Research Activities in the Organization of Professional Activities of Students of Service Studies

Zhanna V. Smirnova, Zhanna V. Chaykina, Olga I. Vaganova, Marina L. Gruzdeva, Elena N. Galkina

Abstract*: Relevance: B under the conditions of reforming the characteristics of the Russian system of higher education are gradually changing in accordance with the General directions of development of modern society. The role of professionalism, personal activity of the student, his interest in self-improvement and readiness for self-education increases. The understanding of education is formed not as a process focused on the transfer of ready-made knowledge from teacher to student, but as a comprehensive system aimed at individualizing the student's mastery of the skills necessary for successful employment in the labor market.This approach to education is based on the development of professional thinking of students by shifting the emphasis of educational work on independent activities of students and its motivation. Independent work of students is considered as a methodological basis for achieving strong and in-depth knowledge, professional competencies, formation of cognitive activity and commitment. Excel software environment, which makes it possible to run cluster analysis of large amounts of statistical data promptly and with minimal time expenses. Conclusion: The paper's authors consider that the automation of clustering process in the Microsoft Excel software environment allows decreasing time significantly. The process of cluster analysis in the MS Excel program without the use of add-on is very labor-intensive and requires a lot of time to complete it. Also, in case of very large number of items, the time for running cluster analysis significantly increases and when the number of items is estimated in hundreds and thousands, the time of effective cluster analysis running can be estimated in days, which is very ineffective. The use of add-in doesn't require special knowledge on the mechanism of running cluster analysis from the user and takes a few seconds to complete it.

***Index Terms*: students' research activity, research study, future specialist's professional development model, student publication.**

I. INTRODUCTION

The main place in the independent work of students is research work. With the modernization of the system of higher professional education, it moves from the desirable, but not mandatory elements of the educational process to the necessary active means of development of graduates. Students in the period of study at the University make a contribution to the development of theoretical and applied issues of various areas of scientific knowledge, determine the ways of their practical use. [3]

Combining with other types of educational process, R & d contributes to the implementation of com - petent basis of training of graduates. The educational activity of the University is based on the personal interest of students in the acquisition and expansion of professional skills and abilities, development of creative abilities. Participation in research, independent scientific research, is the highest level of cognitive activity of students. [20]

The use of personality-oriented approach in the organization of the educational process involves the consideration of the student's research as a creative process with the teacher to find a solution to the problem containing certain elements of novelty. During the research search between them is carried out cognitive exchange of knowledge, skills and other values aimed at the formation of professional thinking of the student, his ability to self-use of scientific methods of knowledge. All this has a positive impact on the process of successful acquisition of competencies provided for the development of a specific educational program.

Carrying out the management of research work, the teacher should purposefully determine the most effective methods of influence, taking into account the psychological characteristics of the student's personality, constantly motivate his creative activity, correctly assess the already acquired knowledge. At the same time, research work should provide for a system of continuous participation of students in scientific activities throughout the period of study at the University. The basis of such a system is the continuity of its methods and forms from one discipline to another, from Junior to senior courses, including the final final qualifying work. [1].

II. THEORETICAL FRAMEWORK OF THE RESEARCH

The issue of students' research activities is not a new one. Many national and foreign scientists reflected in their works the use of practical experience of higher education institutions regarding the conduct of students' research activities: Bogorodskaya et al. (2018), Bulaeva et al. (2017), Kutepov, Vaganovan and Trutanova (2017), Kuznetsov et al.

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Zhanna. V. Smirnova, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation.

Zhanna V. Chaykina, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation.

Olga I. Vaganova, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation.

Marina L. Gruzdeva, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation.

Elena N. Galkina, Minin Nizhny Novgorod State Pedagogical University, Nizhny Novgorod, Russian Federation

(2018), Ilyashenko (2018), Markova et al. (2018), Potashnik et al. (2018), Smirnova et al. (2018), Smirnova, Gruzdeva, and Krasikova (2017), Ilyashenko et al. (2018), Ilyashenko et al. (2018) and others. [2], [3], [7], [8], [9], [10], [11], [12], [13], [14], [15], [16], [17], [21].

