CHANGING THE MODERN EDUCATIONAL PARADIGM ON THE EXAMPLE OF EUROPEAN UNION AND UKRAINE

DOI: https://doi.org/10.24115/S2446-6220202171725p.293-303

Lyubov Kanishevska^{i©}
Svitlana Tolochko^{i©}
Oksana Voitovska^{ii©}
Oksana Pershukova^{iv©}
Iryna Shcherbak^{v©}

ABSTRACT

The purpose of the present academic paper lies in identifying the transformational processes of the educational paradigm within European countries. The research methodology is quantitative; it is based on the method of statistical analysis of development indicators of the EU states' education systems according to Eurostat, the World Bank 2009-2019. The results demonstrate a significant differentiation of the integration of different educational paradigms within European countries. The experience of the EU states bears evidence to the differentiation of mechanisms for financing education. In general, the following financing mechanisms predominate, namely: 1) centralized + local + local transfers (7 countries); 2) centralized in 6 countries; 3) centralized + local transfers in 5 countries. The theoretical and practical value of the research lies in considering the identified slow transformations of educational paradigms by international organizations when developing a policy for ensuring the quality of education within the EU.

Keywords: Concepts of education in the EU. Educational paradigm. The concept of "the opening of education". Lifelong learning. "knowledge and competence" paradigm.

MUDANDO O PARADIGMA EDUCACIONAL MODERNO A PARTIR DO EXEMPLO DA UNIÃO EUROPEIA E DA UCRÂNIA

CAMBIANDO EL PARADIGMA EDUCATIVO MODERNO SIGUIENDO EL EJEMPLO DE LA UNIÓN EUROPEA Y UCRANIA

RESUMO

O objetivo do presente artigo acadêmico é identificar os processos de transformação do paradigma educacional nos países europeus. A metodologia da pesquisa é quantitativa; baseia-se no método de análise estatística dos indicadores de desenvolvimento dos sistemas de educação dos Estados da UE de acordo com o Eurostat, o Banco Mundial 2009-2019. Os resultados demonstram uma diferenciação significativa da integração de diferentes paradigmas educacionais nos países europeus. A experiência dos Estados da UE atesta a diferenciação dos mecanismos de financiamento da educação. Em geral, predominam os seguintes mecanismos de financiamento, nomeadamente: 1) transferências centralizadas + locais + locais (7 países); 2) centralizado em 6 países; 3) transferências centralizadas + locais em 5 países; 4) transferências locais + locais em 5 países. O valor teórico e prático da investigação reside em ter em conta as lentas transformações identificadas dos paradigmas educacionais por organizações internacionais ao desenvolver uma política para garantir a qualidade da educação na UE.

Palavras-chave: Conceitos de educação na UE. Paradigma educacional. O conceito de "abertura da educação". Formação contínua. Paradigma "conhecimento e competência".

RESUMEN

El propósito del presente artículo académico radica en identificar los procesos transformacionales del paradigma educativo dentro de los países europeos. La metodología de investigación es cuantitativa; se basa en el método de análisis estadístico de los indicadores de desarrollo de los sistemas educativos de los estados de la UE según Eurostat, el Banco Mundial 2009-2019. Los resultados demuestran una diferenciación significativa de la integración de diferentes paradigmas educativos dentro de los países europeos. La experiencia de los estados de la UE evidencia la diferenciación de los mecanismos de financiación de la educación. En general, predominan los siquientes mecanismos de financiamiento, a saber: 1) transferencias centralizadas + locales + locales (7 países); 2) centralizado en 6 países; 3) transferencias centralizadas + locales en 5 países; 4) transferencias locales + locales en 5 países. El valor teórico y práctico de la investigación radica en tener en cuenta las lentas transformaciones identificadas de los paradigmas educativos por parte de las organizaciones internacionales al desarrollar una política para garantizar la calidad de la educación dentro de la UE.

