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## **PLANNING TECHNOLOGIES FOR THE PREPARATION OF HIGH SCHOOL TEACHERS BASED IN THE EXPERIENCE OF EUROPEAN COUNTRIES**

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### **Annotation**

The article examines the European experience of multi-level professional pedagogical training of teachers for secondary and higher educational institutions; analyzes state educational standards in Germany, France, the UK governing the preparation specified; distinguishes varieties of models of pedagogical specialists' training in Europe: consecutive, simultaneous and integrative; we study the problem of content and structuring of curricula for the training of teachers in European countries.

The author offers the technology of teacher training, which is six successive stages of the educational process, and its pedagogical tools. This technology is considered as a system of scientifically based operations, technical acts and the teacher's functions, which guarantee the achievement of the objectives of the teacher training.

Due to the relevance of searching the optimal system of teacher training in Ukraine is important, in our view, is the analysis of systems of such training in the advanced countries of Europe, because the European experience of multi-level professional pedagogical training is quite significant.

Therefore, the purpose of this article is a theoretical development of the technology of preparation of high school teachers. The analysis of foreign experience of pedagogical training of future teachers in higher education and designing technology this training that provides the necessary commitment to their future teaching.

The most important for Ukrainian universities is the experience of pedagogical training of teachers in Germany, because there is embodied most acceptable today concept of such training, it is the concept of multivalence [5; 8]. Structure, taken as its basis, gives the ability to use research and subject training,

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received a bachelor's degree, and as a foundation for further study in order to obtain master teacher training for the purpose of obtaining qualification of the teacher, and to start professional activity, for example, in the field of economics or management. In fact, the system of training of teachers on the basis of a consistent model means that the bachelor has no right to teach. But in the content of the curricula of the bachelor's degree remains the principle of studying the academic and psychological and pedagogical disciplines. Basic plan for education was developed and approved in 2004 and is an integral part of training of bachelors of pedagogy.

In the European document notes that the introduction of the two-level model of teacher training and teachers is impossible without working closely with employers who will provide employment of bachelors and masters [5]. In Germany these are federal lands. The regional education department takes a cautious approach to the introduction of two-tier system of pedagogical training of specialists, because the reconstruction of this sector has certain risks: reduction of the practice-oriented component of training programs for teachers at the University; revision of education content; the revision of procedures of monitoring and evaluation; the complexity of regulation by governments the number of training places in universities; bachelors employment outside the education sector.

Note that in teacher training in Germany takes into account the complex competences necessary for a teacher to successfully perform all functions of professional activity: in-depth knowledge of the subject, which can be purchased at the University stage of education in the process of study of disciplines of specialization (Fachstudium); appropriate knowledge and competence in the field of didactics of subjects of specialization, theoretical aspects of which are included in University course (fachdidaktisches Studium), and practical – the program of the second phase of training; basic knowledge and competence in theoretical and practical pedagogy, the study of which is included in both phases of training (grundwissenschaftliches Studium – allgemeines universities and Seminar – in process referendariat); socialization within the teaching profession, which is carried out during practical activities during a two-year teaching

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practice (Lerner im Beruf); the formation of responsible social and professional positions, as well as the development of organizational capabilities [8, 10].

Noting the advantages of the system of pedagogical training of specialists in Germany who are at a high level of scientific and subject-specific teacher training and professional orientation of education at the second educational level "master", many researchers see the weakness of this system in the gap between these two levels of training. This situation is largely due to the ongoing since the end of 90-ies of XX century, the integration of teacher training institutes in the structure of universities. The merger occurred by absorption of University faculties and departments close in profile departments of pedagogical institutions, including departments of didactics and methods of teaching. Of course, this process contributed to increasing the academic level of teaching of disciplines of specialization, and is celebrated as the advantage of the system of teachers training in Germany. But under the auspices of the pedagogical departments of the universities were merged in the Department, combining only the basic directions of education (anthropology, sociology of education, history of pedagogy, comparative pedagogy, theory and philosophy of education). However, the prestige of these units of the University has always been relatively low. In addition, the reputation of the University never contacted the quality of teacher training programmes, which in certain circumstances is still regarded as a "foreign body" in the University discourse [8, 10].

