Взаимосвязь общеобразовательной и профессиональной подготовки: развитие теории и практики в историческом контексте и основные направления современных исследований в странах Западной Европы, США, Австралии.

Correlation between General Education and Vocational Training:

Development of Theory and Practice in History and Major Trends of Contemporary Research in Western Europe, USA, Australia

В.В. Пузырев

V.V. Puzyrev

Анномация В статье кратко рассматривается развитие теории и практики взаимосвязи общеобразовательной и профессиональной подготовки, а также описываются основные направления современных исследований в данной сфере в таких странах как Германия, Франция, США, Австралия и др. Основным мотивом проведения данного исследования является необходимость улучшить подготовку по специальностям ремесленного профиля в России по предметам общеобразовательной и профессиональной подготовки с учетом опыта других стран.

*Ключевые слова* общее образование; профессиональная подготовка; взаимосвязь; ремесленники; ремесленные профессии.

**Summary** The article gives a brief review of the development of the theory and practice of correlation between general education and vocational training and provides an overview of the major trends in the contemporary research in this sphere in such countries as Germany, France, USA, Australia and others. The underlying reason for this survey is the necessity to enhance training of craft and trade workers in Russia both in general and vocational subjects taking into account the experience of other countries.

*Key words* general education; vocational training; correlation; craft and trade workers; craft and trade occupations.

Small enterprises are an integral part of the economies of most of the industrially developed countries. More than 90% of the total number of enterprises in the European Union are small enterprises. Each of them employs no more than 10 people.

The development of small enterprises has become important for the economy of Russia in recent years. Crafts and trades are traditionally considered to be a form of small business which is understood as "a type of entrepreneurial

production activity aimed at the production of custom-designed goods and services in small quantities based on the actual demand of people, in order to meet the requirements of citizens or business entities" [5, p.14]. Training in craft and trade vocations which now "constitute over 13% of the total number of blue-collar occupations in Russia" [8, p.17] is carried out at institutions of secondary professional education which face an important task of training a graduate for work in a small enterprise. Unlike workers at a big enterprise craft entrepreneurs are personally responsible for their labour both in the technological and in the economic aspects. This task sets high requirements for the formation of the contents of education and its quality evaluation.

When forming the contents of vocational education it is recommended to analyze professional activities first [7, p. 45]. The analysis of the professional activities of craft entrepreneurs [5] based on determining the key competences, allows us to make a conclusion that the general education component of their training plays a very important role. It is the general education component that affects the development of such key competences as self-discipline, initiative, excessive professional activity, social and professional mobility, communicativeness, ability to cooperate, creativity, aesthetic sensitivity. These competences are significant in the training of specialists of this kind. Their training cannot be limited to the development of only narrow professional key competences such as manual skills and special competency. Recent research [2] proves that financial success is conditioned by the knowledge of the profession only by 15%. By 85% it depends on the ability to treat your colleagues, to incline other people to your viewpoint, to advertise yourself and your ideas.

Now that "new job descriptions, curricula, new standards of secondary professional education should be developed and adjusted to new blue collar occupations focused on the needs of individual enterprises, not industrial ones" [6, p.10] the problem of combining vocational and general education from the viewpoint of forming the key competences is topical again. The aim of this article is to explore the tendencies of combining general and vocational education in

the theory and practice of different countries in the context of history and at present.

The pedagogical ideas and practice of the ancient time and middle ages established the tradition of segregation of general education. Only people who belonged to the privileged minority had access to the written knowledge, to the acquisition of the liberal arts which contained the knowledge of the universal type. At the same time manual labour as a means of living was considered as "a curse hovering over a man" [1, p.30]. The model of an educated person put forward by Plato [4] gives obvious preference to the acquisition of liberal arts rather than to vocational training. According to Plato a person who is most capable of learning acquires liberal arts and becomes a leader, while a person who is least capable of learning gets vocational training and becomes a worker to serve the leaders' needs. Plato's philosophical teaching influenced not only the development of the education system but other people's minds as well: the acquisition of blue collar occupations has remained non-prestigious in many cultures to this day. The ancient world established the tradition of scant and narrow specialization training, which was the duty of parents.

In the end of the 18-th century the problem of correlation of general and vocational education arose in Germany and France.

In Germany the notion *education* meant *general education*. This notion was formed under the influence of W. von Humboldt's ideas [12, p.3].