Palabras-clave: Conceptos de educación en la UE. Paradigma educativo. El concepto de "apertura de la educación". El aprendizaje permanente. Paradigma de "conocimiento y competencia".

INTRODUCTION

The need for universally recognized changes in the educational paradigm and educational reform is systematically discussed in the scientific literature (BORG; MAYO, 2005). Technological changes have necessitated the development of a new paradigm in the field of education. The existing concepts, proposed in scientific circles, are diverse and relate to individual components of the education system (in the context of subjects and interested parties). The variety of ideas can be traced in the outlining of the following paradigms, namely: networked learning, e-learning, smart-learning, "the opening of education", blended learning, life-long learning, "knowledge and competence" paradigm. These concepts have come to the fore as a result of the penetration of technologies into the educational environment, the needs of the labor market in professionals with practical digital skills, the need for ongoing training and support of competences.

As a result, the EU states' policies are aimed at developing and implementing a new paradigm of education. However, practice shows that the education system always lags behind the needs of the labor market, and the integration of the new paradigm is accompanied by a number of gaps and problems. In particular, the different degree of influence of educational policy on educational inequality within the EU is one of the urgent issues, especially when comparing Western European countries and post-communist countries (SCHLICHT; STADELMANN-STEFFEN; FREITAG, 2010). The differences are also associated with religious, cultural and political features in the EU countries (DAUN, 2011). For instance, in 2000, three fundamental concepts of European educational policy have been adopted, namely: "the triangle of knowledge... education, research, and innovation" (KOUTRAS & BOTTIS, 2013; TELLING & SERAPIONI, 2019). Since the beginning of 2010, scientists have been discussing the need to update the paradigm in the field of education in favor of "knowledge and competence" concept (MULDER, WEIGEL & COLLINS, 2007; PASIAS & ROUSSAKIS, 2012; DODMAN, 2016; SYSOIEVA & MOSPAN, 2018). The concept of competence development arises due to the need for professional education and the needs of the labor market in highly qualified specialists (MULDER, WEIGEL & COLLINS, 2007).

The present research focuses on the following paradigms of education in the EU, namely: "the opening of education" concept, life-long learning, the paradigm of "knowledge and competence". This is due to the priority of the outlined concepts over others and the lack of thorough investigations on the state of integration of paradigms in the EU education system. The purpose of the present academic paper lies in identifying the transformational processes of the educational paradigm within European countries.

LITERATURE REVIEW

Various paradigms in the field of education have been systematized in the scientific literature. Jones (2015) systematizes the conceptual fundamentals of the networked learning paradigm, formed over the past 15 years, identifying alternative concepts of e-learning, technology-enhanced learning. Balyk & Shmyger (2017) postulate the transition from e-learning to the smart-learning paradigm. Herewith, Cosmulese et al. (2019) consider the concept of "the opening of education" within the EU, formed due to the need of countries for innovation, dynamic dissemination of digital technologies in order to stimulate economic development. The proclamation of the goal of forming "Europe of Knowledge" within the EU (PASIAS & ROUSSAKIS, 2012) stimulated the development of paradigms in the field of education based on neoliberal technocratism (BORG & MAYO, 2005; PADAKIS, 2009), privatization, performativity in accordance with the programs of international organizations. In 2000–2015, the convergence and centralized control of education policy planning within the EU is observed based on data, audit and digital technologies.

In the digital era, these concepts of education are based on the theories of behaviorism, cognitivism, constructivism, pragmatism, social-situational learning, computer-supported collaborative learning (Jones, 2015). Jones (2015) identifies three key concepts (new paradigms) of networked learning: affordance, agency, assemblage. Dodman (2016) identifies "knowledge and competence" as key educational paradigms. Recent initiatives at the European Union (EU) level bear evidence of a long history of introducing a competence-based approach to learning in the European educational environment (MULDER, 2014). Competences have been one of the most discussed concepts in both education and social policy for most of the last three decades. Strategic frameworks and programs emphasize their importance for stimulating growth and increasing productivity. Strategies within the EU are also designed to overcome changes in economic structures and build resilience to labor market shocks. (EUROPEAN COMMISSION 2018a, 2018b, 2018c).

