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**MODERN FORMS' MEANINGFUL CHARACTERISTICS
OF RESEARCH WORK FUTURE MASTERS
OF PEDAGOGICAL EDUCATION**

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Modern Forms' Meaningful Characteristics of Research Work Future Masters of Pedagogical Education

An article deals with substantiation and development of modern forms of a research work which is done by future masters of pedagogical education. The forms are masters' work organization inside research communities, familiarization them with participation in research life of university, collaboration in projects' development and implementation which can be proposed to educational institutions, organizations and establishments; participation in competitions to get grants and also in other incentive activities; organization and events' implementation connected with research contest such as conferences, seminars, exhibitions, round work tables, lectures, debates, intellectual games, meetings with famous scientists, research projects' presentations, competitions, contests; preparation and publication of masters' research works; master and researcher schools' participation; researches that implement within research and pedagogical practice.

Union masters to research activity within work inside research communities have been singled out. The main components of research portfolio have been presented; a fulfillment scheme of scientific research inside grant program has been offered; a mechanism of presentations' and perspectives' holding have been presented; fundamental directions of masters' activity within research and pedagogical practice that include elements of research work have been performed.

Key words: research work, future master, pedagogical education, professional training.

The quality of professional competence formation, in particular professional creativity, of prospective masters of pedagogical education depends on how this goal meets the organization of University research work (hereinafter – RW). Research training of undergraduate is aimed at the development of the methodology and methods of educational research, forming skills to plan and organize scientific research in the field of pedagogy, to draw up a

programme of experimental work, to implement it into pedagogical reality, to analyze and summarize teaching experience, revealing the regularities of the pedagogical process and defining the ways of its improvement [1, p. 135].

The analysis of modern scientific sources allowed us to highlight certain aspects of research problem: the essential characteristics of research work (O. Gluzman, O. Gnizdilova, G. Klovak, V. Kraevskiy, O. Mykytiuk, L. Sucshenko, Z. Sazonova, S. Sysoeva, V. Slastyonin, A. Khutorskiy and others); the use of forms and methods research work (N. Bazelyuk, N. Golovin, A. Nelepova, N. Uysimbaeva, I. Sencha, G. Sombamaniya, E. Spitsyn, S. Shcherbyna, etc.); research assessment (L. Burchak, P. Gorkunencko, O. Egorova, N. Knyazyan, E. Kulik, V. Kuleshova, I. Lutsenko, T. Myshkovska, I. Raevska, O. Rogozina, N. Falco, L. Sultanova and others).

The study of scientific literature allowed us to demonstrate the acute problem in the context of a new edition of the law of Ukraine “On higher education” [2] it is reasonable to improve the research forms of prospective masters of pedagogical education, contributing to the professional competence formation, in particular professional creativity, scientific and pedagogical thinking, which is characterized by the heuristic, creative approach to the study of pedagogical phenomena, the systematic organization of experienced research activities and foresight of the results.

In the framework of the research “Modernization of activity of higher educational institutions in the context of European integration” (state registration number 0103U004993) that runs at Luhansk Taras Shevchenko National University we conducted research on the elucidation of the impact of research on the quality of masters training. Therefore, the aim of the article is to give scientific credence of the development of modern forms of scientific-research work of prospective masters of pedagogical education.

The logic of the study is that the study and development of forms of research work of prospective masters of education begins with understanding its goals – implementation through research work the effective undergraduates training who have formed professional competence, in particular professional creativity, and are

competitive in domestic and global labor market. Taking into account the well-known approaches to research training (competence-based, personal-oriented, activity, polysubject), highlight and characterize substantially the forms of research work of prospective masters of pedagogical education.

Analyzing the first form of the research work – *organizing the work of undergraduates in research centers, encouraging them to participate in the academic life of the University*, we focus on that the scientific laboratories, centers, problem scientific groups and other scientific cells allow the undergraduates to participate in research projects which help them to acquire fundamental knowledge of scientific disciplines, to develop skills of research work, to form interest to the intellectual activity.

