

# Program and Methodological Support of the Educational Process in the Magistracy

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**Abstract:** *The article is devoted to the issues of program and methodological support of the educational process in the preparation of undergraduates. In accordance with the requirements of educational standards for magistracy, the author considers a competency-based approach to the educational process in a university. The effectiveness of the developed electronic-methodical complexes according to the programs of educational training of the magistracy is noted. The author also describes the developed electronic courses*

**Keywords:** *software and methodological support, magistracy, educational process, methodological support.*

## I. INTRODUCTION

Modern education is fully focused on the fundamental changes in the learning process in universities. Educational institutions are faced with the main task of creating real conditions for the implementation of the educational process (Aniskin, 2017). The graduate training system should have certain abilities to update the content in various areas of the educational process [1].

The preparation of a master's degree in a university consists in the awareness of theoretical knowledge gained in solving new non-standard problems, possessing the ability to solve problems with incomplete or limited information,

communicative and organizational and managerial skills, and being ready for a systematic independent increase in one's educational level [2].

For the successful preparation and implementation of the task in the training of highly qualified specialists, there is a need to improve the organization of the educational process. In this regard, a study was conducted on the use of program-methodological support of the educational process in a university through an electronic-methodical course [3].

## II. LITERATURE REVIEW

The preparation of undergraduates in higher educational institutions poses two main tasks for students:

- To master modern scientific knowledge and practical skills in the main educational program of the magistracy [4];
- be able to think creatively, solve complex scientific and industrial problems [5].

In the federal state educational standard of the third generation, the master's degree in preparation is 04.04.01 Pedagogical education, prepare for the following activities: research; design and economic; analytical; organizational and management. The field of professional activity and the sphere of professional activity in which graduates who have mastered the master's program can carry out professional activities: Education and Science (in the field of basic general, secondary general and additional education of children). The main tasks of professional activity in the preparation of undergraduates are:

- organization and implementation of educational activities of students in the design of the educational process;
- design and application in professional activities of pedagogical design of the educational process [6].

During the implementation of the program, the objects of the professional activity of the undergraduate are identified, they are educational programs, the educational process, the activities of subjects of education in the system of basic general, secondary general and additional education of children [7].

It is from the content of the program-methodological process that the quality and level of training of specialists will depend [8].

In the context of our study, it is worth bringing an interesting statement by O. I. Shushlyapin: "Since the student (master) does not receive ready-made knowledge in the form of ready-made answers from the teacher, he himself must offer his own versions of the deployment of specific situations, and in these cases the student develops independence, self-esteem and, most importantly, the ability to independently think, reason, analyze a certain dynamic process of the emergence, formation and development of a given situation using the method of "internal game" [9].

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## III. METHODOLOGY

In the course of the study, the authors analyzed the problem of the program-methodological support of the educational process in the magistracy [10].

The result of the implementation of the Federal educational standard requires providing the educational process with a new generation of software and methodological support, including electronic educational and methodological complexes [11]. Today, the problem of creating educational and methodological support for a new generation is becoming a state task, as evidenced, in particular, by raising the issue of creating an effective state-public system of examination and quality control of educational literature and organizing state support of educational book publishing in a report of the working group of the Presidium of the State Council of the Russian Federation on education reform [12].

In the course of the study, it was found that teaching authors of various disciplines to undergraduates in the field of preparation 04.04.01 Pedagogical education in the framework of classroom work to thoroughly study the theoretical material provided for by the work program is practically impossible. The curriculum provides for independent work, due to the main educational program of this area of training. In this regard, we can agree with V. I. Zagvyazinsky that it is the independent work of students that "forms the readiness for self-education, creates the basis for lifelong education" in the context of a rapid update of knowledge.

A good method of organizing independent work as an educational process is a software and methodological support and electronic methodological complexes for the disciplines of the educational program [13]. These materials are a structural teaching material that provides a complete didactic cycle of the learning process (Vaganova, 2018). Designed for mastering undergraduates of general cultural and professional competencies in accordance with the main educational program [14].

Thus, the author developed an electronic educational and methodological complex "Modern problems of science and education", the content of which includes software and methodological support for preparing for seminars, writing essays, essays, methodological material for practical work, etc [15].

In the study of the use of the electronic methodological complex as the software and methodological support of the educational process, it has shown itself as the effectiveness of the quality of training undergraduates in the subjects of the discipline. So, the analysis of the study showed that 67% of undergraduates independently studying the material on the proposed program-methodological materials in the electronic course shown in the final test knowledge for the assessment of "excellent", but 33% of graduate students who studied the material without using an electronic course with software and methodological support answered the final test for "good."

## IV. ANALYSIS AND DISCUSSION

Software and methodological support-complex, which includes: a set of didactic materials containing guidelines, recommendations, test materials, a task bank for independent work, electronic resources; a description of the methodology (guidelines) on the use of educational software or a training software package, and much more [16].

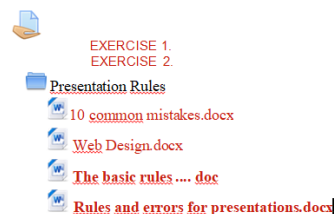
The electronic educational-methodical course developed by the author on the discipline of the master's program "Modern Problems of Science and Education" is an original development. Its purpose is to prepare undergraduates in the direction of 44.04.01 Pedagogical education. The main attention in this complex is paid to the independent work of undergraduates on given topics of the program. The content of independent work topics includes: preparation of scientific reports, writing essays and abstracts, preparation for practical work. Recommendations on independent work and a rating plan for the successful development of the discipline are painted.