Following the analysis of scientific literature dedicated to the range of problems of the research, we pointed out the main tasks of this type of activity and defined its meaningful characteristics.

This approach allows you to gradually increase the volume and complexity of tasks, skills, abilities, formed by students in the process of performing diverse research, continuously integrating them into the professional competence demanded in the labor market. This approach is extremely relevant in the training of personnel for the service sector and tourism business, as its specificity imposes increased requirements for the development of graduates ' creative abilities, cognitive activity, culture of research. The learning process contributes to the expansion of students ' service, tourism and management areas of preparation of the basic foundations of search work, imagination, the ability to independent conclusions, decision-making and implementation. All these characteristics are necessary for participation in scientific research.It seems that in order to provide a systematic solution to the issues of planning, organization and stimulation of students ' research, increasing the number of participants, it is necessary to find approaches to its wider inclusion in both classroom and extracurricular independent activities of students. At the same time, it is advisable to follow the path of expanding the potential of mastering the content of various academic disciplines, starting from the first year, with the help of elements of research. [2]The teaching However, to perform such a task during the first semester is difficult. As a result, the majority of undergraduate students do not participate in scientific work, and, above all, this is due to the following factors:

— lack of first-year students necessary for successful training at the University of skills and abilities;

— low level of development of optional and profile work in schools on humanitarian, social, economic and natural science subjects;

— lack of interest of Junior students in the implementation of research;

— gradual reduction of the General level of training of applicants;

— insufficient activity of teachers in attracting students to research;

— low level of coordination activity of teachers of different General education departments to identify students who are interested in research. [18]

However, it is possible already in the first and second years of study to organize research students in the development of educational disciplines of General education, which are part of the humanitarian and socio-economic, as well as mathematical and natural science cycles of working curricula implemented by the University of basic educational programs. Well-designed teacher job research can give the student in the process of performing more skills and abilities than just listened to the lecture course, not replacing, and supplementing and deepening it.

The content of tasks and the form of research in the disciplines should be determined so that in the course of their implementation the student used the didactic basis and the logical structure of the educational material in accordance with the requirements of the state educational standard and working programs. During the lectures students are given the basic concepts, provisions, mechanisms that reveal the content of the discipline, seminars and workshops the task of processing techniques of their mechanical and technical application, and with the help of research tasks can significantly improve the effectiveness of this process. [4]

As tasks in the Humanities, social and economic disciplines can be the preparation of abstracts, essays, reviews and other options for scientific work of students on one of the proposed topics based on the content of the lecture and practical material. When they are performed as a result of the search and study of various additional information sources, there is a deepening of specific concepts, terms, facts of science and practice.

Within the framework of mathematical and natural science disciplines, students of service, tourism and management areas also have the opportunity to expand their abilities in the field of independent creative thinking, develop the ability to formulate and solve practical problems in the field of research. Tasks for the course "Mathematics" may include mathematical modeling of socio-cultural and economic processes, the implementation of diverse calculation and graphic works. In the discipline "the Concept of modern natural science" students can perform experimental work. Mastering courses "Informatics" and "Computer training", it is possible to receive theoretical skills of wide use of opportunities of modern information systems. [19]

III. THE ANALYSIS OF RESEARCH RESULTS

Systematic implementation of such works in the process of development of General educational disciplines turns Junior students from students to self-taught, develops their research skills in the appropriate direction. Practice shows that in the preparation of scientific works, students more deeply master the theme of the course, acquire the skills of finding additional literature, its independent understanding, and the questions posed in it are transformed from abstract theoretical provisions into an instrument for the study of certain phenomena.