Humboldt considered the notion *education* equal to the notion *formation* of the personality. He thought that on-the-job training or training at an industrial school was closely linked with exploitation of children and had nothing to do with the formation of the personality. Even the notion *industrial school* which was widely spread in Germany at that time in the opinion of Humboldt's followers was derived from the Latin *industria* which means *diligence*, or *hard work*. Thus training for work was not included in the notion *education*. As a result of this differentiation access to university education became possible only after

completing a comprehensive secondary school and getting a certificate of secondary general education.

That situation was criticized by a number of German scientists such as G. Kerschensteiner, E. Spranger and others. They thought that vocational education was directly linked with the development of the personality and must become one of the ways leading to the next level of education – the university level.

Unlike the German philosophers of education the French enlighteners of the 18-th century understood formation of the personality as versatile education based on the development of independent thinking, creativity, activity, visualization, links with the surrounding life. Meanwhile teaching various trades was acknowledged as an important means of the all-round development of a person. The idea of education through work in different trades, which anticipated the concept of polytechnic education, was expressed by prominent French public figures in different variations. Thus in the circumstances of the industrial revolution of the 18-th century Saint-Simon and other utopian socialists thought that after elementary education school must give applied and special education adjusted to the needs of the society and the requirements of the industry. Vocational school was announced as the main type of school. Meanwhile the works of some representatives of the French enlightenment of that epoch such as O. Gréard, A. Corbon and others were united by the idea of finding a way to develop a model of the worker in whose professional activity intellect and rational knowledge prevail and allow him to transform his activity. A. Corbon thought that the rising generation must get both general and vocational education, that it was impossible to draw the demarcation line between general and vocational education, the latter being the continuation of the former [9, p.245].

One of the contemporary trends of research in Europe is focused on strengthening the role of vocational training within the framework of general education. T. McMullen [18], for instance, asserts that vocational training has always been included in the programme of general education at least for some students. The growing indicators of dropout in the system of education and un-

employment among young people substantiate the necessity of introducing vocational training into general education as an obligatory component for all students.

The Australian researcher J. Polesel [19] also considers it necessary to integrate vocational training in the curriculum of the senior secondary school due to the following reasons. First, vocational educational institutions carry out vocational training within the narrow frames of a certain vocation: general skills are not developed, preparation in general education does not meet the needs of either the personality or the society or the employer for whom general skills are no less important than special ones. Second, we can observe a tendency in the society to treat vocational education as inferior in status to general education. The inclusion of vocational training in the general education curriculum must facilitate the equality of status of the two types of education. To confirm the aforesaid Polesel provides the results of a large scale experiment held in the schools of the Australian state Victoria: the number of the unemployed decreased among the school leavers who got not only certificates of secondary general education but also certificates of vocational training, while the percentage of those who continued their studies in the system of vocational technical education and at the university increased.

The American researcher T. Lewis [17] however specifies that vocational training can be a part of the general education programme only if it provides some general notion of labour. If the aim of vocational training is to teach a certain vocation it cannot be a part of general education.

Other representatives of the American pedagogical thought such as D. Stern, Th. Bailey, D. Merritt [20] think that the traditional forms of education do not meet the requirements of the modern economy. Vocational education is focused on developing skills specific for a certain vocation which in the future will not probably be needed. The traditional forms of general education are not adequate to the modern requirements either as they do not give students the idea of how theoretical knowledge can be applied in life. The way out can be found in

the opinion of the American educators if the following four tasks are solved: 1) it is necessary to develop curricular integrating vocational training and general education; 2) educational standards should be correlated with professional standards; 3) in order to prepare students for knowledge-intensive labour it is necessary to include the education-through-work component in the programmes of the basic level for all students; 4) it is necessary to set up partnerships consisting of schools and enterprises with the responsibility for their functioning equally divided between the employers, vocational teachers and teachers of general subjects.

The Austrian researchers S. Humpl and J. Markowitsh [15] emphasize that the educational system should be oriented at the constantly changing needs of the labour market. For this purpose it is suggested that the vocational aspect of general education should be strengthened and the general education component of vocational training should be widened in order for the optimal combination of the two types of training to be achieved. Besides, they also suggest that partnerships be established between enterprises and educational institutions.

German educators have taken an active part in the research of the problem of correlation of general education and vocational training since the 18-th century till these days.

