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The role of professional education in the system of education in the Netherlands, Belgium and Russia

El rol de la educación profesional en el Sistema de Educación de Países Bajos, Bélgica y Rusia

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ABSTRACT:

The relevance of the investigated problem is caused by the need to define the role of vocational schools in the educational systems of European countries and fragmented publicistic material available in special vocational pedagogical literature about the history of development and current state of vocational training systems. The purpose of the article is to identify the pedagogical value of international experience for the development of vocational education in this country. The leading methods of investigation of this problem are the theoretical analysis and synthesis of the data of West-European and domestic sources, the method of describing phenomena, the historical method. The article describes the vocational education systems in Belgium, the Netherlands and Russia, identifies and analyzes the trends in their development taking into account global and national factors, determines the place of vocational schools in educational systems. Research materials may be used in the course of pedagogy and special courses on foreign systems of

RESUMEN:

La relevancia del problema investigado se debe a la necesidad de definir el papel de las escuelas vocacionales en los sistemas educativos de los países europeos y el material disponible en la literatura pedagógica vocacional, en especial sobre la historia del desarrollo y estado actual de los sistemas de formación profesional. El propósito del artículo es identificar el valor pedagógico de la experiencia internacional para el desarrollo de la educación vocacional en este país. Los principales métodos de investigación de este problema son el análisis teórico y la síntesis de los datos de las fuentes de Europa occidental y del interior, el método de describir los fenómenos, el método histórico. El artículo describe los sistemas de educación vocacional en Bélgica, los países bajos y Rusia, identifica y analiza las tendencias en su desarrollo teniendo en cuenta los factores globales y nacionales, determina el lugar de las escuelas vocacionales en educación sistemas. Los materiales de investigación pueden ser utilizados en el curso de pedagogía y cursos especiales sobre sistemas

education at the university and at in-service training courses for teachers. **Keywords:** vocational training, vocational school, apprenticeship, historical research.

extranjeros de educación en la Universidad y en cursos de formación en servicio para docentes. **Palabras clave**: formación profesional, escuela vocacional, aprendizaje, investigación histórica.

1. Introduction

While the fact is true that vocational education in the remote past followed the same pattern of apprenticeship everywhere in Europe, it is also true that with the industrial revolution and the departure from the apprenticeship system national vocational training systems began to differ greatly according to the social characteristics of every nation. Prof. W.-D. Greinert (2004) conducted a historical analysis of European systems of vocational education and offered a model of classification of different systems into three categories: a model of a free market economy in the UK, state-regulated bureaucratic model in France and the dual-corporate model in Germany.

A more difficult task, however, is to explain why two countries with almost identical historical profiles of economic and social development accept completely different systems of vocational education. An attempt to find an explanation for this phenomenon was taken by H. Reinisch & D. Frommberger (2004). Scientists distinguish two aspects which caused differences in the national systems of vocational education: the peculiarities of historical development, including economic, social and technological development; cultural factors, such as the national mentality or ways of thinking, attitudes to education, work and training.

D. Hannelore & E.Y. Esenina (2015) revealed the specifics of the German dual system, built a generalized model of dual vocational education and training, characterized the approaches of different countries to the adaptation of the positive experience of Germany for the development of their own vocational training systems. Along with the advantages of the dual system the authors point to a number of important issues that require speedy solutions: the insurance of continuity in the transition of young people from school to the world of labour; improving the quality of teaching in vocational educational organizations and training at enterprises; dissemination of complete and operative information on current professions for young people; the creation of regulatory and legal framework of cooperation between business and vocational education and the improvement of the culture of their interaction.

A.A. Listvin (2016) states that the experience of the development of the dual forms of training skilled workers in Germany can be particularly useful for Russia in improving national legislation, the development of mechanisms of regionalization and maintaining common educational space, separating the powers of the Federation and the regions, the formation of the institute of social partnership, reanimation of tutorship in training, the development of multi-channel financing models and social support of students.