In the framework of the educational system, the discussion of the concept of competence have revolved around the development of a theoretical and practical basis in order to implement a program of reforms focused on the ideas of integrated curricula, teaching and learning, centered on students, both in professional and academic directions (CEDEFOP, 2009a, 2009b; GORDON et al., 2012). Since the early 1990s, growing interconnections between European economies, combined with technological progress, the variability of political borders and, most importantly, the gradual elimination of internal border controls, have laid the fundamentals for an unprecedented relationship, namely: a comprehensive network of institutions, ideas, interests and mobility flows are linked by increasingly complex links. As a consequence, the need arises for a pan-European educational structure, the definition of a transnational discourse on the modern educational paradigm of learning and development, aimed at reaching consensus in terms of goals, accreditation of teachers and comparative learning outcomes (GORDON et al., 2012).

The emergence of a competence strategy is the most significant event nowadays towards consolidating the European educational discourse. Within the EU, the term "competence strategy" functions as a general term for the formation of a mixed set of policy initiatives and programs to reconcile school learning outcomes with the new social, economic and cultural environment. The basis of the competence strategy is the definition of key competences in the context of the "global knowledge economy", the diffusion of competence assessment systems in the EU, aimed at harmonizing qualification levels, increasing transnational mobility and ensuring transparency in terms of educational achievements (COUNCIL OF THE EUROPEAN COMMISSION, 2008). The transition to a system of competences means an extension of educational policy, including skills traditionally associated with learning, along with knowledge, behavior, attitudes.

Although the concept of competence education is linked to theories of knowledge transfer, the dual ability to use knowledge and skills in accordance with different contexts and for adapting previous knowledge in order to more easily obtain new information is a new dimension of the concept. This concept has undergone constant changes since the first introduction of the EU policy-making process in 1996 at the Berne (Switzerland) Symposium on discussing key competences in Europe. Therefore, politics, social-economic processes and the boom of digital technologies determine the policy in the field of education in accordance with the needs of the labor market. The EU educational programs are subordinated to the achievement of economic goals (CANKAYA, KUTLU & CEBECI, 2015). Economic theories often serve as the basis for new paradigms of education. Thus, the penetration of neoliberalism has led to the formation of a new EU educational policy, the evolution of various concepts of education, including life-long learning. The new capitalism requirements constantly give rise to the needs for the transformation of education and the evolution of concepts. Lifelong learning has become one of the main priorities of the EU's educational strategy.

METHODOLOGY

A quantitative methodology has been used in the present research based on the method of statistical analysis of development indicators of the EU states' education systems according to Eurostat, the World Bank 2009-2019. The basic indicators for assessing the state of implementation of modern educational paradigms are identified as follows:

- 1. Level of higher education by gender in the EU-27, 2009-2019,%.
- 2. Employment rates of recent graduates by gender in the EU-27, 2009-2019,%.
- 3. Participation rate in education and training (last 4 weeks) in the EU-27 (from 25 to 64 years), %.
- 4. Government expenditure on education, total (% of GDP).
- Structure of education expenditures on the part of central government, state government and local government (expenditures prior intergovernmental transfers and after intergovernmental transfers).

The identified indicators have been the basis for measuring the integration of the paradigm "the opening of education", life-long learning, "knowledge and competence" paradigm. The level of higher assessment has made it possible to determine the degree of openness of education for different segments of the population, as well as the level of educational equality within the EU. The level of employment of graduates also assesses educational inequality between males and females, as a result of which it measures the degree of implementation of the concept of ensuring accessibility, openness of education, quality of educational services and reduction of educational inequality.

