
THEORETICAL FOUNDATION OF VOCATIONAL EDUCATION AND TRAINING IN EU COUNTRIES



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Abstract. *New approaches to the development of vocational education and training (VET) in EU in the context of European strategies on lifelong learning are analysed. The author discusses new research findings in the European VET conceptualization taking into account the changes in its character, functions, roles and ways of VET development in EU countries. It has been stated that modern European concepts of VET development is being elaborated within three perspectives – gnoseological and pedagogical, structural and systematic, social and economic. The article emphasises the structural and systematic dimension of VET based on international classifications (ISCED 2012, European Qualification Framework). Within the changes in VET landscape, some challenges are becoming vital – that is appearance of new sectors in VET; growth of the VET providers on higher qualification levels; dissemination of new professional curricula, qualification programs for unemployed youth and other categories of population, etc. Quite challenging an issue of building the common view on the perspectives based on benchmarking and identification of terminology remains, beginning from the historically different interpretation of ‘vocational education’ in EU countries. The transition of VET to a competence-based approach showed national differences in different interpretations of ‘competence’ due to the peculiarities in institutional structures and labour processes in various EU countries.*

Key words: *concept; the European Union; innovations; model; peculiarities; system; traditions; vocational education and training.*

INTRODUCTION. PROBLEM STATEMENT

In the era of rapid and diverse social and global change, an issue of vocational education and training (VET) modernization in EU countries gains a sophisticated interdisciplinary discourse. The components of it are: EU policy documents, education policy research as well as researches in the realms of philosophy of education, educational innovations, sociology of education, comparative education; international VET projects; analytical reports presented by professional networks and associations, etc.

VET researches have proven its importance and relevance amid fast changing political, economic, social, demographic and technological context of modern VET development and extensive reforms in national VET systems in EU countries.

LITERATURE REVIEW

Many Ukrainian scholars are studying various aspects of VET in foreign countries. Among them are: N. Abashkina, N. Avsheniuk, N. Bazeliuk, N. Bidiuk, T. Desiatov, N. Dupak, A. Kaplun, N. Korsunskaya, T. Krystopchuk, O. Lokshyna, L. Lukianova, N. Nychkalo, O. Ogienko, N. Paziura, V. Radkevych, S. Sysoieva, H. Tovkanets, O. Shcherbak and other. In 2015 the Laboratory of Foreign Systems of Vocational Education and Training was formed in the Institute of Vocational Education and Training of the National Academy of Educational Sciences of Ukraine. Within the state order its scientific staff study different aspects of VET system development in EU countries. Their research resulted in such scientific publications as the monograph, manuals, thesaurus of vocational education and training in EU, scientific articles. However, little research has been done on theoretical foundation of VET development in EU countries, including the most topical ideas, theories and concepts of professional development of future and already working specialists. In this article we will analyse new approaches to the development of VET systems in EU countries in the context of the European strategy in lifelong learning which is based on such key principles: new basic skills; growth of investment into human resources development; innovations in teaching and learning; learning assessment (including non-formal and informal); development of career guidance and consultancy in vocational education and training; making education and learning more accessible for those who want to learn.

The elaboration of lifelong learning conception began in 1970s, albeit its reconsideration marks the end of the 20th century. It was the period when the innovative nature was outlined – combination of the education logics (evolving citizens' capabilities) and logics of production (best use of human resources), aimed at two systems convergence (general and vocational education).

The influence of the European strategy of lifelong learning on crucial changes in national VET in EU countries resulted in various researches performed by the European scientists (S. Akkerman, A. Bakker, M. Brockmann, L. Clarke, Th. Deissinger, Ph. Mehaut) and the findings of European research projects led by European Centre for the Development of Vocational Training (Cedefop, 2004; Cedefop, 2014; Cedefop, 2017).

MAIN RESULTS

Nowadays there are two trajectories of changes in the area of VET: (1) apprenticeship (Austria, Denmark, Germany) and extension of the system by adding new elements (especially in the sphere of higher education); (2) VET diversification in its understanding as a structural element of life long education (France, Finland) (Cedefop, 2017).

For our research we consider the results of the research project "*The changing nature and role of vocational education and training in Europe*" as the most valuable. The project was performed under the aegis of the European Commission in the European Centre for

the Development of Vocational Training in 2016-2018. The results of this project serve as a basis for European conception of innovation development of vocational education and training in current context and for the future.

