Forms of Pedagogical Preparation of Higher School Teachers within Master’s Degree Studies

Formy przygotowania pedagogicznego nauczycieli szkół wyższych na studiach magisterskich

STRESZCZENIE

Problem poprawy form przygotowania przyszłych licealistów w warunkach magisterium w kontekście zasad Deklaracji Bolońskiej jest w artykule analizowany przez pryzmat modularnego i samoorganizującego się podejścia. Uwzględniono warunki projektowania współczesnych rodzajów wykładów (wykład z planowanymi błędami, wykład-spór, wykład problemowy), zajęć praktycznych, pracy niezależnej, konferencji, gier biznesowych.

Słowa kluczowe: stopień magistra; forma studiów; wykład; lekcja praktyczna; praca samodzielna; konferencja; gra biznesowa

SUMMARY

The problem of improving the form of future teachers’ preparation of higher education within master’s degree studies in the context of principles of Bologna Convention is analyzed through the prism of the modular and self-organizational approach. Conditions for the design of modern kinds of lectures (lecture with planned mistakes, lecture-dispute, and problem lecture), practical classes, independent study, conferences, and business games are considered.

Keywords: master’s degree; form of studies; lecture; practical lesson; independent study; conference; business game
INTRODUCTION

The task of modernizing professional training is most often solved by the higher school of Ukraine through the creation and introduction of innovative teaching methods in the educational process. In particular, the main ideas, formulated by the documents of the Bologna Process, the credit-module system of the organization of the educational process, elements of the European credit transfer system, etc., are implemented. Pedagogical preparation in the structure of general professional training of the applicant of the master’s degree is rather important, as now Article 55, Clause 9 of the Law of Ukraine on Higher Education (Pro vyshchu... 2014, p. 15) provides a real opportunity for practical work not only in terms of the received, manager or scientist, but also the teacher of a higher educational establishment.

The preparation of masters in higher educational establishments of Ukraine for teaching activities determines a number of relevant pedagogical tasks that require scientific substantiation. The research problem stems from the contradictions between the existing need of universities as regards highly skilled teaching staff and the lack of attention to their preparation both in practice and in the theory of teaching in higher education institutions.

There is a lack of educational disciplines for full-time pedagogical training of masters in higher educational institutions – “Fundamentals of psychology and pedagogy” at the first educational level (Bachelor) and “Teaching method in a high school and pedagogical practice” at the second educational level (Master). Unfortunately, the programs of these disciplines cover only a few aspects of pedagogical training, therefore, in our opinion, there should be implemented the training of teachers at pedagogical universities and teachers in classical universities.

In today’s context, the importance of improving the quality of teacher training for future teachers of higher education within master’s degree studies requires the maximum use of available reserves, in particular, the modernization of existing forms of such training in higher education.

The analysis of recent researches and publications has shown that the study of the teacher training of future high school lecturers within master’s degree studies can be based on theoretical and methodological works by Y. Babansky, I. Bekh, B. Gershunsky, S. Goncharenko, V. Zagvyazinsky, I. Zyazyun, V. Kremen, I. Lerner, etc.; works on the didactics of professional education by A. Aleksyuk, R. Gurevich, O. Dubaseniuk, N. Nichkalo, V. Strelnikov, L. Khomich, P. Yutsaviciene and others.

Other scholars studied the issues of psychological and pedagogical training of specialists in non-pedagogical universities – N. Butenko, L. Grushchenko, D. Dvinnchuk, W. Francuz (1995, p. 31), O. Kapitanets, V. Kozakov, T. Poyasok (2004), etc.; and the issues of methods of teaching and research in higher

An analysis of the scientific works of domestic authors showed that the studies remained outside the attention of the researchers on the theoretical and methodological principles of designing the forms for preparation of future high school teachers in a master’s degree in the context of the principles of the Bologna Declaration.

When starting an outline of the essence and results of our theoretical study, we note that the use of modular training also included designing appropriate forms of organization of training, relevant to the educational goal.

**METHODOLOGY**

Among the training forms, as constructions of the segments of the learning process, which are characterized by special methods of management, organization and cooperation of students in educational activities, there were used the following: frontal group (organization of educational activities in relatively permanent groups); brigade (organization of educational activities in specially created temporary groups for the fulfillment of certain tasks); cooperative group (each contact group performed part of the joint task); differentiated-group (organization of work of groups of students with equal educational opportunities); paired (working in pairs of permanent and variable composition); individual, which provided for an individualized and individualized-group learning form (Lebedyk 2008, p. 334).

