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STUDENTS' ATTRACTION TO RESEARCH ACTIVITIES AS THE MOST IMPORTANT TASK OF MODERN UNIVERSITY

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Students' Attraction to Research Activities as the Most Important Task of Modern University

This article deals with the basic directions of students' involvement in scientific researches. Modern foreign universities are large educational and research complexes that unite research institutes, colleges, faculties, departments, laboratories, school laboratories, design department and technological departments.

In foreign universities research work and innovation activity are a priority task of higher school and necessary component of educational process.

The author points out the research universities' activity in foreign countries. There are fundamental widespread forms of students' involvement in scientific researches.

The activity of the European research area is the system of research programs directed at integration of scientific resources in European Union. There are basic directions of the European research area.

The author emphasizes that organization of research work is an integral part of educational process. Teaching methods have to be based on principals of ensuring unity of teachers and students' educational and research activity.

Key words: professional training, scientific research, university, students' science.

Studying contemporary tendencies connecting with development of foreign higher education we can talk about professional formation of students' personality that is stipulated by maximum students' attraction to research work during studying. In fact in leading countries science is developed in universities. In Ukraine in spite of significant results of research work for the last years most of universities do not have such scientific achievements which could be competitive and have an influence on economic development and social sphere of the country. The level of research activity does not secure necessary training of highly skilled specialists. Not all teachers are engaged in research work. The problem is still not solved and that is how

to effectuate qualitative modernization of process of professional training in higher school so that education can base on scientific researches. It is also important to learn an experience of modern universities according to students' attraction to active research work.

V. Kureychuk says that the tendency of universal education is continual introduction of science in all spheres. The results of fundamental studies become new technologies and ideas in leading countries.

The most important scientific resource becomes creative highly educated potential of society elite [3, p. 265]. It is known that researches and innovative activity in foreign universities are a task of primary importance in higher school and also necessary component of educational process.

The analysis of universities activity allow to affirm that modern researches are included in concepts and programs of higher schools development.

A. Gryban'kova has proved that there is three main models of organization scientific and pedagogical life in the university. They are distinguished by its priorities as to role of science in its activity. German model supposes the unity of teaching and research activity in universities. French model says about division of these two functions leaving only pedagogical tasks for university. The third model (Atlantic, British model) deals with combination of these two models borrowing different experience and traditions.

Movement to the university model that has research character takes place not only in countries, where universities traditionally served as a basis of the national research and innovative system (The USA, Great Britain, Canada etc.) but also where a research work was concentrated in academic and branch institutes (Germany, France, Finland etc.) [5].

Horujiy says that research universities got special distribution in the USA. There are 38 American universities among the rating universities of the world. There are certain criteria in the USA to determine the achievements' level of research university. They are money on research works, which are given by industrial enterprises, the state and local budgets; private capital; amount of the degrees of PhD

awarded by university for a year; an amount of specialists with the degree of PhD, which promote scientific qualification by implementation of research works [6, p. 19]. The analysis of scientific literature allows to assert that the main successful indicator is scientific achievements. Teaching of educational disciplines is carried out on the basis of results of scientific researches.

Realization of scientific researches and professional training of specialists are the main functions of universities all over the Western Europe and the USA. A. Rjevska says that organization of researches have to bring maintenance of education to conformity with the last achievements from certain discipline and to kick in economic and technical development of society. Research work determines contribution in science of every teacher, and also prestige and high-quality estimation of development all institute of [7, p. 204].

Modern foreign universities are educational, research and productive complexes, which unite educational and research institutes, colleges, faculties, departments, laboratories, school laboratories and technological bureaus. Most countries of Western Europe from the middle of 80 – 90 years carry out alteration of higher pedagogical education. Reforms of higher pedagogical education affected the question of maintenance of the research programs, distribution of educational time taking into account organization of students' research work of [5, p. 15].

Using experience of leading countries, the Ukrainian universities must strengthen a fundamental component and give students and graduate students deep understanding of different sciences. It is necessary to build fundamentally new curricula and programs of scientific researches for creation of such knowledge [6, p. 20].

For developing students' creative skills there is a structure of educational discipline study, which is analogical to the structure of scientific research. We need such organization of students' educational and research work, which is integral part of educational process. Teaching methods must be based on principles of providing unity of teachers' and students' educational and research activity as a major condition of mastering scientific method and development of teachers' professionalism.

Development strategy of incorporated Europe is built on the usage of triangle of knowledge which includes education, researches and innovations. In 2000 year Lisbon development strategy of European Union, that is talking about providing transformation of incorporated Europe to the most economy in the world, based on science and knowledge. There is creation of European industry of scientific researches.

The European Research Area (ERA) [1; 2] is the system of the research programs, scientific resources of the European Union. The aim of ERA is to overcome fragmentary of researches in Europe, to promote the competitiveness of the European research institutes by attracting them to joint work through integration of scientific resources of European Union. We single out some basic directions of development of ERA such as dynamics of motion of researchers in Europe and increase of researchers' mobility; research infrastructures development.

