

УДК 378.14

Larysa Savchenko

**MODERNIZATION OF THE QUALITY OF EDUCATION DURING
THE PREPARATION OF FUTURE TEACHERS OF LABOR
LEARNING AND TECHNOLOGY**

У статті розглядаються проблеми модернізації якості освіти при підготовці майбутніх вчителів технології. Проведений аналіз стандарту вчителя технології та окреслено його виробничі функції, типові завдання діяльності та вміння, якими повинен володіти випускник. Не все внесено в освітньо-кваліфікаційну характеристику майбутнього фахівця. Немає умінь володіння проектною діяльністю, яка є основною формою роботи вчителя технології та креслення, не показані вміння прогнозувати результати навчання учнів.

Ключові слова: *якість освіти, навчальні плани, модернізація, підготовка, майбутні вчителі.*

В статье рассматриваются проблемы модернизации качества образования при подготовке будущих учителей технологии. Проведенный анализ стандарта учителя технологии и показано его производственные функции, типичные задачи деятельности и умения, которыми должен владеть выпускник. Не все внесено в образовательно-квалификационную характеристику будущего специалиста. Не высветлены умения владения проектной деятельностью, которая является основной формой работы учителя технологии и черчение, не показанные умения прогнозировать результаты обучения учениками.

Ключевые слова: *качество образования, модернизация, учебные планы подготовка, будущие учителя.*

The problems of the modernization of the quality of education during the preparation of future teachers of technology are considered. The analysis of the standard of the technology teacher and plotting, his production functions, typical problems of activity and ability which the graduate has to own is carried out. Not everything is brought into the education-qualification characteristic of future expert. There aren't any abilities of the possession of design activity which is the main form of work of the teacher of technology and plotting, the abilities to predict the results of pupils' training aren't shown. It is proved that the preparedness of future teachers to pedagogical diagnostics is a complex personal education, determining the effectiveness of professional activity of future teachers, and covers knowledge of pedagogical diagnostics, the ability to solve diagnostic tasks, evaluate results, monitor the quality of activities of students, to predict and design the results of their professional activities, and

other teachers.

Key words: *quality of education, curricula, preparation, modernization, future teachers.*

National and world systems of education before the beginning of the XXI century are experiencing a deep crisis, which in one degree or another covered all countries of the world. This phenomenon has the following rating and features:

- there is a gap between the number of people willing to get quality education and those who have the opportunity to get it. This gap varies in different countries, but is everywhere, as the existing schools and universities are unable to meet the increasing need for education;
- professional education in the world does not have time, in terms of content, to follow technologies that are rapidly changing, i.e. the education system is conservative;
- there is an acute lack of funds, whereby the influence of the system of education cannot fully meet the new requirements;
- the inertia inherent in education systems, leads to the fact that they are too slow to change their internal structure in response to the challenges and requests coming from the outside.

The national education systems of different countries permanently exposed to the crisis. There is lack of financial resources, high-quality teachers, classes, textbooks. The present situation in the world differs sharply from that that was considered normal in the past. The current global education crisis can result in serious consequences.

The recent publications on the topic of the research. The quality of education is considering in the philosophical and pedagogical (V. Andrushchenko, V. Astakhov, K. Astakhov, S. Goncharenko, N. Zgurovsky, V. Kremen, N. Kulstaeva, M. Lukashevich, V. Lutay, I. Nadolny, V. Tkachenko, N. Mikhalchenko, S. Nikolaenko, V. Ognevyuk, Predborska, O. Savchenko, and others), social and governance (O. Velichko, V. Viktorov, A. Gofron, T. Gusen, D. Dzvinchuk, B. Zhebrovsky, A. Taidzman) aspects. The quality of the management of education at different levels of the organization is devoted to the study of M. Albert, M. Weber, M. Vudkok, M. Meskon, T. Peters, S. N. Parkinson, A. Fayol, F. Taylor, P. Waterman, M. Hedouri, L. Yacock and other authors. V. I. Lugovoi, N. G. Nichkalo, V. Kuzminskiy accent the necessity of the search of conditions for the quality of professional training of future teachers. The value of the creative potential of future teachers in providing quality education is revealed by L. Oderii, S. Sysoeva and others.

The study of methodological foundation of the quality of education of the training of future teachers of technology. The analysis of the standard of the teacher of technology and plotting, his production functions, typical activity tasks and skills, which the graduate has to own, is done. Not everything is

brought into the education – qualification characteristic of future expert. There aren't any abilities of the possession of design activity which is the main form of work of the teacher of technology and plotting, the abilities to predict the results of pupils' training aren't shown.

The educational process of higher school is based on the standardization of education. The standard, as it is noted in its definition, is a prerequisite to certain aspects of education. The standards of education are expressed in the following regulatory documents: Law of Ukraine Law dated 28.12.2014 № 79-VIII «About higher education». Standardization in education has two aspects.

1. The didactic task. Its formulation is carried out by opening the three elements of the educational system: students, the goal of learning (education), the structure of the content of learning (education).