It should highlight areas in which undergraduates are engaged to work at research centers in a single complex theme: selection and analysis of scientific sources; research preparation; preparation of Master's thesis, and, of course, the organizing and running the experiment. In our opinion it should to attract undergraduates to work on projects of scientific centers at the initial stage – during the design requests. We are to highlight the stages of attracting undergraduates to research activities in part of the work in scientific centres: stage 1 – acquisition of theoretical knowledge and practical skills in methodology and research methods; stage 2 – execution of the experiment.

Teachers help undergraduates to acquire skills of research work to have the opportunity to apply theoretical knowledge in research and in practice. In addition, scientist as a Manager of education organizes the implementation of scientific research, coordinates activities of other teachers, graduate students, doctoral students, undergraduates and teachers of schools that can join the research center. In modern research centers the system of undergraduates' individual electronic portfolios have spread, it allows to present own scientific results. We have developed the main components of portfolio: the theme of research work, name of supervisor, prospect of the implementation of the Master's thesis, participation and achieving victory in competitions of scientific works, Olympiads, participation in scientific conferences,

publications (articles, theses), documents on objects of intellectual property law, participation in the development of research projects, in particular grants.

One more form of research work – *graduates participate in the development and implementation of projects that can be offered to educational institutions, organizations and institutions.*

One of the leading areas that can attract undergraduates to research is the implementation of the comprehensive Department themes, dissertation or contractual works aimed at the elaboration of actual problems of education and other sectors of the society' life.

For increasing the teachers and masters' interest to this kind of form we have developed mechanisms for the organization and conduct special events – presentations of scientific achievements and prospects. The representatives of institutions, organizations and businesses interested in University scientific-methodical development are necessarily to invite for resolving existing problems. The goal of the events is uniting together efforts of scientists of the University (lecturers, postgraduates and undergraduates) and school-teachers, preschool institutions for together research work, presentation to the masters of requests on scientific and methodological developments of education real problems in attracting young scientists to the election of self-direction research activities. Such action supports one of the main approaches to the organization of science in the University – the principle of relationship of science and practice, scientific studies and future professional activities of the students. The variety of existing scientific and methodological issues gives the opportunity to undergraduates to be realized in one of the directions of research activities depending on their interests and promotes the formation of creative personality.

To ensure the involvement of undergraduates in project formulation that can be offered to educational institutions, organizations and agencies we believe it is necessary to implement a number of measures. First, it should to establish the University Bank of interdisciplinary research problems. To do this, it's necessary to provide interdisciplinary topics into the substantive content of educational programs.

It is also important to expand the network of practice bases for undergraduates through the inclusion of the educational institutions that carry out experimental activities, research institutes, academic libraries and other research institutions. We deemed it expedient to create research teams of undergraduates to prepare and protect master thesis in the form of joint research projects aimed at solving the problems of education, other socio-economic problems.

Another form of research work – *participation of undergraduates in competition for grants and other incentive measures aimed at stimulating scientific research.*

The most important requirement of time – involvement of students to participate in competitions for grants. It is clear that the effectiveness of participation in such programs depends on the level of formation of research abilities, which according to “Pedagogical dictionary” [3] understand the individual characteristics of personality, which are the subjective conditions for the successful implementation of research activities. In addition to research abilities, research position is important, that is the significant personal basis, depending on which the individual actively responds to changes, what is happening in the world. Research position manifests itself and develops in the process of implementation of research activities.

Successful attraction of undergraduates to participate in grant programs depends first of all, on the correct formulation of research problems, interest in increases to the acquisition of new knowledge, research skills, etc. Before performing independent scientific work, the student is required to study methodological literature, which gives an opportunity to figure out the basic stages of scientific research. For better motivation for scientific work it is important that the magistrate independently chose a topic of research for submission for the grant program, and then clarify it with the teacher.

We propose the scheme to carry out scientific research for the grant program: 1) selection of a theme or the research issue, its formulation with different points of view; 2) clarification of the issue and programming the research; 3) a systematic accumulation of materials; 4) search for ideas, solutions, subject to analysis and

evaluation, selection the best; 5) preparation of request for participation in competition for grant programs; 6) summary of the research results; 7) theoretical analysis of the results of the study; 8) implementation of research results into practice; 9) evaluate the significance of survey results; 10) form literary the results of the study; 11) preparing reports, presentations, approbation of the research results.