Thus, during the process of analysis of the sources determined that Ukraine can borrow from the experience of teachers training in Germany, which, though it is at the stage of large-scale reforms, however, finds not only a national specific pedagogical training, but also the General European trend. For the system of teacher training in France is characterized by the introduction in 1990, University institutes of teacher training (Instituts Universitaire de Formation des Maitres – IUFM), when teacher training moved into the University sector. In each school district opened IUFM, the purpose of which is the formation of the overall structure of education programmes for all teachers, regardless of their specialization. For training in IUFM accepted applicants who have a University degree (Bac+3 Licence and diploma). Pedagogical training in IUFM is for two years with the qualification and status of civil servant. The total duration of

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programme of teacher education in France is 5 years, and its structure formally corresponds to the Anglo-Saxon model of higher education (3+2). Program of teacher training in IUFM contain three sections: subject preparation; psychological and pedagogical cycle, including methodology and didactics; teaching practice [6].

The General scheme of a two-year training in IUFM is as follows. The first year devoted to the fundamental theoretical training in their chosen specialty (e.g., Economics) to pass a competitive examination (Concour). Candidates who have not attended in the first year, but put them about 80% of those who studied at the IUFM, and 20% of available candidates are allowed to it[6]. Students who enrolled for the second course, given the status of trainee minimum for this category of workers wages. Under the status of trainees assume certain responsibilities: you must attend lectures at the IUFM and practical classes at school; not to carry out any additional earnings; to be employed in the Department who were paid wages during the second year of study [6].

The state education authorities, as well as the academic community of France to modernize basic teacher training system considering creating a professional corps of teachers. IUFM role in this process is to develop and implement authentic educational programs, which are based on the principle of forming a complex professional competencies [1, 114].

So, in the system of teacher training in the French national context determines the transformation of the concept of professionalization in the unique fusion of tradition and innovation that preserves the characteristic of the French idea of a mission teacher determines the further development of the system in line with general European trends.

Teacher training in the UK is carried out by universities and similar educational institutions, and partly by the schools in cooperation with universities. All educational institutions providing teacher training, are required to undergo accreditation Agency for teacher education – Teacher Training Agency (TTA) the results of inspections of authorized organizations (for example, in England – Office for Standards in Education, OfSTED). In the UK is dominated by Anglo-Saxon two-stage model of teacher training, which are characterised by the distribution of educational programs on dostoinii and

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plastelinebis level. The first provides a focused and comprehensive training, the second is professional.

State educational standards in all these countries (Germany, France, UK) is the main document regulating pedagogical training. The most stringent requirements for the educational process observe in Germany. The feature of the latest generation of standards (2002) in the UK is their focus on the end result of Universities (competence of graduates), but establish clear procedures for mandatory passing inspection.

Regarding the educational model of training in select European countries, besides the already mentioned sequential, simultaneous and integrative varieties.

The synchronous model provides that to the pedagogical training of specialists attached long-term teaching practice in the school. In Germany (it is called Referendariat or Vorbereitungsdienst) and Austria (Unterrichtspraktikum) after passing the first state examination students for two years (in Austria – one) attend training workshops to train teachers and conduct classes in assigned to these seminars schools. This phase of training ends with the second state examination, after which graduates receive the qualification of a teacher (teachers).

Integrative model of teacher training, according to data Thematic network of teacher training in Europe (Thematic Network on Teacher Education in Europe – TNTEE) [7], is at the stage of formation. In this model the individual components of the curriculum that are substantive and pedagogical areas, are combined in the integrative courses. The accent is on relevant from the point of view of professional competence of the topic and on the connection between theoretical and practical aspects of academic disciplines. The trend towards structuring curricula of teacher training based on the integrative model typical for the Scandinavian countries and Spain. Despite the structural variability of European systems of pedagogical training of specialists, can acknowledge that there are certain General trends that characterized the development of Europe at the stage of formation of uniform educational space.

The leading trend in recent decades was moving teacher training in the university sector. Most programs are consistent and synchronous patterns leading to a qualification, which corresponds to the degree 5A International Standard

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Classification of Education (ISCED) by UNESCO. The content of teacher training is one of the most important elements of upgrading teacher training in Europe, the Concept "Education and Training 2010" [4]. Providnoyu recent decades was moving teacher training in the university sector. Most programs are consistent and synchronous patterns leading to a qualification, which corresponds to the degree 5A International Standard Classification of Education (ISCED) by UNESCO. The content of teacher training is one of the most important elements of upgrading teacher training in Europe, the Concept "Education and Training 2010" [4].

