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MOTIVATION OF STUDENTS TO PROJECT ACTIVITIES IN A MODERN UNIVERSITY

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Abstract

The relevance of the study is determined by the need of both theoretical and practical training of students in a modern university. An important component of the practical preparation of the bachelor is the project activity. The purpose of the article is to study the motivation of bachelors to project activities in intersubject project groups as part of the educational process. The main research method was the survey and questionnaire of first-year students who first carry out project activities at the university. The article reveals the problem of the need to consider the leading students' motivation for project activities, empirical data on the motivation of university students to develop projects, their ideas about the possibilities and concerns about the implementation of project activities at the university are presented. The authors proceed from the assumption that it is necessary to consider students' ideas about the possibilities and shortcomings of project activities when organizing students' work on projects. The students' attitude to project activities and the conditions that allow it to be effectively implemented at the very early stages of student learning are revealed. These include the following: supporting the initiative of the students themselves in choosing the topic of projects, developing teamwork skills, taking into account the complexity of the project work, without affecting the main educational activities of students.

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1. Introduction

The success of a modern person is determined not only by the sum of knowledge acquired during training, but also by practical skills, the ability to interact with other people, receive and process information from various sources and work in a team. Traditional forms of organization of the educational process at the university do not allow the development of these competencies in full. At the same time, the results of domestic and foreign scientists show the promise of solving this problem through the introduction of project training at universities (Cerezo-Narváez, De Los Ríos Carmenado, Pastor-Fernández, Yagüe, & Otero-Mateo, 2019; Gavrikov, Pevzner, & Petryakov, 2017).

Project training is based on the methods of project planning and management, which have proved their relevance and effectiveness (Kudinova & Skulmovskaya, 2018).

The basis of project training is the organization of students' project activities, both individual or group, when studying one of the disciplines, individual while writing a term paper or graduate qualification work, when performing independent research work, and as a team, when carrying out a project that meets modern challenges and directly or indirectly related to educational track of a student.

Modern scientists (Hero & Lindfors, 2018) obtained data that project training at the university allows students not only to understand the essence of innovative processes, to see group dynamics in practice, to master the logic of project thinking from setting the problem to developing ideas and prototypes, but also to identify gaps in mastering one's own competencies, gain conflict resolution skills, create motivation for further higher education.

Project training can be organized both in specialized teams, which may include students of the same field of study, having a close set of competencies, and in interdisciplinary ones, including students with various competencies necessary for solving project problems.

Teamwork allows students developing critical thinking, planning skills, managing their own time, leadership and performing skills.

At the same time, it was proved that the lack of university students' experience in project or research activities makes project training subjectively incomprehensible and difficult for bachelors, which significantly reduces the motivation for project activities both as a group or individual (Van Blankenstein et al., 2019).

At the same time, there is a number of problems that do not allow considering the project training method ideal for students: risks in monitoring their implementation, when students do not receive the necessary amount of knowledge (Safonova & Podolsky, 2018), insufficiently structured training and development of analytical skills, lack of systematic leadership (Zhang, Xie, & Li, 2019) and others. The study of students' motivation for project activities at the university is equally important.

Nevertheless, despite the large number of relevant studies on project-based learning at a modern university, the issues of students' motivation and expectations for project activities remain poorly studied.

2. Problem Statement

Project activities, with the qualitative organization of this process, can be a universal condition for the formation of practical competencies among students.

In this study, we understand the project activity in teaching students as a properly organized sequence of stages of work on a project, including substantiating the topic of the project, forming the project team, planning and implementing the project, analyzing mistakes and successes (Safonova & Podolsky, 2018). The presence of students' motivation for a systematic and effective implementation of the project is a necessary condition for the successful organization of this process.

The practical implementation of project activities in the training structure includes such types of work as role-playing games, team collaboration, personal research of project participants, clear, informed planning under the guidance of a teacher, information modeling, etc. (Zhang et al., 2019). This allows students presenting their career and possible ways of its development and growth at the training stage. So, Safonova and Podolsky (2018) substantiate the most important stages of the organization of project activities: the selection of projects, the formation of project groups, the approval of their mentors, planning and distribution of roles within the working group. The authors analyze in detail the structure of activities in the project and the risks of project inefficiency using specific examples.