When teaching the discipline “Methodology of teaching in high school” students had to implement individual knowledge and a joint search for answers to questions, promote the assimilation of content in the design of their own teaching system and the forms of learning in particular. We consider it expedient to use the optimal combination of individual (each student performs a joint task independently), individualized (the student carries out a separate task), group (in various variants), frontal forms of problem learning (Lebedyk 2008, p. 335).

The study course “Methodology of teaching in high school” began with the module “European Educational Integration”, which has a methodological value for the mastering of the entire training course and other disciplines of the psychological and pedagogical cycle of pedagogical preparation of the Masters, because without general knowledge it is difficult to understand the concrete one.

At the lecture, students got acquainted with the purpose and plan of the entire training block, passed the test control of knowledge in the block “entrance” and selected an individual trajectory of training. An important element of the introductory lecture was the use of a professionally-oriented episode, which created an emotional attitude to perceive the course (epigraph, picture, excerpt...
from a book, etc.). The instructor informed students about the role of education in the development of Ukraine’s partnership with other states, the possibility of Ukraine’s education and science entering the European information and education field, which is a significant factor in economic, social, intellectual, innovative, technological and cultural development. It was important to bring to the student consciousness the importance of understanding the essence of the Bologna Process as a means of integration and democratization of higher education in Europe for the future master’s work. For a detailed study of the problem, reference books and other documents may be recommended to students (Lebedyk 2015, p. 74).

The modular approach made it possible to change the system of lecture classes: to consider the content of the subject, not only an overview, but also to take into account the previously developed modular program, which was studied by the method of “deepening into an object”. This provided for a kind of preparation of students for lectures: they studied the scheme of the theoretical block of the training module with the questions and problem tasks of the lecture in advance, and then at the lecture sessions on this topic they analyzed them and discussed with the teacher.

During the “Methodology of teaching in high school” lecture, it was mandatory to create problem situations – such a mental state of contradiction, inconsistency in the student’s minds, which caused a sense of surprise, misunderstanding, the desire to solve the problem. Problematic situations generated and strengthened cognitive motivation of students (Lebedyk 2016, p. 76).

So, at the beginning of the study of the topic “Adaptation of higher education in Ukraine to the requirements of the Bologna Process”, the following question was formulated: What kind of changes in quality will appear in higher education in Ukraine in connection with the Bologna Process?” Students found that these changes could be defined by such terms as “modernization”, “reform” or “revolution” (Strelnikov 2006, pp. 96–97). The answer of the former Minister of Education and Science of Ukraine to the question (What changes are already taking place in high school?) – “development” – was rejected by the students, assessing it as an attempt to avoid the answer (development may have different directions – from progress to regress, not to mention the lack of information about the strength and intensity of these changes). Future masters clearly pointed out the difference in the meaning of these concepts: modernization – the improvement of individual elements of the system; reform is a significant improvement of the system in order to preserve the previous qualitative basis; revolution – acceleration of pace (as opposed to evolution), an objective need for the transition of society or its subsystem (education) to a new, qualitatively higher degree of development.

A problematic situation was created, which sometimes led to the collision of different points of view. The teacher focused students’ attention on the logic of analyzing the essence of the Bologna Process, which was the basis of the
opposite conclusions. Exit from the problematic situation could be of two types – the teacher, showing the reasons for the contradictions, summed students to the final conclusions or attracted students to personal involvement in solving problematic issues.

Since the scheme of the theoretical block of the topic usually served as a guiding function, students were also tasked with compiling the abstracts or summarizing the teaching material proposed by the teacher. At the lecture, the teacher implemented, mainly, the frontal form of training, including, where possible, the group (tasks were given to students in advance, the results necessarily discussed at the lecture) and individualized (self-preparation of tasks for a single student for a monologue presentation on the lecture) forms of training (Lebedyk 2016, p. 77).

For example, during the study of the theoretical and methodological foundations of the study “European Credit Transfer and Accumulation System (ECTS)”, one can implement a group form of education and conduct a lecture session with the elements of the dispute, in advance distributing the questions to several groups: the first group: “Characteristic features of ECTS: determining the student’s academic load”; second group: “Essential documents of ECTS: information package, training contract, list of assessments of disciplines”; third group: “Types of credit system models”. For all groups: What opportunities do students and teachers provide to the system of accumulation and crediting? What are the opportunities for the development of educational components to be left to the countries by the Bologna Declaration? (Strelnikov 2006, pp. 188–189).

When studying the issue of “Credit as the basis for designing educational programs”, considering the relevant examples, one can conduct a lecture with planned mistakes. In the process of giving a lecture, the teacher caused students confusion, knowingly allowing mistakes. Based on the scheme of the theoretical block of the training module, the students found errors and tested them in conjunction with the teacher at the end of the lecture (Lebedyk 2016, p. 77).

