

Methodological Aid to Form Readiness of Master's Studies Undergraduates for Research Activity

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Abstract: The article is devoted to actual problem of Master's studies - methodological support of training for research activity. The analysis of scientific literature enabled to find out efficient pedagogical conditions to provide readiness for research work. The research and pedagogical practice programs for more efficient training for research activity have been developed. The authors offer methodological recommendation on writing Master's thesis "Scientific - pedagogical aspects to plan Master's thesis".

Key words: Master • Methodological Aid • Readiness for Research Activity • Master's Professional Training

INTRODUCTION

Educational Master's programs are associated with strengthening of research work of Masters, developing ability for self-education and self-development, needs and skills of independent mastering knowledge while performing practical activity. All this demands such training aids which would encourage the learners for active thinking and practical activity in the process of studies.

John Bransford and Ann Brown identify the following stages in formation of research skills:

- *1st stage:* knowledge stage, actualization of available knowledge;
- *2nd stage:* learning with understanding-understanding the task, understanding of factual information and knowledge organized in the context of research problem;
- *3rd stage:* building of conceptual diagram of solution of this problem. Conceptual diagrams help learners to control their own studies [1-4].

Barbara J. Klopfenstein disclosures the particularities of individual-oriented research training. She believes that regardless of the age of the scientists the key moment is "need to know", this moment determines learner's

situation. The scientist emphasizes the following conditions of efficient research training: firstly, dialogue form of teaching; secondly, realization of reflexive approach. Development of research skills is impossible without activity of the learner himself, his analysis of his own experience and use of this experience as a supporting base [5].

Thus, analysis of scientific literature showed that efficient preparation for research activity is possible under the following conditions:

- Recognition that the learners themselves introduce valuable experience into training;
- Use of different evaluation methods and encouragement of self-assessment methods;
- Taking into account physical and social context of active training methods organization;
- Possibility to choose trajectories of training and activity of learners, responsibility for their own studies;
- Recognition of success and facilitation development of individual research skills [6].

Studying the problem selected by us in theory and practice of higher school we made conclusion that readiness for research activity is not inculcated on its own and demands special means for its formation.

Main Part: Readiness for research activity is personally developed ability formed in the process of activity of research character [7].

The *means (aids)* for formation of such readiness are understood by us as tools of teacher's and students' activity, material and ideal objects, involved into educational process as bearers of information and tools of activity [8]. All used by us means were divided into 3 groups: informative (information resources, of global and local networks, computer databases and encyclopedias, special literature, libraries etc.); methodological means- program of research and pedagogical practices, methodological aid for preparation and defense of Master's thesis; learning (research knowledge, research tasks, special course "Theoretic and methodological foundations of research activity", self-education programs, programs of psychological trainings).

One of the key methodological means to form readiness of Master's studies undergraduates for research activity formulated in our study is pedagogical and research practices and independent research work of the Master's studies undergraduates.

During research practice Master's studies undergraduate is improving his skills in realization of research programs: he learns to select and reason the topic of his research work, work with bibliography, to define object, subject, aim and tasks of study, methodology and methods of study, analyze scientific concepts, process materials of study and summarize the results and present them in the form of reports, library-research papers, articles, presentations at meetings etc. [9].

Research practice include the following research tasks:

- Formulate the problem and the topic of your study choosing among up-to-date problems of pedagogical science.
- Formulate scientific tools on your topic: the aim, object, subject, hypothesis, tasks of study.
- Prepare bibliography of works on your problem of study (not less than 20 sources). Give grounds to up-to-datedness of your topic. Find out key contradictions and formulate the problem.
- Write down basic and peripheral notions (terms) on your topic. Build up the matrix and perform the following operation over your notions: provide definition, its links with above, below positioned notions; define its structure, its attributes.

- Using pedagogical vocabularies, you should identify 5-6 old notions which have long period of development and 3-4 notions which are relatively new in pedagogical science. Try to explain their appearance in the language of pedagogical science.
- Make a program on the topic of your study.
- Prepare presentation of the prospect of Master's thesis.

After finishing of research practice Master's studies undergraduate must submit a report to his scientific director.

Observations, analysis of the reports of Master's studies undergraduates on research practice demonstrate that this practice facilitates formation of research skills, allows the Master's studies undergraduate to feel himself as a researcher, forms ability for research activity.

The aim of pedagogical practice is mastering by Master's studies undergraduates of scientific-methodological contents of teaching activity, methods of scientific cognition of pedagogical process, formation of professional pedagogical concept in interaction with students as partners in pedagogical communication.

Developed by us program of pedagogical practice consists of 3 stages: preparatory, forming and resulting.

Preparatory stage is provided for initial conference where the students get acquainted with the program of practice: aims and tasks of practice, contents of knowledge, requirement to the practice, forms of reports.

Forming (main) stage is characterized by development of strategies by Master's studies undergraduates which must refer to their own scientific activity, they work with learning programs, get to know the principles of thematic planning on the base of State standard and working training programs, develop and perform lectures, seminar and laboratory studies independently (on their own). Obligatory requirements are as follows: performing classes with the use of information technologies, development of didactical materials: multimedia presentations, testing programs, learning programs etc.

In the process of pedagogical practice Master's studies undergraduates attend laboratories of the chair on scientific disciplines and the classes of other Master's studies undergraduates. In the course of the practice Master's studies undergraduate performs individual consultancies with the practice director, makes notes in pedagogical practice diary, makes up questionnaires, creative products.

Resulting stage is devoted to final conference where the summary of obtained results is given. The results of pedagogical practice of a Master's studies undergraduates are shown in reporting documents. These documents are: pedagogical practice diary, methodological materials (results of micro-research works), plans and notes of lectures, seminars and laboratory studies, scenarios and reports on the project etc.), diagnostic materials on self-assessment in conditions of pedagogical activity (lecture attendance analysis).

Our study emphasized important role of independent research work on writing Master's thesis because independent writing of research paper by Master's studies undergraduate allows to rely on his own professional and creative experience obtained in the process of Bachelor's training and on auditorium classes devoted to mastering of education program of Master's training. That is why the task of teachers of Master's studies course is to help Master's studies undergraduates to organize their research activity in most efficient way. However the practice testifies that most part of Master's studies undergraduates commencing their work on Master's thesis suffer difficulties related to methodology of writing Master's thesis, the use of scientific cognition methods and use of logical laws and rules [10]. In order to help in realization of these tasks we developed methodological aid for writing Master's thesis "Scientific-pedagogical aspects to plan Master's thesis". This aid covers all steps in preparation of Master's thesis on pedagogical specialities, general methodology of scientific creative work, general structure and contents of every stage of work on paper.

CONCLUSION

The process of formation of readiness of Master's studies undergraduates for research activity must provide single space of efficient interaction of all subjects of educational process.

Use of methodological aids in training Master's studies undergraduates for research activity allows to solve the following tasks:

- Achievement by Master's studies undergraduates of such education level which provides basis for formation of self-developing personality, able to solve the problem in different spheres of life activity independently;
- Master's studies undergraduates' self-realization in individually oriented learning activity of research character;

- Mastering of research activity knowledge, basic intellectual and practical skills, development of the Master's studies undergraduates' skills for creative solution of given tasks of learning character.

Inference: Thus, methodological support of formation of readiness of Master's studies undergraduates for research activity facilitates improvement of professional training of Master Degree graduates, inculcation of professionally significant abilities of teaching researcher, formation of research skills and abilities.

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