On the first stage of the project the experts made a review of the ways of identification and explanation the VET phenomenon, developed the theoretical model for the analysis of national terms and conceptions, scrutinized the historical changes in national understanding of the concept. The results of the scientific analysis proved the variety of way in identifying the VET phenomenon in national context in the European countries – different organizational models, its specific features, concepts, terminology, etc. On this basis, we conclude that VET in European context is very difficult to identify as an institutional integrity, since in many cases it meets the other spheres of education. Taking the above mentioned into account, the European Centre for Development of Vocational Training defines VET as *‘education and training which aims to equip people with knowledge, know-how, skills and/or competences required in particular occupations or more broadly on the labour market’* (Cedefop, 2014). As such wide definition does not contain all main characteristics of VET, it was suggested to specify the concept taking into consideration three aspects – gnoseological and pedagogical perspective, structural and systematic perspectives, socio-economic and market perspective.

The European and world education researches that contain systematic analysis of VET serve as a basis for the conceptual framework of analysis. The research held by Moodie (2008) aimed at studying different dimensions of VET namely epistemological, structural and pragmatic (practical) etc. The definition of VET in the light of each of these aspects has its own peculiarity – in the context of epistemological dimension it is based on the understanding VET as special way of cognition and training; structural dimension sees VET in the context of its levels classifications (professional, educational, cognitive etc.); pragmatic dimension places VET either to ‘residuals’ (not everything is included) or to ‘casuals’ (that will happen when VET will be represented in specific place and time). Discussing the new approaches to VET studying, the author sees the perspective in combination of all VET dimensions, giving such a definition of VET *‘elaboration and application of skills and knowledge for semi-skilled professions which are necessary for the society in the course of historical development’* (ibid).

The significant impact on the conceptualization of critical areas of vocational education and training makes the research by Rojewski (2009) who thinks that modern VET conception need to include such components as: (1) purpose, theories, models; (2) teacher-education for VET system; (3) curriculum; (4) variants of education services; (5) clientele; (6) student assessment; (7) program evaluation etc. Each component is described in its process (in the past, current and emerging situation).

Billett (2011) studies different VET models, its peculiarities and scenarios. His monograph served as a source for the identification of all the components of modern conception framework and holistic conception of European vocational education and training.

The results of the research held by Cedefop show the existence of thirty (or even more) specific national approaches to VET in Europe (Cedefop, 2017).

Ukraine has its own ancient pedagogical traditions and history of vocational education and training. In the context of integration and globalization the phenomenon of VET from its organizational and systemic perspective becomes topical.

Vocational education and training from the viewpoint of system of education

European scientists elaborated a lot of various ideas and conceptions, which build the basis for modern VET development and can be used for conceptualization of *VET as developing system*. For example, such conceptions as: VET as a sector in the system of education (G. Moodie); VET as a system (W.-D. Greinert); VET as an organizational sphere (G. Hefler, J. Markowitsch); VET as a culture (A. Heikkinen) and other.

Beginning from 1976, the International Standard Classification of Education (ISCED) serves as a key instrument for international comparisons in education. It is important to understand how vocational education and training are conceptualized in this classification. The first variant of ISCED 1976 included neither the definition of VET nor its program. The programs were classified only by the levels of higher secondary education (e.g. agricultural). Only the next ISCED 1997 had the description of VET and its program orientations. It should be noted that in this document was introduced such criteria as ‘*program orientation*’ (general, pre-professional and professional) and ‘*mission of the program*’ (labour market, access to tertiary education), which the important step towards separating vocational education from the general school education.

ISCED 2011 which was adopted during the 36th session of the UNESCO General Conference in 2011 introduced such new tendencies as *modularization of education* (appearance of a new measurement tool – differentiation between ‘full and partial qualifications’) and *placing vocational area of education into the structures of tertiary (higher) education* (in the classificatory there is a differentiation between ‘academic and vocational programs’ on higher qualification levels) etc.

Organizational models of VET in EU countries in the context of common education and research area

The definition of integration systems in VET usually begins with understanding the models that are inherent for some country, as each European country builds the sphere of VET in its own way taking into consideration historical traditions, management peculiarities, regulation mechanisms in education etc. Currently in Europe from three until five main VET models are distinguished.