The level of participation of the adult population in education and training programs assesses the state of integration of the concept of lifelong learning. Public expenditures and the structure of public expenditures are chosen to measure the level of penetration of the neoliberal concept, and the dynamics of reduction is a manifestation of a greater level of liberalization of education.

RESULTS

Despite the spread of cooperation policy and support for a common practice in the development of the education system, there are differences in the level of higher education within the EU (Figure 1). The average value of the level of higher education among the population aged 30-34 is 43,93% in 2019, the minimum value is observed in Turkey (31,4), Bulgaria (32,5), North Macedonia (35,7). Herewith, in terms of gender, the share of women with higher education exceeds. This indicates educational inequality. In Ukraine, the level of higher education is 82,671% (as of 2014), while among females – 88,815%, among males – 76,829%. Thus, the differences in the level of education depending on social-economic development are observed within the EU: developing countries being in the process of transition to a market economy are characterized by lower levels of education.

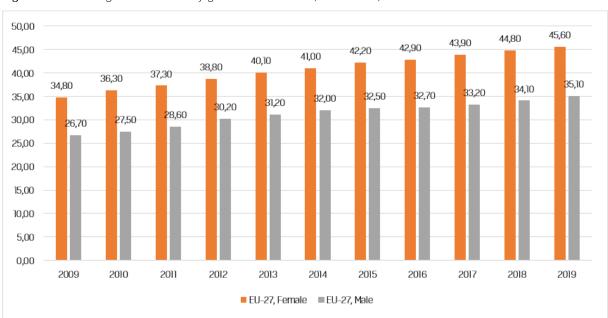
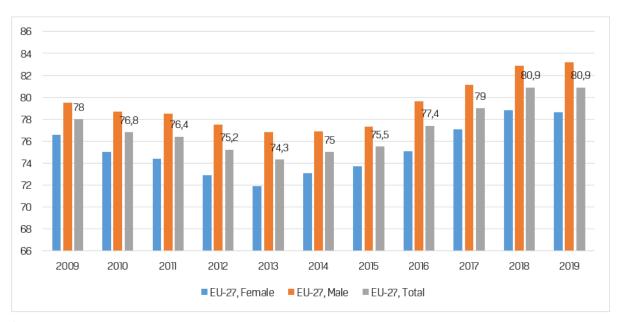


Figure 1. Level of higher education by gender in the EU-27, 2009-2019,%

Source: Eurostat (2021).

The increase in the level of higher education among the population could be the reason for the growth of employment among graduates (after 1-3 years of study). Herewith, the employment rate of women is lower compared to men – 78,6% and 83,2%, respectively, in 2019 (Figure 2). Consequently, educational inequality within the EU lies in the lower level of employment opportunities for women compared to men. On average, within the EU, employment rate of recent graduates amounts 80,61%, with a significant lag behind Turkey (57,8%), Northern Macedonia (57,2%), Romania (76,1%), Spain (73%), Greece (59,4%). The deviation from this indicator is 9,99%.

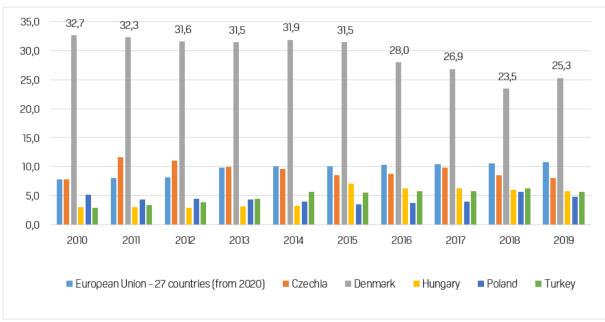
Figure 2. Employment rates of recent graduates by gender, in the EU-27, 2009-2019,%



Source: Eurostat (2021).