2. The purpose of learning (education). To get a quality specialist.

The quality of higher education described in the standards of specialist of technology education as a set of qualities of a person with higher education, which shows her professional competence, value orientation, social orientation, and leads to the ability to meet personal spiritual and material needs, and the needs of society. The quality of higher education graduates of higher education institutions also reflects the ability to:

- to satisfy according to the social norms of the social requirements of upcoming social and professional roles;
- to answer for their socially important decisions;
- to satisfy the desire of social status and prestige.

A very different picture of the standardization of education offers in the analysis of another part of the pedagogical system - didactic processes. As you know, the main components of the technology of education is its content, in fact the didactic processes, organizational forms of learning, tools and teaching methods. So, to set learning objectives for the academic discipline mean to identify and to establish a system of skills that students should master.

While developing specific objectives of the study discipline we must be guided by the requirements of qualifying characteristics of a specialist. Based on the learning objectives the content of the discipline and technologies of their development is further developed. The goal is the beginning of the design of education process.

In order to set learning goals, it is necessary to describe and evaluate what a man *does*, as the goal of the education is always to ultimately develop an ability *to do* something. To describe and evaluate what the person does is necessary with a certain degree of accuracy, rigor, and consistency. We, in turn, should use the system of *concepts of the activities*.

The description of the activities only in terms of the subject («Technology of sewing production», «Decorative applied art», «Methodology of technological education», «General pedagogy») is insufficient because the completeness and communication with the specialty is lost. For example, very

often we do not take into account such important characteristic of activity, as a form – the action is based on the source of information (book, summary) or without support (from memory). The analysis of the standard of the teacher of technology and designs, his production functions, typical activity tasks and skills that graduate of the Krivoy Rog state pedagogical university showed that not everything is included in educational-qualification characteristics of the future specialist. In our opinion there are no skills of the possession of the project activity, which is the main form of work of the teacher of technology and plotting, the ability to predict student learning outcomes is not shown. Pedagogical diagnostics is an important part of predicting learning outcomes. Pedagogical diagnostics is not included in the educational specialist level. Educational activity of student learning in higher pedagogical institution is reflected in the educational-qualification characteristics. Let's take for example a future teacher of technology and plotting. *Educational qualification characteristics* of a graduate of the Krivoy Rog state pedagogical University is a normative document, which summarizes the content of higher education, that is, reflects the objectives of higher education and training, determines the place of a specialist in the structure of industries of the state and the requirements for its competence, other socially important properties and qualities. This standard is part of the standards for higher education, which summarizes the requirements from the consumers of graduates to the content of higher education. Educational qualification characteristics (EQC) reflects the social order for training specialists based on the analysis of professional activities and requirements to the content of higher education on the part of individual customers professionals. The EQC determines the qualification requirements for social and productive activities of graduates according to specialty and requirements of properties and qualities of the individual that received the educational level of the corresponding professional direction.

Higher professional education is the most important social and national institution, performing the function of preparing the young generation to address future professional challenges in a particular field of activity and assumes a fairly high level of completeness of the graduates of various skills, and the ability constantly to improve them.

The analysis of curricula showed that the content and volume of educational information in various higher educational institutions.

If you compare the normative and the variable part curricula of the Krivoy Rog state pedagogical University faculties of technology and pedagogical, natural sciences, physics and mathematics, it is seen that within a single school hours on the same training courses have been different.

Within one higher education institution different distribution of hours with cycles provided by higher education standard, so the cycle of natural-scientific preparation (normative part) at the physic-mathematical faculty of the heralds about 300 hours, and the technological-pedagogical and natural faculty

coincides 1350 hours. Cycle of professional and practical training (regulatory part) at the physic-mathematical faculty is 2088 hours, and technological-pedagogical – 4824, respectively, at the natural – 3780 the difference in 2736 hours. With regard to the variable part cycles of training too, there are various approaches to the allocation of hours, so the cycle of natural-scientific preparation (the variable part) at the physic – mathematical faculty exceeds on 234 the number of hours at the technological-pedagogical faculty at natural as much as 334 hours from technological and pedagogical faculty.

Cycle of professional and practical training (the variable part) drew attention to the grave discrepancy of hours on the physic-mathematical faculty is 2952 and the technological-pedagogical discrepancy 1008 hours 1944 hours, with the natural history faculty 1242 hours. In our view such discrepancies in the distribution of hours is the main problem regarding the provision of quality education.

Analysis of hours of the regulatory and the variable part of the faculties with twin cycles of special disciplines showed different approaches to standards of education, and hence to the content of training in higher pedagogical school. From the analysis of scheduling hours according to the curriculum it can be argued. What possesses a different amount relative to the content of education at twin specialties?