The work of students in groups was that for small groups (for 2–5 people) certain questions were offered (educational problems), which were the components of the leading professionally-oriented problem, which was considered at the lesson. The search for answers to the questions (educational problems) was carried out in small groups, because of their chopping into smaller problems and issues of different levels of complexity, which were distributed among the participants of small groups for individual performance or in pairs (the level of difficulty for the purpose of motivation was chosen by the students themselves). Individually or in pairs, the solution to individual problems was then discussed in small groups and the collective decision, firstly, was evaluated for the task, and, secondly, the answer to the general question of the small group was substantiated
to further discuss it with a leading professionally-oriented problem in the entire training group (Strelnikov, Britschenko 2013, pp. 155–188).

Practical classes were held on: “Formation of the ECTS Information Package”; “Drawing up of structural-logical schemes, curriculum of specialties and individual curriculum of the student on the requirements of the credit-module system of organization of the educational process”; “Method of forming the content module of discipline and credit”; “Development of assessment scales of student’s educational activities and models for monitoring the quality of education under the conditions of the credit-module system of educational process organization” (Lebedyk 2016, pp. 77–78). It is important, that according to the modular program, it is necessary to allocate time for independent work of students. In the context of the proposed modular and self-organizing approaches, the main types of independent work were the preparation of a project for teaching discipline in a modular system or the preparation and conduct of a separate training session.

Thus, performing independent work on the course “Methodology of teaching in high school” on the topic “Preparation and conducting of the training session” was carried out under the following indicative plan: 1) the title of the topic; 2) the purpose of the work (educational, educational, developing); 3) duration of employment; the contingent of listeners; 4) the content of the training material; 5) used methods and means of training; forms of training organization; 6) the final stage of the class (methods of control and evaluation of knowledge, homework).

Control by means of a computer program in the form of multilevel test tasks was supplemented by terminological and semantic dictations on a topic, each version of which was checked by other students. At the same time, the one who tested could use the material of lectures, textbooks, which greatly deepened or corrected their knowledge. Such tasks were given to low-level and not to very “strong” students, which contributed to their “pull-up” during the verification of work, provided the objectivity of the evaluation. Conducting a classroom lesson by compiling a thematic professionally-oriented crossword puzzle with appropriate design especially motivated students. Tasks were carried out both individually and in pairs, at the end of the classroom presentations were showed with the aim of discussing and identifying the best of them.

At the end of each module relating to the course “Methodology of teaching in high school” there was a summary of the work and orientation of students in the contents of the next module. This module structure was clear and consistent.

After the definition of the topic, the purpose of studying the material, the “input” test control knowledge was actualized, which was to repeat a certain amount of data known to students, necessary for further deepening and generalizing their knowledge about these issues.

Lecture for the educational level “master” was usually problematic, because it had to realize the goal: to teach students to think in pedagogical categories, ana-
lyzing the scientific and practical problems of the introduction of a credit-module system of organization of educational process in the high school of Ukraine. This goal was achieved by the teacher through the formulation of problem questions and tasks that were used at the lecture (for problematic presentation) and professionally-oriented tasks for the next independent work and practical classes. These tasks were to orient students towards reflection on the main problems: the tendencies of the development of higher education in Ukraine at the present stage; distinction and similarity between higher education systems of Ukraine and European states; prerequisites for the entry of higher education in Ukraine into the Bologna Process: adaptation of legislation, structural changes in education, introduction of the European Credit Transfer System (ECTS) into higher education system, conducting pedagogical experiment on introduction of credit-module system of organization of educational process in higher educational institutions of III–IV levels accreditation, etc.

Students had to master the theoretical material to find answers to their questions. To this end, the teacher explained to the students the material of the topic, oriented them to the content schemes of the theoretical block of the training module (primary and secondary explanation of the theoretical material in the full and abbreviated scheme of the indicative basis of action, respectively) (Strelnikov 2016, pp. 12–13).

When performing group activities, the goal was to create favorable conditions for the cooperation of students, which contributed to more efficient spontaneous memorization of educational material. The teacher at this time served as a consultant. At the end of the independent work, through the programmed control or in the game form, the results, as well as the elements of the educational material that caused difficulties for students, were revealed.

In the lessons of organization of independent work, in addition to performing the main work – the gradual study of educational material, the teacher took time to discover historical data (the chronology of the events of the Bologna process), the main documents of the Bologna Process, and the “strong” students were offered to work with the “deepening” block which was based on a set of educational and methodological tools, to perform “problem” tasks for further discussion during practical lessons (“problem” block of the training module).

The main types of non-auditing independent work of masters were preparation for a block of training sessions, practical tasks (tests, tasks, preparation for trainings, role games, independent work). The corresponding design and discussion at the final module classes was practiced.