The developed electronic-methodical complex consists of the following sections:

The work program of the discipline, which reveals the competency-based approach in accordance with the requirements of the educational standard, gives a description of competencies, as well as the results of education are presented in Figure 1.

### TASKS FOR STUDENTS

This section presents the tasks that are required to be completed during the first semester of the 2019-2020 academic year. of the year



The listed educational results are the basis for the formation of cultural and professional competencies.

In accordance with the Federal State Educational Standard of Higher Education in the field of training 44.04.01 Pedagogical education, the content and organization of the educational process during the implementation of the educational program of higher education is regulated by the curriculum for preparing a student taking into account his profile, work programs of disciplines (modules), materials that ensure the quality of training and education of students, training programs and production practices, a calendar training schedule, as well as teaching materials to ensure the implementation of relevant educational technologies.

The course contains a description of the educational technologies used by the author in the educational process, taking into account the specifics of studying the discipline: lectures, seminars, business games, creative tasks, etc.

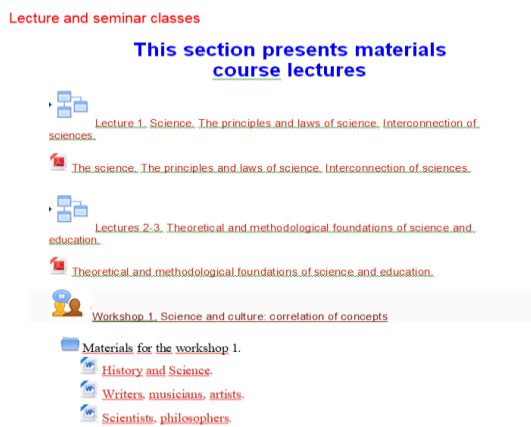
The content of the electronic educational methodical course also reflects the schedule of passing control tests and passing the work, containing points that a graduate student can get for the task [17].

We have developed and presented in the course guidelines for teachers on the organization and technology of training undergraduates [18]. There is a schedule for studying the discipline, containing the dates of the current control tests; teaching and control methods, links to task blocks for practical training; links to the corresponding blocks of the fund of assessment and diagnostic tools [19]. The latter include control questions, tests, tasks in all sections of the studied discipline [20].

In this section, the author describes in detail the features of the application of various educational technologies, taking into account the specifics of the educational process in the magistracy, provides methodological recommendations on the use of certain educational technologies [21]. For example, it is emphasized that “with the help of a problem lecture, the following main learning objectives are achieved:

- arouse interest in the topic;
- intensify the cognitive activity of students;
- to form a culture of thinking;
- to develop the productive thinking of students [22,27].

Figure 2



In addition to these sections, the electronic educational-methodical course also contains:

- guidelines for the implementation of practical work;
- guidelines for the implementation of the settlement and graphic work;
- guidelines for the implementation of term papers;
- fund assessment and diagnostic tools, providing systematic monitoring by the teacher of the effectiveness of the study of the discipline;
- Glossary (glossary of terms and definitions).

In the framework of extracurricular independent work, the participation of undergraduates in scientific research is extremely important. As noted, for example, by E. V. Zakharova: “Students' research work (NIRS) is an effective way and means of forming and developing students' motivation for creativity, responsibility and independence, as well as a way to fully realize an individual approach to teaching and education of students” [23,28].

The use of the electronic methodological course in the process of training specialists increases the efficiency of independent work of undergraduates, increases the quality of training and the formation of professional competencies.

As part of a study to improve efficiency, an experiment was conducted on students to study the discipline "Modern problems of science and education." The study involved undergraduates of two groups, studying in the field of training 44.04.01 Pedagogical education, but with a different training profile. One group studied the material of independent work of the discipline independently; the second group studied the material of independent work using software and methodological support in the electronic environment. The result of the study showed the following indications Diagram 1.

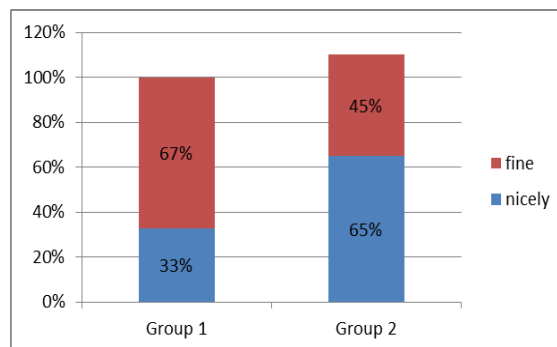


Chart 1 - Final Test Indicator

So, the analysis of the study showed that 67% of undergraduates, group 1 independently studying the material on the proposed program-methodological materials in the electronic course, showed knowledge in the final test of knowledge “excellent”, but the second group of undergraduates who studied the material without using an electronic course with software - methodological support answered the final test for “good” and amounted to 45% of the rating “excellent”.

Thus, it can be noted that the developed content for the study of material allocated to the independent work of the discipline affects the quality of training.

## V. CONCLUSION

Training of undergraduates in the direction of preparation 44.04.01 Pedagogical education largely depends on the program support of the educational process at the university. Graduates can successfully independently study the material of the disciplines of the educational program [24,26]. We have developed an electronic educational and methodical course, which includes software and methodological support that fully meets all the requirements of the educational standard. The graduate student is described of the content of the discipline with clear guidance on the performance of certain works performed in the process of studying.

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