An important condition for the transformation of research students of the first and second courses in a permanent element of the educational process is the inclusion in the thematic plan of seminars and workshops on the work program of discipline, discussion of reports and reports of students on the results of research in the form of debates, discussions, round tables, etc. This approach, as well as the mandatory reflection of research issues in all developments of educational and methodical complex of the discipline contributes to the status of research activities of

students, reflects its role and place in the process of its development competencies. For wider coverage of students by scientific work it is possible to use group forms of activity, associations of students in research teams which participants together select, study, systematize additional information material on the chosen subject, prepare its presentation, answer questions during discussion. [20]

It is impossible not to take into account the motivational moments that encourage and attract students to research, among which are the following:
the opportunity to assert themselves, to show their importance;
to demonstrate personal affiliation to scientific activities;
Express your individuality and independent thinking;
to acquire skills of creative scientific work;
to participate in research together with senior students, graduate students, teachers.
The organization of student scientific work is based on the presence of its participants the necessary knowledge, skills and abilities. To successfully achieve its goals and objectives should be based on the willingness of students to perform independent research. Implementing the principle of individual approach, the teacher should be in the first class to diagnose the level of training, skills, interests, independence and commitment of each student, which determines the possibility of further differentiation of research students.
For students with a low level of development of independence it is advisable to set tasks related to the expanded collection, processing, study and bringing to the audience of reproductive material on the topics of the discipline: to choose literature and study a specific topic or question; to collect material and to calculate a certain algorithm; to perform a task on the proposed sample, etc. [6] Students with an average level of independence and self-development is better to put the task of reproductive and creative nature, aimed at deepening the concepts and provisions, the application of learned theories, laws and rules in practice: to prepare an abstract, message, report, review information sources on the topic, etc.
Students with a high level of development of skills of independent activity can be oriented to work of a creative nature, associated with the understanding of the theoretical provisions of the discipline, finding original approaches to solving problems of the practical plan, the use of previously formulated competencies in the consideration of specific situations, the preparation of innovative works and projects. [5]
For example, in 1st and 2nd courses, students prepare reviews, conduct studies Individual-differentiated approach in scientific work helps successful personal growth of students, increases the level of their activity and self-development. The effectiveness of research of students in the development of academic disciplines of Junior courses is associated with the implementation of the goals of the entire University educational process and the acquisition of the following skills:
work with educational, periodic, scientific and methodological sources;
carrying out an experiment using the necessary technical means;
collection and processing of necessary information, analysis of the results;
propose approaches to solving problems using acquired competencies;
forecasting the results of possible consequences of the development of solutions;
preparation of presentations of individual and group work results;
public speaking, discussion.
Summing up the results of the research with the characteristics of the characteristics and personal results of each is necessary for the formation and development of students ' constant need for self-improvement and advancement.
Thus, we can highlight the following positive aspects of attracting students of different courses of study to research:
students are more quickly involved in the educational process of the University and adapt to its features;
in the process of more frequent communication of students with teachers in the performance of scientific works improve their mutual understanding and psychological contact;
carrying out research, students learn better disciplinary material, acquire sustainable additional skills in the field of self-development and self-education;
students have formed an approach to the construction of personal trajectory of professional education.
Having gained experience in research in Junior courses, students use the acquired skills in the process of further training, including in senior courses in coursework and projects, reports on practice, final qualifying work sections of a research nature or fully performing them as independent research on a specific topic.
The considered types of scientific work of students belong to the elements of research activities included in the educational process. It is especially important that they are successfully integrated into the program of higher education and specialists, and bachelors and masters. In addition, students of different courses have the opportunity to carry out research that complements the educational process. This form of organization of scientific activity includes various types of research, not provided by the training programs: participation in student scientific circles, seminars, research laboratories, conferences, competitions, Olympiads, preparation of publications on the results of creative work, etc. It reflects a higher level of formation of the research ability of the student, his readiness to build a trajectory of continuous education, training in graduate and postgraduate studies. The highest form of research of students is considered their participation as performers in the implementation of budgetary and extra-budgetary research conducted by the teaching staff at the departments and laboratories of the University, as well as the implementation of their own search works when receiving a grant. The most valuable in this continuous process is the ability to coordinate the joint efforts and creative potential of the teaching staff and students in the work on the problems of theoretical and applied nature, reflecting the General focus of professional and

educational and scientific activities of the University. An example of such an approach is the organization of students ' research, which goes beyond the basic educational programs in university.