The participation of adults in educational and training programs varies significantly across the EU, averaging 25,3% due to high participation rates in Finland (29%), Sweden (34,2%), Iceland (22,2%), Norway (19,3%), Switzerland (32,4%). For comparison, the figure is low in Bulgaria (2%), Greece (3,9%), Croatia (3,5%), Romania (1,3%), Slovakia (3,6%), Serbia (4,3%).), Turkey (5,7%). In Ukraine, the level of population participation in formal and informal education and training aged 25-64 has amounted 0,7%, aged 15-24 – 55,5% in 2019, and by gender – 7,5% of women, 7% of men. Significant differences indicate different levels of implementation of lifelong learning concept and the level of awareness of the importance of adult learning, especially in developing countries. Thus, the EU's educational policy is differentiated depending on economic development and quality of life.

Figure 3. Participation rate in education and training (last 4 weeks) in EU-27 (from 25 to 64 years), EU-27, %



Source: Eurostat (2021).

Total expenditures on education within the EU vary (Figure 4), averaging 5,03% of GDP in 2009-2017 (capital, current and transfers). For comparison, expenditures in Ukraine average 6,25% of GDP, gradually approaching the EU level. The deviation of the indicator within the EU was 1,18% in 2017, and, therefore, the share of expenditures does not differ significantly within Europe. The countries with the largest share of expenditures on GDP are as follows: Belgium (6,29%), Denmark (7,33%), France (5,45%), Austria (5,25%), Finland (6,06%), Sweden (7,06%), Iceland (6,67%), and Norway (6,94%). The countries with the lowest level of funding are as follows: Greece (3,41%), Romania (2,69%), Serbia (3,59%), the Czech Republic (3,77%).

The relative share of public sector expenditures in Ukraine is 90%, including the central government - 19%, local budgets - 71%. Expenditures of the private sector amount 10%, including private firms - 1%, households - 10% (as of 2019). The structure of expenditures for service providers in Ukraine is as follows: 15% of funds are spent on preschool education, 20% on primary education, 22% on the first stage of secondary education, 7% on the second stage of secondary education, 5% on post-secondary education, 29% on short-cycle higher education, 1% on doctoral studies.

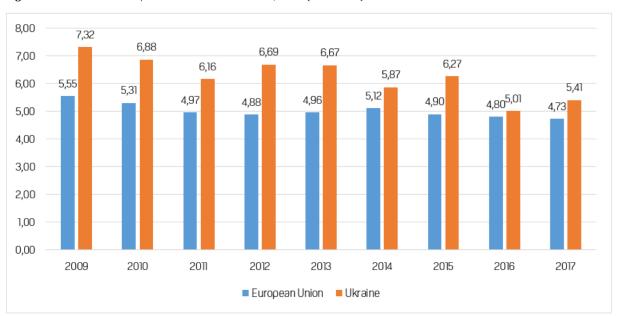


Figure 4. Government expenditures on education, total (% of GDP)

Source: World Bank (2021).

Within the EU, the structure of expenditures on education differs significantly from that of Ukraine. For instance, in Belgium, the central public expenditure of government prior intergovernmental transfers to primary education is 24,4% in 2017, expenditure of government after intergovernmental transfers - 24,3%, state government expenditure of government prior intergovernmental transfers - 70,9%, local government expenditure of government prior intergovernmental transfers – 4,6%. This means that in Belgium the financing of education is entrusted to public authorities, the level of decentralization is insignificant, and transfers are an uncommon investment practice. Thus, in Belgium, the field of education is centralized and controlled by the highest state authorities. A similar governance experience is observed in the following countries, namely: the Czech Republic, Denmark, Spain, Romania, Iceland, Norway (Table 1); in these countries, the share of central government expenditure of government prior intergovernmental transfers on primary education is in the range of 0,01% -30,0%. Herewith, the share of central government expenditure of government after intergovernmental transfers in 14 countries is in the range of 0,01% - 30,0%. In 13 countries (Bulgaria, Ireland, Greece, Italy, Cyprus, Luxembourg, Hungary, Malta, the Netherlands, Portugal, Slovenia, Slovakia, Turkey), the share of central government expenditures on primary education prior transfers is 75,1-100%. Consequently, the EU countries are characterized by either a high level of centralized funding of primary education, or a high level of decentralized funding. Along with this, in general, more developed countries are characterized by a lower level of decentralization. Among the EU countries, such a method of funding as the provision of educational transfers is also widespread, especially for Estonia, Latvia, Lithuania, Austria, Poland, Slovakia, Finland, and Bulgaria. This means that post-communist countries most of all use intergovernmental transfers to finance education.