Students' motivation for project activities was studied in works of domestic and foreign authors. For example, Cerezo-Narváez et al. (2019), study the competencies necessary for project management of the teaching and research staff for the sustainable success of technical education, since the motivational component is fundamental in this process. The experience of training students in multidisciplinary innovation projects confirms that creating partnerships based on multidisciplinary projects that solve real problems of developing innovations in science and technology brings mutual benefit to students and organizations (Duenas & Rincon, 2019; Hero & Lindfors, 2018; Kudinova & Skulmovskaya, 2018; Van Blankenstein et al., 2019). The authors give an important place for the development of students' motivation for scientific activity in the learning process and consider such parameters as self-efficacy and intrinsic motivation as fundamental factors of this process (Van Blankenstein et al., 2019).

The authors understand the motivation for project activities as a set of conditions, factors and reasons that motivate a student to plan and implement a particular project purposefully and thoughtfully in order to solve educational and then production problems.

Two vectors of motivation are found in students: achieving success and avoiding failure. The students have a desire to achieve goals and progressively complicate tasks with the dominant motive for achieving success and this process is possible with high self-esteem and activity and a constant increase in the level of their own achievements. The dominance of students' failure avoidance motivation encourages them to choose easier tasks out of fear of dissatisfaction with their activities. One way or another, the personality characteristics of students can influence the process of project activity. From these positions, teachers need to understand the characteristics of student motivation in the formation of project groups and the distribution of tasks between performers. The following question naturally arises: can motivation for project activities change from one vector to another and under what conditions?

The lack of experience among students in the field of collaboration, lack of communication, difficulties with self-government were perceived as potential limitations and risks that arise when achieving educational goals in the implementation of project activities (Lazar & Faciu, 2019), which can become a serious obstacle to the application of this method of teaching at a university, despite all the advantages of this method.

A review of research by domestic and foreign scientists allows concluding that the phenomenon of students' motivation for project activities is not well understood, but relevant to higher education. The studies give fragmented ideas about students' motivation for project activities, containing both risk and error analysis in training and specific solutions for individual areas of science. The problem of introducing the project method as universal for different fields of science and education has not yet been resolved.

3. Research Questions

3.1. What is the motivation of bachelor students to project activities?

3.2. What are the students' perceptions about the opportunities and disadvantages of project activities in the educational process?

4. Purpose of the Study

The aim of the study is to determine the motivation of first-year students to project activities in the educational process.

This study may be useful in planning the educational process and extracurricular work with students beginning to master professional competencies. It is aimed at revealing the reasons for both low and high motivation for project activities, its features at different stages of the project. Analysis of students' expectations and concerns can help better project planning and the possibility of transferring project activities to solving production problems.

5. Research Methods

Survey and questionnaire methods were used in the course of the study. A modified method "Motivation for Success and Fear of Failure" by Rean (2004), which includes a series of statements about project activities with which students either had to agree or disprove was used to identify students' motivation.

The study was conducted based on Yaroslav-the-Wise Novgorod State University. The study involved first year students of various areas of training.

6. Findings

6.1. The study of the motivation of first-year students to project activities

Diagnostic results of students' motivation for project activities have shown that most students involved in project activities in the first year are more focused on avoiding failure (59.1%) than on achieving success (40.9%). 43.2% of respondents show the average severity of motivation to avoid failure. The fear of failure is clearly expressed in 15.9% of first year students. Only 11.4% of students are focused on achieving success.

The results of the study suggest that first year students, starting project activities, try more to avoid responsibility for the results of project activities than they think about the success of their project.

6.2. Students' views on project activities

Students' ideas about the possibilities of project activities were identified during the survey. First year students' responses were divided into 9 clusters. The survey results showed that most students believe that project activities can contribute to creative self-realization (27.3%) and the improvement of professional competencies (22.7%). Also, students note the possibility of gaining experience working on a project (11.4%), gaining teamwork skills (9.1%), developing communication skills (9.1%), and also the opportunity to make acquaintances (9.1%) as positive effects of project activities.

A number of students note the possibility of having an interesting time (4.5%) and improving planning skills (2.3%) as expectations of project activities in the first year.

At the same time, 4.5% of students did not expect anything from the project activity except the opportunity to get a positive mark in the corresponding subject.