In the European systems of teacher training curricula are based on the identical structural matrix and contains four basic components: the special subject areas, General pedagogical discipline, didactics (methodology) and practice. The greatest variety of content inherent to the subject training unit, the ratio of academic and professional cycles is 75%:25% [3, 12]. Projects of implementation of common European principles of specialists training are developed within the framework of the SOKRATES programme [2]. After the completion of the project "Building educational structures in Europe" formulated the basic principles of the description of qualifications, including competence, a typology of training courses and their modular content and model of load distribution in the credits. Prospect of integration with European systems of pedagogical training of specialists in the field of educational content is the creation of a single European curriculum. It is also necessary to create conditions for mobility of students and teachers, development of partnership of different participants in the educational process, support joint educational and cultural initiatives and projects.

Analysis of the integration of the systems of teachers training in Europe provides the opportunity to state that the basic properties of these systems continue to determine their internal structure. In the framework of the Bologna process is the formation of coordination relations, which in future will enable to strengthen the integrity of integrated systems. System of pedagogical training of specialists of the European countries participating in integration, including Ukraine, yet retain the capacity for independent existence, and mostly their

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traditional forms of organization of teacher training are stronger universal, which indicates the dominance of national educational strategies.

Based on the analysis of foreign experience we offer technology training to high school teachers, which in Poltava University of Economics and Trade is a system of scientifically proved actions that guarantee the achievement of this goal. Structurally this technology is a system of operations, technical actions and functions which the teacher realizes at every stage of the process of preparation of future teachers of higher schools; it determines the interaction of the main elements of the model of teacher training system (its objectives; content; learning technologies – methods, techniques, learning tools, ways of control and correction; result; activity of the teacher and the student), but is not limited thereto.

Defining technology for the design and implementation of pedagogical training of high school teachers, which will ensure the growth of their pedagogical competence, we were guided by the fact that: 1) knowledge and skills are part of the pedagogical competence of the student that includes not only the reflection of objects of objective reality, but also effective against them, personal sense acquired; 2) the formal assimilation of knowledge will not provide the future specialists the possibility of their practical application; 3) the accumulation of information with no connection to the life undermines the goal of learning.

Despite this focus on professional and personal future teachers demanded activity. Distinguish six stages of this technology: motivation (lectures, theoretical, instructional), intensification (practical, creating a vision of yourself as a teacher), personalization (variable practice, tutoring, "coaching"), selection (active practice, control and correction), design (creative experimentation), self-actualization (self-knowledge, self-development).

On the motivational phase of goal setting and learning objectives, defining the needs and capabilities of students) based joint activity of teacher and students. The definition of students personally meaningful (important) goals and objectives of the course begins with familiarizing them with the objective requirements of preparing students for discipline based on the Industry's educational standard. During the introductory session was carried out the

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correction targets, substantial and procedural parties of the educational process based on the identified needs of its students. At the end of the introductory session students are given a small writing assignment is to Express your wishes regarding the organization of training and the list of subjects that should be explored. We analyzed the students' wishes concerning the organization of educational process and take into account the following wishes: engaging students in lectures and practical classes, providing students with the opportunities, preparation of personal projects as transcripts and test tasks, the shift of traditional forms of knowledge control, an introduction to various academic disciplines to issues that interest students, but not provided for the study (innovative methods and technologies of training and development; problems of self-development and self-improvement, improve the level of professionalism; how to quickly learn how to constructively deal). So, during the introductory session we were able to correlate the goals and objectives of the subject "Didactic systems in higher education" (educational level – MSC) and to solve problems of adoption by the students goals and learning objectives.

At the stage of intensification of educational process (practical, creating a vision of yourself as a teacher) is compact, concise information is served all courses (using computer). Used automated training systems, hypertext technology, electronic edition, "case"- and TV-technology, technology training, Internet and Intranet, integrated into Web page design tools in the form of packets that are globally accessible via the Internet. The accumulation of such a Fund projects led to a synergistic effect of training high school teachers. Virtual reality multimedia environment created the illusion of the immediate presence of the future teachers in the audience and gave the opportunity to practice their professional skills. Forms of organization of education differed from traditional content and methodology: lectures and seminars problem-based presentation, lecture-visualization, lecture with planned mistakes and so forth.

At the stage of personalization (variable practice, tutoring, "coaching") the work begins with the joint development of the students and teachers of the strategies of the discipline with the subsequent choice of a particular one of them. Customizing training to high school teachers is made possible on the basis of modular training, which was characterized by the fact that: each didactic unit



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was graphically represented in the modular programme and the modules; the content of the training was clearly structured theoretical material had a consistent presentation; the educational process is provided with information-subject system of evaluation and monitoring of mastering of knowledge, which allowed to adjust the learning process; provided variability of training, adaptation of educational process to the individual capabilities of future teachers.