The Classification presented by the Institute of Labour Economics (Germany) provides five models for VET: (1) technical and vocational schools or colleges; (2) centres for vocational training; (3) apprenticeship; (4) dual system which combines studying at educational establishment and on-the-job training; (5) informal professional training. The basis of the classification makes the fact about the place of either studying at educational establishment or apprenticeship in vocational education and training. Here we speak about different organizational models of education and training – from education which is performed entirely at vocational colleges and is not completed with training (gaining qualification) as an apprentice at a factory or firm to apprenticeship programmes without theoretical education at vocational schools or colleges. Between these two poles, there is a variety of other models, in particular dual models which combine education at an educational establishment with apprenticeship etc. (Cedefop, 2017).

Another classifier by Prof. Dr. W.-D. Greinert (Institute of Vocational Education and Work Studies in Berlin, Germany) distinguishes the following VET models in Europe: (1) traditional apprenticeship model; (2) vocational schools model; (3) labour market orientated model; (4) dual model (Cedefop, 2014).

If we consider that traditional apprenticeship (which is still in practice all over Europe) is usually confined to construct sphere and combines only small percentage of youth aged 16-19, we may focus on three historical models of vocational education and training in EU countries – vocational schools model, market-orientated model and dual model.

Vocational schools model. Within this model vocational education and training is regulated by the state and its structure. At the institutional level this is the system where the key element is a school. Traditional example of such vocational education and training can be France and South Europe countries.

Market-orientated model. Such VET organization is defined by regulatory factors of ‘labour’ and qualification needs of labour market. On the one hand, this model implies to the initiative of every citizen of a country, on the other hand to attraction and obligation of intermediate and training personnel from different companies, firms, agencies etc. that can professionally perform vocational training in accordance with emerging situation and manufacturing sector needs.

The type of market-regulated vocational training system can be found in Great Britain, the USA and Japan. Having a significant difference in socio-economic conditions and traditions, these countries have one common feature – vocational training for youth is not connected with the system of general school education. Moreover, these countries do not have specially regulated VET system that would guarantee a qualification minimum to each young person.

Dual model of vocational education and training. Based on its feature characteristics this model is market-orientated model with state support. Originally this model exists in German-speaking countries such as Germany, Austria and Switzerland. Some researches see it as one of heterogenous (mixed) models of vocational education and training, which are characterized by the integration of different types of management. More often, it is the combination of market and state management in some proportion. In world history of education, such models are called “cooperative training systems”. The segments of such model in modern times can be found in majority of national systems of vocational education and training.

We carried out the analysis of VET organization in European countries considering its historical models. But modern researches show the change in the nature and role of the VET phenomenon during last two decades which can be described by such key features: diversification of providers, levels of VET, target groups etc.; increase of horizontal and vertical flexibility; attention to the elements of education based on efficient work; integration (hybridization) of education system, curriculum, qualifications etc.

In the modern world the strategic aim of each EU country is the development of innovative education. The comparison of requirements to innovative education stated in European and national policy documents, expert reviews and research ideas allows us to characterize the feature characteristics of future *European innovative system of vocational education and training*. It will provide:

- development of professional environment which corresponds to skills and needs of a personality;
- multilevel vocational education as several ways in education programs which

presume different studying time and different specialties; succession of vocational programs of different levels;

- new organization forms and the function of vocational education establishments by distribution of functions between education establishments, companies and organizations that are a part of education complex/cluster;

- development of maintenance services in continuing VET, such centres as adaptation, diagnostic, didactic, psychological centres etc.;

- improvement of compatibility of national systems of VET by stating and implementing the European Qualification Framework and compatible with it National Qualification Frameworks which are to provide the permeability between the different sectors in education (the highest level in qualification frameworks comprises both sectors with visible connections between the elements of ECTS in higher education and ECVET – in VET), and also provide international recognition of qualification documents;

- increase in quality of VET by development of efficient quality systems (the level of vocational education establishment, national and European levels);

- use of innovative educational methods and techniques; efficient use of modern innovation technologies and distant education in the context of creation of common European open education area (Pukhovska, 2017).