Thus, we can say that in the students' view, inclusion in the project activity in the first year allows using the opportunity for personal growth and professional self-improvement, as well as the development of communication and teamwork skills.

Students' answers to the question about the shortcomings of project activities were grouped into 4 clusters and ranked.

An analysis of the results showed that most students fear that project activities will take too much time (75.0%). Also they note the difficulty of combining project activities and training (15.5%). 6.8% of the first-year students surveyed are afraid that they will have to complete a project that is not related to the educational program starting their project activities. A number of students fear that they will not be provided with the resources necessary for the implementation of the project at the university (2.3%).

7. Conclusion

The study found that first-year students who for the first time carry out project activities in intersubject groups are more focused on avoiding failure than on achieving success.

At the same time, most students consider project activities in terms of opportunities for selfrealization and professional self-improvement.

From the students' point of view, it is useful to organize project activities to gain experience in developing and promoting their own projects, as well as developing teamwork skills and establishing team communication with representatives of other professional communities, which is consistent with other modern research.

However, despite the rich opportunities, first-year students consider the large time spent on working on the project as the main drawback of project activities, as well as the difficulty of combining it with attending classes and performing extracurricular independent work in subjects. The data obtained allow us to say that the organizers of project activities at the university should provide enough free time to complete projects when designing the educational process, coordinate the volume of homework in subjects and the timing of their implementation with control points of project activity. Mentors and tutors of project activities need to conduct propaedeutic work to correct negative ideas about project activities and change motivation for achieving success in project implementation.

References

- Cerezo-Narváez, A., De Los Ríos Carmenado, I., Pastor-Fernández, A., Yagüe, B. J. L., & Otero-Mateo, M. (2019). Project Management Competences by Teaching and Research Staff for the Sustained Success of Engineering Education. *Educ. Sci.*, 9(1), 44. https://doi.org/10.3390/educsci9010044
- Duenas, W. R. R., & Rincon, A. M. R. (2019). Interdisciplinary Work as a Pedagogical Innovation for Biomedical Engineering and Health Science Students. World congress on medical physics and biomedical engineering, 1, IFMBE Proceedings, 68(1), 855-858. https://doi.org/10.1007/978-981-10-9035-6 158
- Gavrikov, A. L., Pevzner, M. N., & Petryakov, P. A. (2017). Pedagogical education in a regional support university: challenges of the present and the search for development paths. *Scientific and pedagogical review.Pedagogical Review*, 4(18). https://doi.org/10.23951/2307-6127-2017-4-158-165 [in Russ.]
- Hero, L. M., & Lindfors, E. (2018). Students' learning experience in a multidisciplinary innovation project. *Education and training*, 61(4), 500-522. https://doi.org/10.1108/ET-06-2018-0138
- Kudinova, O. S., & Skulmovskaya, L. G. (2018). Project activities at the university as a basis for innovation. Modern problems of science and education. 4. Retrieved from http://scienceeducation.ru/ru/article/view?id=27928 [in Russ.]
- Lazar, I., & Faciu, E. (2019). Project Based Learning as Teaching Approach for Master Students. Revista Românea scăpentru Educație Multidimensională, 11(4), 113-135. https://doi.org/10.18662/rrem/161
- Rean, A. A. (2004). *Psychology of personality. Socialization, behavior, communication.* SPb.: Prime-EUROZNAK [in Russ.].
- Safonova, K. I., & Podolsky, S. V. (2018). Project activities of students at a university; project planning and evaluation of the effectiveness of their implementation. https://doi.org/10.24158/spp.2018.5.16 [in Russ.]
- Van Blankenstein Floris, M., Nadira, S., Van der Rijst Roeland, M., Marleen, S., Bakker-van den Berg Danel, A. S., & Van Den Broek Paul, W. (2019). How do self-efficacy beliefs for academic writing and collaboration and intrinsic motivation for academic writing and research develop during an undergraduate research project? *Educational Studies*, 45(2), 209-225, https://doi.org/10.1080/03055698.2018.1446326
- Zhang, J. X., Xie, H. Y., & Li, H. (2019). Improvement of students problem-solving skills through project execution planning in civil engineering and construction management education. *Engineering construction and architectural management*, 26(7), 1437-1454. https://doi.org/10.1108/ECAM-08-2018-0321