In the opinion of G. Gruener [14] the continuation of general education is one of the important tasks of the German vocational school. However, in recent years the significance of general education subjects has been underestimated in vocational training. There are three reasons for that. First, vocational schools take more and more students who have already completed secondary general education and do not need to continue it. Second, there is an increase of vocational theoretical requirements to modern occupations which leads to the increase of vocational theoretical training at the expense of the general education component. Third, within the dual vocational training system there are few hours that students spend in class (1-2 days – studies at a vocational school, 3-4 days – training at an enterprise), therefore it is the custom to think that for this

type of vocational schools the role of the general education subjects is insignificant.

R. Dubs [13] singles out the following tasks for teaching general education subjects at a vocational school: to make up for the gaps, to complement, to balance, to replace vocational training. Vocational schools have to make up for the gaps in the knowledge of the students (lack of literacy in writing, reading, calculation, etc.) which were made in pre-vocational school education. Teaching general education subjects at vocational schools for making up the gaps does not often meet the interests of students as the teaching material has no immediate relation with the occupations of their choice. The complementing function is carried out through vocationally oriented teaching of general education subjects, which complements the study of special subjects and allows students to acquire the chosen occupation in an integrated way. The function of balancing general education and vocational training stands in opposition to the complementing function. It is assumed that teaching at a vocational school should not be exceptionally vocation-oriented. General education subjects should be focused on the general development of students. Thus the study of the native language puts in the forefront questions of literature, theatre, art. Social science classes are expected to have a discussion of political and social problems as well as labour market problems. Doing sports helps to relieve mental strain caused by the modern occupational activity which requires less and less physical exercise. The replacing function implies that the general education component of vocational training should take upon itself the task of upbringing which for some reason or other cannot be solved in the family and at an enterprise. General education classes can help to solve educative tasks in various life spheres such as ecology, sexual education, rules of behavior in society, etc.

Having analyzed the functions of general education at a vocational school suggested by R. Dubs, A. Schelten [10, p.153] makes a conclusion that the combination of the complementing and balancing functions most meets the requirements of the contemporary vocational school with more emphasis put on the

complementing function. If teachers tend to focus more on the balancing function it is recommended to make the general education subjects optional.

Trying to solve the problem of demarcation between general education and vocational training another German researcher F. Achtenhagen [12] suggest the idea of proceeding from the notion of key qualifications and competences. The development of key qualifications in accordance with the requirements of the labour market and their introduction in the system of vocational education in Germany were initiated by associations of German employers and trade unions in 1987. The usage of key qualifications in the system of vocational education makes it possible to raise the quality of training a worker significantly. According to Achtenhagen [11] key qualifications can be attributed to three types of competences: individual (cognitive, emotional, motivational, moral spheres), professional (special knowledge) and social (team work, communicative skills, problem solving skills, empathy). It is obvious that the quality of training a worker would be better if his general education preparation were oriented at the formation of the same key qualifications which constitute the aim of vocational training. In other words, general education and vocational training should have a unified aim formulated as a common list of key qualifications required by the labour market.

One more trend of pedagogical research in Europe concerns the problem of the unequal status of general education and vocational training. The inequality of statuses is caused by the unattractiveness of vocational training in comparison with general education. Thus, J. Lasonen and S. Manning [16] note that almost in all European countries the growth of the number of students who wish to continue their studies after they achieve the obligatory level of education is connected with their desire to get a certificate of education which gives the opportunity to take a higher position in society. Preference is given to general education programmes as they lead directly to higher education. Vocational training programmes, especially the ones the completion of which does not give the right to enter university, are in little demand.

Conclusions. The problem of correlation between general education and vocational training has deep roots. The tradition of segregation in getting general education and vocational training supported by Plato's ideas influenced the public conscience. Vocational training is still considered by many as less prestigious than general (academic) education.

At present the problem of correlation between general education and vocational training is no less topical: many competences of craft and trade occupations may be best formed by general education subjects.

The main trends of contemporary research in this sphere deal with the modernization of education contents, the methodology of correlation between general education and vocational training, the balancing of the statuses of general education and vocational training.

## References:

- 1. Джуринский А.Н. Педагогика: история педагогических идей / А.Н. Джуринский. М.: Пед. об-во России, 2000. 350 с.
- 2. Ибрагимов Г.И. Требования рынка труда и их отражение в критериях качества подготовки специалистов. [Электрон. ресурс] / Г.И. ибрагимов // Материалы Межрегиональной научно-практической конференции «Качество профессионального образования и рынок труда» / Институт среднего профессионального образования РАО. Режим доступа: http://it-cpo.by.ru/s1-00.shtm. 2002.
- 3. Некоторые понятия современной педагогики профессионального обучения в Германии. Толкование и комментарий / Сост. Тидеманн Б. Екатеринбург, 2004. 86 с.
- 4. Платон. Государство. Законы. Политик / Платон; Пер. с древнегреч.; Сост., предислов., аннотир. указ. Е. И. Темнов. М.: Мысль, 1998. 798 с.
- 5. Психолого-педагогическое обеспечение подготовки ремесленниковпредпринимателей / Э.Ф. Зеер, В.А. Водеников, Н.А. Доронин, П.Ф.