Modern socio-economic situation in Russia actualized the problem of personnel training. In the speeches of politicians, economists, scientists there sounds the alarm about the shortage of qualified workers. The main cause of this acute problem is seen in a catastrophic state of the system of primary and secondary vocational education. The concern over the current practice of training vocational teachers, who should deal with the revival of the vocational training system is expressed (Dorozhkin & Zeer, 2014; Dorozhkin, Kopnov & Romantsev, 2015; Hannelore & Esenina, 2015; Fedorov & Tretyakova, 2016; Ronzhina, Romantsev, Piskunov & Vrbka, 2016; Zyryanova, Fedorov, Zaitseva, Tolkacheva & Glushchenko, 2016; Davydova & Dorozhkin, 2016; Listvin, 2017; Dorozhkin, Zeer & Shevchenko, 2017). All cited researchers emphasize the need for historical reflection to better understand the present and build new models of the future.

2. Methodological framework

2.1. Research methods

In the process of research the following methods were used: theoretical analysis and synthesis of the data of West-European and domestic sources, study and theoretical analysis of the educational, methodological and professional literature; comparative analysis of educational systems; historical method.

2.2. Stages of research

The study of the problem was conducted in three stages:

at the first stage theoretical analysis of the existing methodological approaches in pedagogical and professional scientific literature was carried out; the problem, the purpose and methods of research were singled out;

at the second stage the data of domestic and foreign literature sources were studied and analyzed;

at the third stage theoretical and practical conclusions were specified.

3. Results

The aim of the research is the definition of the place of vocational school in the educational systems in the Netherlands, Belgium and Russia. The basis of the consideration of this issue is laid on the principles of historicism and conditioning of professional education development by the needs and specific features of socio-economic development. At the same time the concept of "professional school" covers all levels of professional education, up to the higher one. However, special emphasis is made on the analysis of the problems of initial vocational education as a basic one.

The Netherlands and Belgium are characterized by fairly common stages of socio-economic development. In the second half of the XIX century, they experienced the era of classical industrialization. After the Second World War they adopted the economic policy based on Keynesianism. The object of the Keynesian economic model is the national economy; this concept considered "effective demand" at the macro level the determining factor of its development. "Effective demand", consisting of consumer demand, the demand for means of production (investments), foreign demand (export) and the government demand stimulates, according to Keynesians, production and employment.

In the second half of the 70s of the XX century the Keynesian model ceased to be relevant. Microelectronics, automation, information technology, new materials have radically changed the process of production and circulation of commodities. The mass production of standardized products (conveyor system), based on the rule of "economy on scales", called "Fordism", was replaced by a flexible production (flexible manufacturing system), based on the rule of "economies on scope". As a result, the organization of the labor process and the segmentation of the labor force and, consequently, the training system changed (Berbum, 1995).

Another major transformation that took place in the developed Western countries in the XX century was internationalization (globalization) of economic activity, which was associated primarily with the advent of transnational companies (TNCs).

Along with technological development and globalization the third component of the deep transformations in the economic sphere of Western countries should be mentioned: namely, a shift from the industrial sphere to the sphere of services.

With the development of technical progress productive labor became divided mainly into two types. The first is usually associated with the primary labor market. It presents complex activities that require formal training, which, in turn, provides opportunities for professional growth and relative job security. For the majority this labor market is more preferable, since it is assumed that its workers can cope with various situations and make their creative contribution to the improvement and rationalization of the working process.

So-called secondary labor market is a sphere of production activity for which neither education nor qualifications are need, or rather limited skills are enough. This market offers low wages and often unemployment. With most of the people it is not popular, because the correct execution of instructions, strict observance of technology and the law are expected from its workers.

Despite the changes that have taken place in the overall employment world, the images of these two markets continue to live in the minds of those who govern them and prepare workers for them. This situation is fully consistent with the principle of scientific management, developed by F.W. Taylor (1911). This principle defined the organization of labor in the industry for 90 years and contributed to the emergence of confidence that under the conditions of technological progress polarization of professional competence in these two labor markets will increase. In other words, the primary labor market will consist of minimally-trained and competent employees.

The education system is the reflection of the processes taking place in the organization of work, in the sense that it is structured to provide students with two different types of education. It is assumed that those receiving the first type of education are destined to manage and plan and they need to learn in comprehensive schools that provide thorough training. According to the second type of education the students should meet the needs of the secondary labor market; they are required to attend schools where they could get special, narrow-profile labor skills through vocational training. Such a distinction was traditionally solidified in the statements of political leaders, even though more than a century ago August Bebel, protesting, said that "general education is vocational education is for the oppressed" (Schmidt, 1995).