Let's analyze the technological – pedagogical faculties, the different distribution of hours of higher educational institutions. Draws attention to the fact that the same faculties have different hours in the curriculum according to the normative part, so the cycle of humanitarian and socio-economic training (regulatory part) in Uman pedagogical University 1404 hours in Krivoy Rog pedagogical University 648 hours difference 756 hours, Donbass state pedagogical University 648 hours. Cycle of natural-scientific preparation (normative part) in Krivoy Rog pedagogical University the number of hours 270, is higher than in Uman pedagogical University and lower on 620 than in Donbass pedagogical University. Cycle of professional and practical training (the normative part) shows the developed approaches to the allocation of hours in Krivoy Rog pedagogical Institute 4824 hours and in Uman pedagogical University 3348 hours difference 1476 hours, a small difference compared with the Donbass state pedagogical University 666 hours.

Regarding the variable part of cycles of training, the discrepancy of hours between pedagogical institutions of higher education is obvious, so the cycle of humanitarian and socio-economic training (the variable part) and the cycle of natural-scientific preparation (variable part) in the Donbass pedagogical University is absent, and in Uman pedagogical University is just 54 hours. Cycle of professional and practical training (the variable part) to Krivoy Rog pedagogical Institute is 1008 hours, and Donbass pedagogical University 468 hours, Uman pedagogical University 405 hours 540 hours difference and 603 hours. As it can be seen from the analysis, we observed different approaches to planning hours in the curriculum. There are different approaches to professional

training of future teacher of technology. There is an urgent need to develop standard training and specialist degree in educational qualification of teachers of technology.

The modernization of education implies a change of purpose, the reduction in mandatory content, change of methods and techniques of mastering the content at all levels of training, individualization of the learning process, and the possibility of variable educational systems. Accordingly, the subject modifications are the standards, program, and curricula. The analysis of curricula showed that the content of education varies not only in different institutions (universities and colleges) but also within a single institution, even one specialty.

The modern content of education is multi-component. It should include not only knowledge, but practical activity, artistic experience and value orientation of the person. So, the content of higher education is a system of knowledge, abilities, skills, which should be taken by those who are studying in a certain period to receive a profession at the specialist level of the highest qualification. Methodological bases of preparation of future teachers of technology and drawings to pedagogical diagnostics of the quality of education is the theoretical cut gnoseological, humanistic approach, continuity, integrity, continuity; in practical dimension, activity, axiological, systematic, competency-based approaches.

Thus it is necessary to note a number of peculiarities of the submission of the planning hours on the same faculty, different pedagogical higher education institutions in the content of education. The content of education should be associated with the needs of society. With the strengthening of the fundamental parts of education, which is expressed by:

- extension of theoretical training (for junior courses – a broader scientific training, high specialization, which includes the essential elements of the theory);
- expansion of the range of majors at the expense of socio-political, mathematical, and some special and other disciplines);
- learn new science and practice methods.

These trends are a consequence of differentiation and integration that occur in science, specialization, unification and complex harmonization. In the selection of educational content you need to consider certain knowledge is not so much the face, but the set of interrelated objects of study. Further his work we see in the development of diagnostic techniques that affect the quality of education. Further the work sees the development of information technology in determining the quality of education in universities.

REFERENCES

1. Введенский В. Н. Моделирование профессиональной компетентности педагога / Вадим Николаевич Введенский // Педагогика. – 2003. – № 10. – С. 51–56.

2. Вдовиченко Р. П. Управлінська компетентність керівника школи / Р. П. Вдовиченко. – Х. : Вид. група «Основа», 2007. – 112 с.
3. Вікторов В. Г. Управління якістю освіти (соціально-філософський аналіз): [монографія] / Віктор Григорович Вікторов. – Дніпропетровськ: Пороги, 2005. – 286 с.
4. Митина О. А. Средства диагностики для мониторинга учебных достижений учащихся при изучении естественно-научных и математических дисциплин / О. А. Митина // Педагогические технологии. – 2007. – №1. – С. 51–56.
5. Оцінка знань студентів та якості підготовки фахівців (методичні та методологічні аспекти): навч. посіб. / А. Й. Ягодзінський, А. О. Муромцева, Л. В. Іванова [та ін.] ; за ред. А. Й. Ягодзінського. – К. : ІЗМН, 1997. — 216 с.
6. Поташник М. М. Качество образования: проблемы и технология управления (в вопросах и ответах) / Марк Максимович Попашник. – М. : Пед. общ. России, 2002. – 352с.
7. Приходько В. М. Моніторинг якості освіти і виховної діяльності навчального закладу. Навчально-методичний посібник для вчителя / Приходько Валентин Миколайович. – Х. : Вид. група «Основа»: «Тріада +», 2007. – 144 с.
8. Савченко Л. А. Проблема качества образования при подготовке педагогических кадров / Л. А. Савченко // Образование через всю жизнь: Непрерывное образование в интересах устойчивого развития : материалы 11-й Междунар. конф. : в 2 ч. / сост. Н. А. Лобанов; под. науч. ред. Н. А. Лобанова и В. Н. Скворцова ; ЛГУ им. А. С. Пушкина, НИИ соц.-экон. и пед. пробл. непрерыв. образования. – СПб. : ЛГУ им. А. С. Пушкина, 2013. – Вып. 11. – Ч. II. – С. 217–219.