For the formation of students' readiness to participate in grant contests, programs, we consider it expedient to update subjects of the individual scientific-research tasks of master's works, which correspond to areas of research activities of the departments. It is also important to involve students to perform practice-oriented research for the entire University training. Therefore, for attracting undergraduates to work on grant projects and programmes it is important to develop them in intercultural dialogue and the exchange of knowledge within the framework of international programmes ("Erasmus Mundus", "Horizon 2020", etc.), as well as to undertake measures on improvement of material and moral forms of stimulating research as a method of control that affects the success of the research project.

Another important form of research work – *organization and holding events of scientific competition (conferences, webinars, seminars, exhibitions, round tables, workshops, debates, intellectual games, meetings with famous scientists, presentations of research projects, Academic competitions)*.

Research should not be limited to impersonal relationships of scientific disciplines and research. It involves personal contacts of scholars, practitioners, holding of seminars and conferences, the availability of scientific information, discussion [4, p. 56]. Activities of a scientific competition include not only theoretical research reports and discussion of solutions of real-life problems. They contribute to the establishment of close links between UNIVERSITIES and schools, as well as help undergraduates to learn reducing theory to practice.

A characteristic feature of the scientific-practical conference is the complexity the organization, that participation to be useful and interesting for undergraduates and teachers. Therefore, the organization of conferences requires significant attention

and patience from the organizers and participants. It should to highlight the types of scientific papers that are discussed at scientific conferences:

- results of own researches, confirmed or not confirmed by practice;
- authoring and proposals of a hypothetical nature; the description and analysis of own practical experience;
- author's compilation of practical work in the organization.

Graduates participate in the activities of a scientific competition, which stimulate the creativity of prospective teachers and development of research work that is a training, aimed at mastering new skills in specially created conditions; cognition, which might the emergence of new knowledge and collective scientific communication. Important to this is the introduction within disciplines of new forms of organization of research activity (presentation at mini-conference; team research projects; preparation of scientific essays, analytical notes; talk together; competition essays; business, roleplay, etc) aimed at developing scientific and critical thinking).

Another form of research work of prospective masters of pedagogical education – *testing the results of scientific research through the preparation of scientific papers.*

To enhance scientific creativity of young scientists, their research it is organized the edition of the University collection of scientific papers “Scientific research of young researchers”.

At the beginning of each academic year at the University departments under the work of scientific groups, laboratories begin preparation of publications. Usually this work coincides with the thesis project. The most important condition we put forward to the preparation of scientific publications, is that articles must satisfy the requirements of Ministry of Education and Science of Ukraine. So we purposefully teach young researchers to identify a pedagogical problem, to correlate it with important scientific, practical task, to analyze the main research and publications in which the solution to this problem is initiated, indicate unresolved parts of the scientific problem. It’s important the goals, tasks of articles, opinions and prospects for further research in this direction to be determined.

The edition of the scientific collection is done by the leaders of scientific societies institutions (faculties) in different directions. To improve the quality of publications each article to be considered in the Department, where it is recommended to print. General editing of the collection is the Chairman of the scientific society faculty, Institute. Additionally, for undergraduates, winners contests and competitions provide opportunities for the publication in the collection of scientific works for free, which is an important incentive for attracting to scientific activity.

It is also important to conduct information sessions and seminars for the formation of skills of scientific metric databases. The leading idea of the practice is to focus on undergraduates the use of internal electronic information resources of the UNIVERSITY (e-catalogues, repositories, e-learning courses and the like) at writing qualification and research papers. It is important to inform young scholars to check master's research with the “Antiplagiat” system and its entry in the Bank master works. New forms are the involvement of undergraduates to participate in existing and new Wiki projects.

In the process of University studies we developed the innovative form of attracting undergraduates to research activities – *school of a student-researchers (SSR)*, which is a form of studying the theoretical foundations of the formulation, methodology, organization and execution of research, planning and the organization of a scientific experiment, scientific data processing in the framework of specialized courses included in the curriculum.

