote scientific events
Social media	Creating special accounts on social networks and regularly updating content to attract new students and retain their interest through the "VKontakte" platform, RuTube
Advertising campaigns	Advertising on social networks, search engines and video hosting platforms can help expand the audience of students and increase interest in research work
Content Marketing	Creating blogs, videos and other content that will be of interest to students and can help establish and improve interaction with their audience
Email marketing	Sending emails can help inform students about new scientific events, promotions, exhibitions, and competitions
Affiliate Marketing	Working with bloggers and outstanding scientists and scientists who can help attract new students to scientific events.
Mobile applications	Development of a mobile application for the "Consultation Center" can provide students with additional opportunities to improve their knowledge level
Consultations, Presentations	Consultations and presentations can be conducted depending on the needs of students (for example, "How to prepare a report, article, essay, etc.")

Table 3. *Criteria for indicators of research work of members of the student scientific club "ON START"*

Criterion indicators	Maximum amount	
	2021-2022	2022-2023
Participation of members of the student scientific club "ON START" in research projects financed from extra-budgetary sources	0	1
Number of reports by members of the student scientific club at scientific events (international, all-Russian and regional conferences)	5	7
Members of the student scientific club have publications in publications indexed in Russian and international scientific citation systems	2	6
Involving IPhCS students in the activities of the student scientific club	28	86
Participation of members of the student scientific club in the organization of scientific and scientific popularization events	12	32
Number of members of the student scientific club awarded for active work	7	28
Number of diplomas, diplomas, certificates for winning competitions received by members of the student scientific club	11	21
Number of scientific events held by members of the student scientific club for IPhCS students	5	10

"Potential" (B-24%, M-20%) - this group includes students who have not been specifically engaged in research activities.

"Not interested" (B-36%, M-12%) - these students do not plan to engage in science at all. For various reasons, they deny any possibility of participating in research activities.

To involve students in research and development, a plan of joint and individual scientific activities was developed for students of all courses and areas of IPhCS, and technologies for involving students in research activities were identified (Table 2).

At the end of the academic year, a repeated survey was conducted, which made it possible to establish certain positive changes in groups of students (Fig. 2, 3). From the diagrams you can see that the segment of active participants has changed, the increase among master's students was 14%, among bachelor's - 10%. Participants from the "Potential" and "Not Interested" groups gradually move to other groups, which makes it possible to assert the effective work of the student scientific club.

If we compare the indicators of student participation in various events, we can see the dynamics of their involvement in research activities (Table 3). In our opinion, this is facilitated by the developed ways to increase interest in scientific activities and ways to attract students to it.

Conclusions. Thus, the process of preparing future specialists for scientific work will be effective if students, starting from their first years, are involved in various forms of research activity [3]. The student scientific club "ON START" has been actively working for two years. The efficiency indicators presented in the article have more than doubled over the past year. The share of students involved in the active activities of the scientific club has tripled. Project competitions, seminars are held, consultations are organized and non-traditional scientific activities are identified for each course of students. The fourth issue of the electronic student magazine "Pulse of Science" is being prepared for release, the founder of which is the Institute of Physical Culture and Sports.

Summarizing all of the above, it should be especially noted that the process of training young scientific personnel will be successful if, at each level of education, creative thinking [4] and research skills are developed in students, without which it is difficult to continue education and be realized in the labor market, and the effectiveness of this work depends from student science created within the university itself, and the well-functioning system of its functioning.

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