Conceptual ideas of European researchers in the area of VET development in the EU countries are tightly linked to EU strategy “Europe – 2020” that unveils European social and economic conception of the 21-st century. The main aims and ideas of this conception are enlisted in the Bruges Communiqué on enhanced European cooperation in vocational education and training (2010). Among them are the following: ‘attractive and inclusive vocational education’, ‘quality initial vocational education’, ‘flexible vocational education based on education outcomes’, ‘common European area with clear qualification systems’, ‘international mobility’. Further conceptual development of these ideas can be found in key political documents, such as European Commission Communication “Rethinking education: investing in skills for better socio-economic outcomes” (2012), “New priorities for European cooperation in education and training” (2015) and other.

CONCLUSIONS

We have come to the conclusion that thanks to focused EU policy these instructions step by step are being moved into the sphere of practice-orientated education and the shift of scientific research in the sphere of VET in the EU countries in general. Highlighting the efforts of national governments in preservation and enhancement of cultural identity and sociocultural VET function in EU countries, scientists work on the theoretical foundation of the European VET based on the integration of empirical, comparative and prognostic research. An essential source of such findings can be the results of research projects within European Centre for the Development of Vocational Education and Training. During the last couple of years at this Centre a large research project is being performed, concerning the conceptualization of European VET regarding changes in character, functions, roles and ways of this phenomenon development in EU countries. Combination of the three platforms or perspectives of scientific analysis (gnoseological and pedagogical, structural and systematic and socio-economic) enables us not only to show the conceptual researcher’s ideas, but also to combine the interests of all stakeholders – scientists, politicians, governors and practitioners.

REFERENCES

- Akkerman, S. F., & Bakker, A. (2011). Crossing Boundaries Between School and Work During Apprenticeships. *Vocations and Learning*, 5(2), 153-173. doi:10.1007/s12186-011-9073-6
- Billett, S. (2011). *Vocational Education: purposes, traditions and prospects*. Dordrecht: Springer.
- Brockmann, M., Clarke, L., Méhaut, P., & Winch, C. (2008). Competence-Based Vocational Education and Training (VET): The Cases of England and France in a European Perspective. *Vocations and Learning*, 1(3), 227-244. doi:10.1007/s12186-008-9013-2
- Cedefop (2010). *The Bruges Communiqué on enhanced European Cooperation in Vocational Education and Training for the period 2011-2020*.
- Cedefop (2014). *Attractiveness of initial vocational education and training: identifying what matters*. Cedefop research paper; No 39. Luxembourg: Publications Office.
- Cedefop (2014). *Terminology of European education and training policy: A selection of 130 key terms*. Luxembourg: Publications Office of the European Union. doi:10.2801/15877.
- Cedefop (2017). *The changing nature and role of vocational education and training in Europe. Volume 1: conceptions of vocational education and training: an analytical framework*. Luxembourg: Publications Office. Cedefop research paper; No 63. doi:10.2801/532605
- Deissinger, T. (2009). The European Qualifications Framework and the European Lifelong Learning Perspective: How European countries are preparing to cope with the new philosophy of VET. *International Journal of Training Research*, 7(1), 1-18. doi:10.5172/ijtr.7.1.1
- Greinert, W., & Hanf, G. (2004). *Towards a history of vocational education and training (VET) in Europe in a comparative perspective: Proceedings of the first international conference, October 2002, Florence*. Luxembourg: Office for Official Publications of the European Communities.
- Hefler, G. & Markowitsch, J. (2013). Seven types of formal adult education and their organizational fields: towards a comparative framework. In Saar, E.; Ure, O. B.; Holford, J. (eds). *Lifelong learning in Europe: national patterns and challenges*. Cheltenham: Edward Elgar, 82-113.
- Moodie, G. (2008). *From Vocational to Higher Education: An International Perspective*. Open University.
- Pukhovska, L. (2017). Profesiina osvita ta innovatsii: dosvid krain Yevropeiskoho Soiuzu [Vocational education and innovations: the experience of EU countries]. *Naukovyi visnyk Instytutu profesiino-tekhnichnoi osvity NAPN Ukrainy. Serii: Profesiina pedahohika*, 14, 124-132.
- Rojewski, J. W. (2009). A Conceptual Framework for Technical and Vocational Education and Training. In: Maclean R., Wilson D. (Eds.), *International Handbook of Education for the Changing World of Work*. Springer, Dordrecht, 19-39.