During a practical lesson, the teacher highlighted the time to discuss “problem” questions, prepared by “active” students. The analysis of responses was carried out in the whole study group, students could be guided by a set of educational and methodological tools, additional literature was recommended in the

In the classroom, to test the level of acquired knowledge and skills, students were invited to perform test tasks of various levels of complexity. In addition to assessing the students’ knowledge, their ability to analyze and self-analysis of activity and its results was formed, therefore, mutual control and self-control were used. An analysis of the students’ work in the classroom was conducted. In this case, the teacher took into account the content and character of the future professional activities of masters.

During the study of the survey themes, conferences were organized, for example, “Systems of Higher Education in the Countries of Europe and America”. The conference was opened by the teacher’s speech, which characterized the modern era, the role and place of education in it, the modern principles of the construction and task of higher education in developed countries. Subsequently, issues were articulated that should be highlighted at the conference. The main part of the lesson were speeches delivered by lecturers on materials of abstracts, performed individually or in groups (at the request of students), and the discussion. At the end of the conference, with the help of a teacher, conclusions were drawn about important achievements of the conference participants, and their work was evaluated. The conference could take three lessons of the module “European Educational Integration”. During the fourth, the final control was organized using the mutual control: the speakers at the conference, who independently studied the topic and received an assessment of their work, questioned those who did not participate in it. The final score was presented by the teacher on the basis of descriptive assessments given by the student controllers (Lebedyk 2016, p. 78).

Classes were held in the form of a business game. Business game refers to simulation games (imitation, image, reflection), it refers to making managerial decisions in different situations by playing according to the rules developed by the game participants (Strelnikov 2004, pp. 168–176). As regards this issue, the following situations were presented: conducting a seminar (conference, round table, consultations, etc.) or creating an individual student’s curriculum. In this case, students alternately performed roles of teacher, dean, curator, methodologist, inspector, student. This activity required a great deal of preparatory work and was planned in advance: a scenario was formed, roles were distributed, situations were chosen. The final stage of the lesson is the traditional summing up, providing the definition of the best, marking, preparation for the next lesson. Business game, putting the student in a situation of real action in the role of a particular active person, forced him to think concretely and substantively, with a clear aim to achieve a real result, which contributed to better assimilation. The overall project included the counseling of students who performed individual tasks that differed from other types of activity of teachers and students.
RESULTS

Experimental research has shown that the following kinds of lectures are most active in submitting the teaching material: a lecture with planned mistakes, a lecture by two, a lecture-debate, a problem lecture, etc. At such lectures the active assimilation of the content of learning took place, the role of dialogue, interaction and communication increased.

Students noted the expediency of such work, since during the lecture, they were more engaged not in mechanical note-taking, but in constant tension of thought; they focused on logical linking the studied material to the new one. Moreover, the process of studying the modules of professionally-oriented discipline “Teaching method in high school” had its own peculiarities, which were determined. They were, among others, the specifics of the purpose of teachers’ pedagogical preparation or self-organizing approaches to class scheduling and its content.

CONCLUSIONS

The search for effective forms of pedagogical training for future teachers of higher education within master’s degree studies is a rather interesting phenomenon, understanding of which is impossible without resorting to the achievements of higher school didactics, modern requirements of the Bologna Process. Clarifying that the most effective of them are interactive forms of training and practical training for the activities of the master as a teacher, in turn, determines the prospects for further research. Among them it is necessary to clarify the essence of forms of modular, informative and intensive pedagogical training of future teachers of higher education within master’s degree studies. It also affects the design of the content (including the didactic materials), methods, technologies of such preparation, the solution of which will allow to streamline the terminology, to consider the components of teacher training of high school teachers in the master’s degree studies, to identify the patterns and mechanisms of the study process.

REFERENCES

tive technologies in the professional training of the teacher of labor education: the problem of theory and practice]. Poltava: Vydavnytstvo «ASMI».


Poyasok, T. (2004). *Psykholoho-pedahohichna pidhotovka maibutnikh fakhivtsiv finansovo-eko-
nomichnoho profiliu u vyshchkh navchalnykh zakladakh [Psychosocial and Pedagogical Training of Future Specialists of Financial and Economic Profile in Higher Educational Institutions], Kyiv: In-t pedahohiky i psykholohii prof. osvity APN Ukrainy.


Strelnikov, V. (2004). *Sotsialno-psykholohichnyi treninh u formi dilovoi hry – efektyvna tekhnolo-
hia navchannia u vyshchii shkoli [Socio-psychological training in the form of a business game – an effective technology of teaching in high school]. *Novi tehnolohii navchannia [New Le-
arning Technologies], 38.