In 2007 for realization of Lisbon declaration "Universities of Europe after 2010: variety of aim unity" the European association of universities accepts the special program where strategies are worked out. The essence of declaration is to stimulate the collaboration of scientists in different countries and unite resources for breaches realization. The role of coordinators belongs to European Science Foundation and European Research Councilact [6, p. 16].

There are basic principles For of declaration such as development of scientific researches as a component of higher education, simultaneous forming of European area of education and European research area as principles of society which are based on knowledge; overestimation of higher education and scientific researches, reorganization of higher education and updating the programs with the aim of providing of innovative activity etc. Education which is based on scientific researches is one of the most strong sides of European universities. Therefore, educational establishments must provide development of research component on all stages of studies, allowing students to gain experience in research work writing and encouraging interest as to the possible future profession.

Important ideas for our research are ideas of usage individual educational and

research tasks that are the type of individual students' work. Students use these tasks in the process of learning educational material and complete them with final examination or test [8, p. 245].

There are the most widespread forms of organization of students' studies such as conducting classes, discussion, research tasks through implementation of pedagogical and technological projects, creative works writing, authentic conversation etc.

The effective form of organization students' research work are cooperative studies which foresees teacher's and student's participating in planning, choosing scientific direction and intercourse in small groups [5, p. 12].

G. Balyhin analyses the priority national project "Education" (Russia) [9], indicates that a modern university must influence on social and economic development. So that the development and support of fundamental science and university education are primary tasks, that have centuries-old history and many achievements in different spheres of talented scientists' preparation.

The experimental basis work effectively in the process of realization the government programs if they are going to attract students to scientific researches:

- educational and scientific centers, created on the basis of scientific organizations and institutes or on the base of its subdivisions;
- branch laboratories and institutes which execute the fundamentally oriented researches;
- centers of the collective usage scientific equipments.

As some researchers say (O. Belyaeva, O. Zagora, V. Chernoles, A. Shaydullina and other) organization of students' scientific researches and educational process are co-operating, collaboration of scientific organizations and educational establishments with the aim of increasing efficiency to carry out scientific and educational activity, highly skilled specialists' training, rational usage of financial, material and technical resources [4; 11].

The analysis of activity of higher educational establishments affirms that students' attraction to research work are realized slowly. Students' attraction to

scientific work are not developed well.

V. Shorin says that the action program, which foresees students' stage-by-stage attraction to science, must be built on simple forms of science and education integration [10, p. 4]. Students' research is one of the most powerful facilities, that are able to actualize forming of creative thought and intellectual culture in the process of university training.

To our opinion, the process of students attraction to science must assist upgrading of future specialists' preparation, activation of scientific activity, creation of research structures of new type, that are able to provide intercommunication of science and education.

In our work we examine the problem of combination two types of activity in the university, it is research and educational work. Such combination is a difficult system task, directed at organization and realization of educational process through research activity, ability to apply knowledge from different branches, when the educational process is based on realization of teachers', students' and graduate students' scientific researches. It requires forming the ability independently conduct a creative innovative researches, it assists students' desire development to express them at scientific work etc.

Innovative process means the system of education, open to modern scientific researches, which attracts students to participating in realization of fundamental researches and in development of the real projects in social, economic, cultural and educational spheres.

Thus, investigated modern universities' experience that attract students to active scientific researches, we set that research and innovative activity in some foreign universities are higher school's tasks of primary importance and also a necessary component of educational process. All scientific sources are the fundamental base for the formulated problem. We are planning to work out pedagogical technology of the effective students' attraction to scientific researches in the process of university training using the basis of the works analyzed.

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Волкова Н. П.

Залучення студентів до наукових досліджень як найважливіше завдання сучасного університету

У статті розглянуто основні напрями залучення студентів до наукових досліджень. Зазначено, що сучасні зарубіжні університети – значні освітньо-науково-виробничі комплекси, що об'єднують навчальні та дослідницькі інститути, коледжі, факультети, кафедри, проблемні лабораторії. Установлено, що науково-дослідна робота й інноваційна діяльність у них – пріоритетне завдання вищої школи, а також необхідний компонент освітнього процесу.

Розглянуто діяльність дослідницьких університетів у зарубіжних країнах. Виділено форми залучення студентів до науки. Розглянуто діяльність Європейського дослідницького простору. Наголошено на організації науково-дослідницької роботи, яка постає невід'ємною частиною освітнього процесу.

Ключові слова: професійна підготовка, наукове дослідження, університет, студентська наука.

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Привлечение студентов к научным исследованиям как важнейшая задача современного университета

В статье рассмотрены основные направления привлечения студентов к научным исследованиям. Отмечено, что современные зарубежные университеты – значительные образовательно-научно-производственные комплексы, которые объединяют учебные и исследовательские институты, колледжи, факультеты, кафедры, проблемные лаборатории. Установлено, что научно-исследовательская работа и инновационная деятельность в них – приоритетная задача высшей школы, а также необходимый компонент образовательного процесса. Выделены формы привлечения студентов к науке.

Рассмотрена деятельность Европейского исследовательского пространства. Отмечена организация научно-исследовательской работы, которая выступает неотъемлемой частью образовательного процесса.

Ключевые слова: профессиональная подготовка, научное исследование, университет, студенческая наука.

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