Table 1. Classification of the EU countries by the structure of expenditures on primary education in terms of recipients, %

The relative	Central go	overnment	State gov	vernment	Local gov	vernment
share of expenditure s, %	Expenditure of government prior	Expenditure of government after	Expenditure of government prior	Expenditure of government after	Expenditure of government prior	Expenditure of government after
	intergovernment al transfers					
0,0 - 30,0%	7	14	4	3	15	12
30,1 - 50,0%	2	2	1	1	4	2
50,1 - 75,0%	5	1	2	3	3	3
75,1 - 100,0%	13	11	2	2	5	11

Source: calculated by the author based on Eurostat (2021).

For comparison, in Denmark, Romania, Sweden, Iceland, Norway, Iocal budgets account for about 75,1% – 100,0% of education expenditures prior interbudgetary transfers. In Estonia, Lithuania and Latvia, Poland, Romania, Slovakia, Finland, Sweden, Iceland and Norway, the share of intergovernmental transfers to education is in the range of 75,1% – 100,0%. Thus, the most common forms of financing education in the EU are as follows: 1) central government expenditures with transfers in the range of 0,01% – 30,0% in combination with local government expenditures with transfers in the range of 75,1% – 100,0% in combination with local government expenditures in the range of 75,01% – 100,0%.

Financing mechanisms for education also determine the policy and prerequisites for the implementation of the educational paradigm. Therefore, it can be assumed that in countries with a high level of centralized funding a higher level of control and audit of the quality of higher education operates, however, such control may be ineffective. As the experience of the EU countries shows, the mechanisms for financing education differ significantly. In general, the following financing mechanisms predominate, namely: 1) centralized + local + local transfers in 7 countries; 2) centralized in 6 countries; 3) centralized + local transfers in 5 countries. Public funding in combination with local transfers is typical for 3 countries; centralized funding together with state transfers and local transfers is observed in 2 countries; exclusively state funding is typical for 1 country; exclusively local funding is typical for 1 country; state funding in combination with local and local transfers is typical for 1 country.

DISCUSSION

Within the EU, there is a significant differentiation in the level of integration of the concepts of "the opening of education", life-long learning, "knowledge and competence" strategy. "The EU has added a social dimension to the predominantly neoliberal world agenda... However, due to cultural, religious, political, and other national and local patterns, there are still a number of differences among the education systems of Europe" (DAUN, 2011). As evidenced by statistical analysis and classification of countries by mechanisms and structure of funding, a high level of centralization and management control at the state level is a major disincentive to transformational changes in educational paradigms. The declared policy of cooperation and support of the unified practice of development of the education system within the EU in essence does not provide elimination of systemic problems of quality assurance of education (KASZTELEWICZ & TOMASZEWSKA, 2018). For instance, the paradigm of "the opening of education" is partly implemented through technologies and methods of blended learning, which has led to the evolution of the concept of e-learning and the concept of smart-learning. The life-long learning paradigm is poorly implemented in practice, especially in the states of Eastern Europe and postcommunist countries. This concept is more common in countries with higher levels of funding and socialeconomic development. As a result, the paradigm of "knowledge and competence" is also slowly implemented in practice, forasmuch as lifelong learning involves not only the use of knowledge by students in professional activities, but also the support of skills, skills development of the adult population as a whole. "Life-long learning has become the basic point in the EU's educational strategy" (CANKAYA, KUTLU & CEBECI, 2015).