- Зеер, И.А. Колобков; Под ред. Э.Ф. Зеера. Екатеринбург: Изд-во Урал. гос. проф.-пед. ун-та, 2001. –233 с.
- 6. Романцев Г.М. Ремесленное профессиональное образование: первоочередные задачи / Г.М. Романцев, И.А. Колобков // Становление и развитие ремесленного профессионального образования в России: Тез. докл. 1-й Междунар. науч.-практ. конф., Екатеринбург, 16-18 дек. 2002 г. / Под ред. Г.М. Романцева. Екатеринбург, 2002. С. 7-10.
- 7. Семушина Л.Г. Содержание и технологии обучения в средних специальных учебных заведениях / Л.Г. Семушина, Н.Г. Ярошенко. М.: Мастерство, 2001. 272 с.
- 8. Смирнов И.П. Ренессанс ремесленничества в современной России / И.П. Смирнов // Становление и развитие ремесленного профессионального образования в России: Тез. докл. 1-й Междунар. науч.-практ. конф., Екатеринбург, 16-18 дек. 2002 г. / Под ред. Г.М. Романцева. Екатеринбург, 2002. С. 14-18.
- 9. Фрумов С.А. Французская школа и борьба за ее демократизацию 1850-1870 / С.А. Фрумов М.: Изд-во Акад. наук РСФСР, 1960. 584 с.
- 10. Шелтен А. Введение в профессиональную педагогику / А. Шелтен. Екатеринбург: Изд-во Урал. гос. проф.-пед. ун-та, 1996. - 288 с.
- Achtenhagen F. Entwicklung oekonomischer Kompetenz als Zielkategorie des Rechnungswesenunterrichts / F. Achtenhagen. In P. Preiss & T. Tramm (Eds.), Rechnungswesenunterricht und Ekonomisches Denken. Wiesbaden, 1996. S. 22-44.
- Achtenhagen F. General versus vocational education demarcation and integration / F. Achtenhagen // W.J. Nijhof and J.N. Streumer (eds.), Key Qualifications in Work and Education. The Netherlands, 1998. P. 133-143.
- 13. Dubs R. Berufsbildung der Zukunft / R. Dubs, in: Verband der Lehrer an beruflichen Schulen in Bayern VBB-aktuell 37 (1988)3, S. 1-14.

- Gruener G. Die Berufsschule im ausgehenden 20. Jahrhundert: Ein Beitrag zur Berufsbildungspolitik / G. Gruener. – Bielefeld: Bertelsmann 1984. -102
   S.
- 15. Humpl S. The labour market at the crossroads between general/vocational and theoretically/practically orientated educational tracks / S. Humpl, J. Markowitsh // Strategies for reforming initial vocational education and training in Europe. Jyväskylä, 2000. P. 165-176.
- 16. Lasonen J.How to improve the standing of vocational as against general education A comparative investigation of strategies and qualifications across Europe (CEDEFOP Research Report 2) / J. Lasonen, S. Manning. Luxembourg, 1999.
- 17. Lewis T. Vocational education as general education / T. Lewis // Curriculum Inquiry. 1998. No. 28/3. P. 283-310.
- 18. McMullen T. The growing influence of vocational preparation on general education / T. McMullen // European Journal Vocational Training. 1985.
   No. 17. P. 7-10.
- Polesel J. Vocational education and training in schools: an Australian initiative: towards the integration of vocational and academic studies in the senior secondary curriculum / J. Polesel // European Journal Vocational Training. 2000. No 21. P. 24-31.
- 20. Stern D. School-to-work policy. Insights from recent international developments [Electronic resource] / D. Stern, Th. Bailey, D. Merritt –. Berkeley: Graduate School of Education, University of California at Berkeley.URL: http://ncrve.berkeley.edu/AllInOne/MDS-950.html 1996.
- Stratmann K. Die Krise der Berufserziehung im 18. Jahrhundert als Ursprungsfeld paedagogischen Denkens / K. Stratmann. Ratingen, 1967 401 S.