For many years at General and final departments of University scientific work of students within the subject reflecting specifics of the fixed academic disciplines and the directions of research interests of teachers is carried out. According to its results, the Cathedral student scientific conferences are organized. They identify the best R & d, the performers of which are recommended to participate in the faculty scientific conferences with the right to nominate candidates for a similar conference at the University level.

In addition to the Department work, each faculty of the University organized a student scientific seminar aimed at familiarizing its participants with the topics, progress, research results of students of various courses, specialties and areas of training in the field of solving applied problems of increased interest to the tourism and service.

Attention should be paid to the experience of broad involvement of students of various faculties in the implementation of large-scale innovative scientific project "Living map ". The project has been implemented in university since 2010. The purpose of its implementation is the development of methodological, information and software for the preparation of an interactive map of tourist resources located in different regions of the country. In the course of the study, the students were given the task of collecting, processing, systematization and unification of primary information about tourist sites located on the territory of individual administrative-territorial settlements, taking into account the requirements of the proposed methodology by the scientists of the University.

The size of the territories of the administrative regions of the country and the task of covering the maximum number of objects of tourist interest by the study have caused the need to involve a large number of performers in the implementation of this work. They included students of the University of different faculties, specialties, directions, courses. Belonging of the participants of the research project to professional training, other than tourism, does not matter, because the nature of the search work is based not on the specific specialty formed competencies, but on the use of skills in the application of scientific principles of knowledge, the selection of the necessary information, its refinement and systematization, as well as readiness for independent individual and group activities aimed at achieving this goal. Particular attention is paid to the presence of students ' cognitive interest to participate in this study and work with primary information materials that make up its basic Foundation. The selection of students showed that their desire to become part of the project is mainly based on a passion for tourism and local history or predisposition to search work, the desire to form and develop skills for its implementation.

The results obtained so far indicate that students are successfully coping with the goal. Their scientific work can be divided into a number of stages.

At the initial introductory stage, the students are given the task of studying the methods of research of various types of tourist space, the composition of the objects included in them, the features of their characteristics. Its result is the readiness of students to distribute individual objects by types of tourist space: natural, cultural and historical, anthropological, service, recreational, scientific, event, mythological, as well as their assignment to a certain group and subgroup of objects of the same type.

At the next stage of the search for students assigned administrative areas to identify existing facilities and establish their belonging to the type, group and subgroup of tourist space. The implementation of the tasks requires the project participants to concentrate efforts related to the collection and study of primary and secondary information data on the identified objects. As sources, they study materials on local history, reference books, Internet resources. The information collected for each object is subject to verification, clarification and addition, taking into account the provisions of the methodology, the diagnosis of the tourist space.

IV. CONCLUSION

At the final effective stage of the study, the students are faced with the task of systematization of the prepared information on the objects and types of tourist space for placement on the information portal "Living map ". In its implementation, information data on each object are structured according to the requirements of certification in two formats: a brief and full description.

Thus, the research work of students allows to form, update and constantly expand the information database of tourist resources of the administrative regions of the country, which is the basis of a large innovative project of university.

Having considered the various areas of research students, we can say that it is organically integrated into various areas of educational and extracurricular activities of the University, contributing to the development of the following competencies of the graduate:

- ability to understand the problem;
- readiness to conduct independent and group studies;
- the ability to predict the trends in the development of events;
- ability to plan and organize individual and group search activities;
- discussion and public speaking skills;
- ability to self-education and self-development.

This meets the requirements of the state standard of the third generation, promotes a smooth transition to a multi-level system of professional training.

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