No wonder that, in comparison with general education the status of vocational education in the industrialized countries is low, and in developing countries it's still lower. Undoubtedly, the grandeur is easier associated with academic duties than that of a worker an assembly line. And although over the past one hundred years industry underwent significant changes, the superiority of the general education over the professional one in terms of respect for it by the society remained unchanged, since we are still far from the time when the secondary labor market will no longer exist. However, the working conditions are constantly changing, and it may very well be that we are at the beginning of transformations that can change the modern organization of labor and eliminate the traditional division of the labor market.

Although so far there is no clear description of a modern employment world, fragments of its image are already traced. The new model of industrial and labor relations is built on the concept of a systemic integrated process. We can say most approximately: production is no longer seen as a series of successive technological processes, rather it is a comprehensive and simultaneous process, where all aspects are related to each other. Modern developed societies are in the process of transition from societies in which labor organization was defined by the technology of engineering production, to societies, where organic information systems start to determine it. The old model of labor organization was like a clockwork, the new one reflects the configuration of rather a biological order, in which the whole is different from the sum of its constituents. The novelty of the concept is that a person as an employee has a huge impact on the work of the entire system; in other words, in order to work productively, the workers need to understand how this whole is organized and how to become its active participant.

In Holland, professional school received a fairly wide development already in the second half of the XIX century - the period of its industrialization. A relatively low level of technology and production at that time determined the purely practical (applied) orientation of vocational training of workers, which was mainly carried out in schools of apprenticeship.

In the Netherlands, there is a developed system of professional education, and participation in this sector is relatively high. In order to imagine the system and participation in vocational education and training in the perspective, it may be noted that in the Netherlands the population is small, about 17 million people, with the labor market of approximately 9 million employees.

In the transition year of high school (for students from 12 years), students are divided according to abilities into two streams: junior and senior stages of general secondary education. The junior secondary education has directions, one of which is professionally oriented. Students are taught professionally oriented disciplines along with general subjects. Then students may transfer to vocational training, which consists of a variety of programs in terms of length, complexity and organization (for example, the so-called trajectory of professional training and job-oriented path, which are, respectively, the school and the dual ones). After completing school vocational training students get an opportunity to continue their studies in vocational education system, which is part of the higher education and is called higher professional education. According to a study conducted by M. Mulder (2012) the proportion of students in the age group of 16 - 21 year olds in professional education is 68%, i.e. 2/3 of all students. Such mass participation in professional (not academic) education is very different from the countries all over the world which have no developed systems of vocational education. In the Netherlands, there is a binary system of higher education, in which universities are responsible for the academic education and higher professional educational institutions - for vocational education. In institutions of higher professional education applied research aimed at the needs of regional organizations or small and medium-sized companies, which are not included in the more general or purely scientific research in universities is conducted.

In Belgium, as well as in the Netherlands, the oldest form of vocational training is apprenticeship in self-employment sector. Back in the Middle Ages, the guilds of large cities developed a practical doctrine with students, artisans and craftsmen hierarchy. Only in 1906, these apprenticeships were ratified by the decision of the Ministry, and training grant was issued to the owners, who recruited young students. In 1947, a formal structure for the vocational training of traders and craftsmen was established. The existing structures and the types of training programs for self-employment and small and medium-sized enterprises were established in Royal Decree of 4th October 1976, at that time the Institute for Continuing Education was organized for medium-sized entrepreneurs. In 1991, this non-commercial institute was converted by the order to a public organization – the Flemish Institute for Independent Entrepreneurs.

Education for social advancement originates in the XIX century in the schools of education for adults, and technical schools. Adult education is one of the first institutionalized forms of adult training in Belgium. The aim was to consolidate and extend the knowledge acquired in primary school. There were three levels: basic education, in-service training and practical training courses. Schools for education for adults were designed for the age group of 12 - 30 year olds.