We have developed the content of the SSR, which contains various kinds of scientific research work:

- study of the theoretical foundations of the methodology and organization of implementation research, planning and organization of scientific experiment, processing of scientific data (“Problems of modern educational research”, “The logic of scientific research”, “Algorithm of research”, “Modern requirements relating to the preparation and execution of research”, “Ethics of scientific research”);

- perform tasks of research nature, which can be implemented in scientific-pedagogical practice (game-training “Challenge problem. The search for effective challenges and solutions”, “Working out the conceptual apparatus in the process of conducting scientific research”, “Methods of data collection in psycho-pedagogical studies (surveys, analysis, supervision, survey)”, moderated seminar “Responsibility and autonomy as the main qualities of the researcher”, polylogue “Pedagogical diagnostics”, seminar “Psychological features of creation of scientific texts”);
- organization of exhibitions of undergraduates’ scientific achievements, scientific conferences, Academic competitions and other events, research, etc (exposition of the literature “Help expert”).

The last form – *scientific researchers conducted in the process of scientific pedagogical and research practices.*

We have developed basic activities of undergraduates within the scientific and pedagogical practice that contains elements of scientific work:

- participation in consultations, colloquia;
- participation in the work of the chair meetings, in seminars and scientific-methodical conferences of the teachers;
- preparation of scientific-methodical and didactic materials for the Department;
- study psychological and pedagogical literature on the issues of educational process in higher education, the compilation of a bibliography on innovative pedagogical technologies in the organization of educational, research and social and humanitarian work;
- conducting experiment on the scientific and pedagogical research, analysis and generalization of empirical research materials; preparation of report on practice, in particular on the research work and etc.

Scientific research conducted by prospective masters of pedagogical education is aimed at mastering the discipline that is being studied, formation of skills of independent work, professional activity, abilities to learn responsibility, to find constructive solutions pedagogical problems. Teaching practice gives the opportunity

to feel the importance of pedagogical theory to professional activity, to test the level of own training, heighten the interest in scientific sources. Proper organization contributes to the formation of skills and abilities to notice and analyze the pedagogical phenomena and processes, to feel the full complexity and at the same time the attractiveness of the chosen profession.

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Райхман Є. І.

Змістовна характеристика сучасних форм науково-дослідної роботи майбутніх магістрів педагогічної освіти

Стаття присвячена обґрунтуванню та розробці сучасних форм науково-дослідної роботи майбутніх магістрів педагогічної освіти. На підставі загальновідомих підходів до організації дослідницького навчання (компетентнісний, особистісно зорієнтований, діяльнісний, полісуб’єктний) змістовно охарактеризовано форми науково-дослідної роботи магістрантів. Виділено етапи залучення магістрантів до науково-дослідної діяльності в межах роботи в наукових осередках, подано основні складові наукового портфолію, запропоновано схему здійснення наукового дослідження за грантовою програмою, представлено механізм проведення презентацій наукових досягнень і перспектив, розроблено основні напрями діяльності магістрантів у

межах науково-педагогічної практики, що містить елементи наукової роботи.

Ключові слова: науково-дослідна робота, майбутній магістр, педагогічна освіта, професійна підготовка.

Райхман Е. И.

Содержательная характеристика современных форм научно-исследовательской работы будущих магистров педагогического образования

Статья посвящена обоснованию и разработке современных форм научно-исследовательской работы будущих магистров педагогического образования. На основании общеизвестных подходов к организации исследовательского обучения (компетентностный, личностно ориентированный, деятельностный, полисубъектный) содержательно охарактеризованы формы научно-исследовательской работы магистрантов. Выделены этапы привлечения магистрантов к научно-исследовательской деятельности в рамках работы в научных сообществах, представлены основные компоненты научного портфолио, предложена схема реализации научного исследования по грантовой программе, представлен механизм проведения презентаций научных достижений и перспектив, разработаны основные направления деятельности магистрантов в рамках научно-педагогической практики, которая содержит элементы научной работы.

Ключевые слова: научно-исследовательская работа, будущий магистр, педагогическое образование, профессиональная подготовка.

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