Personalization of learning was achieved: firstly, democracy in relationships (students choose an educational path freely felt in communicating with the teacher, discussions were held in an atmosphere of psychological comfort); secondly, the scoring system of evaluation not only of students' knowledge, but also of each of their operations for the acquisition of knowledge and honing the skills of professional activity. Evaluation of students' educational achievements was the transfer of control from teacher to students, which was achieved by the introduction of the rules of scoring.

At the selection stage (active practice, control and correction) was used a lecture-press conference, two lectures; training; games and the like. Technology training in collaboration gave the opportunity for a short period of time to solve the problem of intensive formation and development of pedagogical skills and abilities to select the best professionals to work at the University departments. To apply this kind of training is needed were clear and detailed design and continued organizational and methodical training. The use of collaborative learning operational inadequate professional behavior specialists in the future, reduced the possibility of disappointment in the profession and helped to overcome obstacles that naturally arise in the activity. Students will develop a: friendliness, lack of aggression; free expression of feelings, which significantly enhances the ability for creativity; empathy – the ability to feel the psychological state of another person, empathy; non-violent ways of communication – respect for freedom of choice, the removal or limitation of the prohibitions, the emphasis on positive encouragement of the interlocutor, the error tolerance of the opponent while learning new material, trust, advance praise; the ability to understand, accept and acknowledge the opinions of others, the installation of decentration – the ability to rise to the position of another; the ability to perceive the situation (of) not as good or bad, and as such that require thought.

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At the stage of designing (creating experiments) were applied, the final lecture; monitoring the result of work on the theoretical material of the course; implemented the results of independent work by students. Applied technology training the so-called fourth generation of technology student-centered, project education. Because the student not only received the profession of a teacher, but he "designed" it myself, projective education opportunities for this. Projective education is a sector of social life, which created the conditions necessary for the design direction of activity of the individual student. The Central concept of projective education is a "project" – the idea of solving a problem which for the student of vital importance; and displaying the personal embodiment of truth, personal beliefs; the desire to find your best solution. Experimental application of projective education showed that, when education became a means of realizing the student's own project life journey, radically changed the role of the teacher from the authoritarian transmission model of absolute truths, he moved on to teaching as a way of familiarizing students to the values and technology of obtaining personal important knowledge that has contributed to his life of the project. We designed an environment that was relevant to the needs of the student, the tasks it set itself according to the logic of their own interests, their own learning needs. A draft was applied so that not "learning activities" received the decision in the vital situation, but rather, life's problems got solutions or tools in the field of education.

At the stage of self-actualization (self-knowledge, self-development) were used control and self-monitor growth forecast for the pedagogical competence of students. Research training we gave significant values in the experimental work that is most efficiently formed creative abilities of future teachers in higher school. The essence of technology research study was to construct educational knowledge as a system of task and to develop an algorithm of actions of the student. Creative self-realization of the student was conducted using three interrelated goals: creating educational products; mastering the basic content through a comparison with achieved their own results; the construction of an individual trajectory of self-improvement. Cognitive qualities necessary for the student to master the profession of teaching: intellectual curiosity, analytic, synthetic, ability to see cause and effect phenomena, a tendency to experiment;

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creative – admiration, inspiration, imagination, intuition, originality, inventiveness, novelty, independence, propensity to sensible risk, predictability; methodological – the ability to set a goal and achieve it, the creation of norms, the propensity to planning, communication skills, sense of vision, reflexivity, introspection, self-awareness, self-esteem and the like. The growth of levels of development of pedagogical competence of teachers in higher education was a prerequisite and the result of the research activity.

Other evaluation criteria were student learning activities if traditional teaching on student learning product was assessed by how he approached the standard of knowledge, that is, more accurately reproduce a given student content, the higher the assessed his work. In educational research study product was evaluated by how it differed from the set, the more scientific and cultural innovation, the higher the assessed student work.

Output of this study may be the fact that the search of effective technologies for training of future high school teachers to educator is an interesting phenomenon, the understanding of which is impossible without referring to the achievements of didactics of higher school, including the advanced countries of Europe. Technology of preparation of future teachers cannot be reduced to those or other technologies, methods or means of study. It is natural that any changes in the actions of the elements of the preparation process, any change in the quality or composition leads to certain changes in the technological cycle, the actors of the didactic system and the nature of their relationship which in turn determines the prospects for further research.

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