The first technical schools emerged at the initiative of the Flemish Community in the first half of the XIX century. They can be regarded as schools for adults with a specific technical element, designed for the elite among the workers. In the 80's there began the search for the niche of initial vocational training. Since 1887 schools for adults have been elected for subsidized "special" courses. Those practical courses were designed for the advancement of the knowledge and skills acquired as a result of high professional standards set out in agriculture, industry and trade. The courses were designed to meet the growing demand for a more highly educated workforce. Thanks to legislation on the school leaving age of 19th May 1914, which obliged all children to go to day school until the age of 14, it became possible to raise the standards for admission to the evening school. The Act of 29th July 1953 provided for four types of adult education: technical courses, vocational courses and temporary courses. In 1953 the restrictive law was issued: new courses should be organized only when there is a clear economic or social need for them. This law (School Pact) was abolished in 1959. Royal Decree of 14th November 1962 regulates the same for higher education courses. In 1970, "education with a limited curriculum" was replaced by "education for social advancement".

The authorities responsible for employment, gradually paid attention to the search of jobs for workers and retraining of the unemployed. After the Second World War there was a shortage of

skilled workers in the dwelling construction sector. In 1944 the state mediation service in finding a job was set up. In 1961, the institution was renamed the State employment service. One of its tasks was to set up vocational training centers. Eventually there appeared a network of training centers in the sectors of secondary and post-secondary education. The goal was to reduce the shortage of qualified personnel on the labor market. Since 1963, these centers have been opened to non-profit mediators, and not just the unemployed. In 1985, the State Employment Service was divided on the community basis. On the Flemish side the Flemish Service for Employment Mediation was founded in 1989, and its powers were transferred in fact to the public employment service of Flanders. In 2006, Flanders mainstreamed employment services for the disabled and for employers in the regular labor market into the Flemish Public Employment and Vocational Training Service.

For comparison, in Russia, too, vocational training was carried out in the form of apprenticeship. Many progressive Russian figures, like their contemporaries in Western Europe, criticized the obsolete forms of vocational training and suggested ways of reforming it. For example, the great Russian teacher K.D. Ushinsky (1868) wrote that "the establishment of vocational schools will allow to bring production into line with the requirements of technical progress, to eliminate immoral apprenticeship system, train personnel of domestic experts".

In the middle of the XX century the following requirements to the system and contents of vocational education in Russia were formulated: meeting the needs of a developing economy, competitiveness of the trained personnel, a mandatory basis - general education, diverse-typed and multilevel nature of vocational schools, depending on the basic general education, practical orientation of training and clear specialization, the gradual replacement of apprenticeship by craft schools, the combination of labor and apprenticeship of teenage workers with their training in the evening and Sunday schools. The peculiarity of the Soviet period of the formation of the vocational education system was the fact that the ideological, social and political factors of the development of vocational education came to the fore.

The history of professional education, including vocational education, Russia should be seen as a holistic socio-historical process in accordance with the laws of social, economic and political development of the country.

The periodization of the history of professional education in Russia is offered by S.Y. Batyshev, A.M. Novikov & E.G. Osovsky (2003) in the book "History of vocational education in Russia". It clearly traces the main periods of development and historical dynamics of the formation of a broad humanistic understanding of vocational education.

The first period is the emergence of different forms of vocational training at the early stages of the Russian civilization, the birth of a vocational school and the beginning of the theoretical understanding of vocational education in the industrial era (XVI - the first half of XIX century.).

The second period is the development of vocational education and vocational and educational thought in the era of the industrial formation of Russia, the formation of the system of state vocational schools and development of social-pedagogical movement in the field of vocational education (the second half of the XIX century - 1917).

The third period is the conversion and development of vocational education system in the post-revolutionary decades, during the restoration and industrialization of the Soviet economy, the initial stage of institutioning of professional pedagogy (1917-1940).

The fourth period is the establishment and operation of the system of state labor reserves as the vocational education system, reflecting the authoritarian party-state setup of the social development of Russia, activation of the development of industrial training methodology and the formation of the system of training of industrial-pedagogical personnel (1940-1958).

The fifth period is the development of vocational education in the Russian Federation in the conditions of liberalization of the society and socio-economic reforms of 1960-1980s, the transformation of labor reserves in the system of vocational education and transition to comprehensive vocational education, the establishment of scientific centers for vocational

education (1959-1990).

The sixth period is the development of vocational education in the Russian Federation in the conditions of democratization of the society and transition to market relations in the economy, the period of differentiation and diversification of the vocational education system (1991-present time).

Russia historically developed its own original system of professional education, the hallmarks of which were centralization, stationary character and fundamental nature. Centralization assumed the existence in Russia of a general governing body, stationary character - the presence of a wide network of specialized schools of personnel training, the fundamental nature - organic interrelation of general and vocational education.

4. Discussions

The works of Russian scientists in the field of professional pedagogy, history of vocational education and training of personnel S.Y. Batyshev, A.M. Novikov & E.G. Osovsky (2003), *V.P. Lednev (1975)*, G.M. Romantsev (1997), *L.Z. Tenchurina (*1998), V.A. Fedorov (2001), N.V. Ronzhina (2014) contributed to the theoretical understanding of various aspects of the research.

When studying the problem and comparing the ways of its decision in Russian educational institutions the authors turned to the works of E.V. Tkachenko (2007), A.M. Novikov, V.A. Popkov & E.V. Tkachenko (2008), G.M. Romantsev, B. Tidemann, A.V. Efanov & E.Y. Bychkova (2015), E.M. Dorozhkin & N.K. Chapaev (2015), N.N. Davydova & E.M. Dorozhkin (2016), G.M. Romantsev, A.V. Efanov, A.V. Moiseev, E.Y. Bychkova, N.P. Karpova & B. Tidemann (2016), N.K. Chapaev, A.G. Erofeev & L. Dvořáková (2016). The respectful attitude to the historical and pedagogical experience in implementing cardinal reforms in education is necessary. The total consideration of both positive and negative facts, and professional learning outcomes allow us to design the optimal route map of educational reforms and avoid the repetition of the mistakes of the past.

Considerable material on the history and current state of systems of vocational education, the role of the labor market and society needs in professional guidance, the national policy in the field of vocational education in Belgium and the Netherlands is provided in the publications: Labour market information and guidance in Belgium (2016), Labour market information and guidance in the Netherlands (2016), Spotlight on VET Belgium (2015), Vocational education and training in the Netherlands (2016). The analysis of the literature makes it possible to state that the Russian researchers have accumulated considerable experience in the study of West-European and Russian theory and practice of vocational education. However, it should be noted that the vocational education systems in Belgium and the Netherlands were almost no special subject of study.

5. Conclusion

As a result of our study we can state that at the present stage the vocational education system is developing as part of the educational system in the direction of integration of general and vocational education. The widespread introduction of new technique and technology was the stimulus to increase the qualification level of the workforce and the emergence of new professions requiring prolonged special training and general education. From the mid 70s in Western Europe there was a new economic situation, which is associated with the onset of the technological stage of the industrial revolution.

New conditions determined the direction of the intensification of the development of the system of education and vocational training, the changing of its role in the society. The sharp demarcation, the opposition of the general education to professional, a dead-end nature of vocational education conflicted with the whole complex of conditions that determined the new situation in the development of all spheres of Western societies. The interrelation of general and

vocational education has been recognized as the leading trend in the development of educational systems, a problem that required a comprehensive development and solution.

This stage is characterized by mass character of vocational education and increase of its level educational institutions that train skilled workers acquire the status of secondary schools (in Belgium - professional and technical schools, in the Netherlands - preparatory vocational schools, secondary vocational schools, industrial apprenticeship courses in secondary vocational education). This significantly strengthened the link between the educational system and the production system, which is reflected in the creation of a whole network of links of matching the policy of vocational training with industrial circles, in the implementation of a series of measures aimed at establishing close links and cooperation between educational institutions and enterprises (in Belgium - getting vocational secondary education on the job, the system of industrial apprenticeship, apprenticeship in the self-employment sector when they interact with employment services, centers for education and training, practice in industry or at an enterprise; in the Netherlands in industrial sectors advisory bodies in which social partners and the educational system have equal representation were set up, on the regional level Contact centers for education and labor are expanding, their purpose is to coordinate and stimulate contacts between schools and firms). Three types of secondary education - academic, general and vocational in the Netherlands and technical and art education in Belgium, are recognized as equal, which is supported by a system of transitional classes between different types and levels of education.

The materials of this article can be useful for teachers and professionals in the field of general and vocational pedagogy.

For the further study the issues of improving pedagogical training of vocational teachers, based on the creative application of a positive West-European experience in modern conditions of reforming vocational education in Russia and integration of Russian higher school into the international academic community are of particular interest.

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