In Europe, there are still problems with the openness of education; in particular, this is reflected in the different levels of employment of female and male graduates. Such educational inequality leads to a slow integration of the knowledge and competence paradigm: increasing the level of higher education in Europe has little effect on the employment rate of graduates, although, among those who have received higher education, a higher level

of participation in educational programs and lifelong learning is observed. Measuring the implementation level of the concept of ensuring accessibility, openness of education, quality of educational services and reduction of educational inequality indicates some problems in this area. The level of participation of adults in educational and training programs indicates a slow integration of the concept of lifelong learning. The lack of a coherent definition of the competence concept, the lack of a clear interrelationship between competences and efficiency are disincentives to the integration of the paradigm of "knowledge and competence". The paradigm of "competence" and its integration neither determines the value of knowledge nor is the cause of problems in the development of principles in the field of education. In the EU countries (France, Germany, the Netherlands, England), there are many problems in integrating the competence paradigm and evaluating the effectiveness of this paradigm (MULDER, WEIGEL & COLLINS, 2007). Along with this, neoliberalism has penetrated various subsystems of education, as evidenced by the reduction of government expenditures. Herewith, the disincentive to the liberalization of the education system is the widespread practice of centralized financing.

CONCLUSION

A significant differentiation of the integration of different educational paradigms within European countries has been revealed in the present research. There is a significant differentiation of the level of integration of the concepts of "the opening of education", life-long learning, "knowledge and competence". The paradigm of "the opening of education" is partly implemented due to technologies and methods of blended learning, which has led to the evolution of the concept of e-learning and the concept of smart-learning. The life-long learning paradigm is poorly implemented in practice, especially in the states of Eastern Europe and post-communist countries. The lack of a coherent definition of the competence concept, the lack of a clear interrelationship between competences and efficiency are disincentives to the integration of the paradigm of "knowledge and competence". This is due to the mechanisms of financing education, which determine the policies and prerequisites for the implementation of the educational paradigm. In general, European countries are characterized by a high degree of centralized / government funding of education. Therefore, it can be assumed that in countries with a high level of centralized funding there is a higher level of control and audit of the quality of higher education. However, such control may be ineffective in achieving economic goals. The experience of the EU countries shows the differentiation of mechanisms for financing education. In general, the following financing mechanisms predominate, namely: 1) centralized + local + local transfers in 7 countries; 2) centralized in 6 countries; 3) centralized + local transfers in 5 countries; 4) local + local transfers in 5 countries.

REFERENCES

BALYK, N.; SHMYGER, G. Formation of digital competencies in the process of changing educational paradigm from e-learning to smart-learning at pedagogical university. Studio NOA for University of Silesia in Katowice. E-learning Methodology – Effective Development of Teachers' Skills in the Area of ICT and E-learning: monograph. Katowice, Cieszyn: University of Silesia, 2017. 9, 483-497, 2017. Available at: http://dspace.tnpu.edu.ua/handle/123456789/12366. Access: 02 Jan.2021.

BORG, C.; MAYO, P. The EU Memorandum on lifelong learning. Old wine in new bottles?. *Globalisation, societies and education, 3*(2), 203-225, 2005. Available at: https://doi.org/10.1080/14767720500167082. Access: 02 Jan.2021.

CANKAYA, S.; KUTLU, Ö.; CEBECI, E. The educational policy of European Union. *Procedia-Social and Behavioral Sciences*, 174, 886-893, 2015. Available at:https://doi.org/10.1016/j.sbspro.2015.01.706. Access: 02 Jan.2021.

CEDEFOP. Modernising Vocational Education and Training. Vol. 2. Cedefop reference series: 70. Luxembourg: Office for Official Publications of the European Union, 2009b. Available at: https://www.cedefop.europa.eu/files/3050_II_en.pdf. Access: 02 Jan.2021.

CEDEFOP.The Shift to Learning Outcomes: Policies and Practices in Europe. Luxembourg: Office for Official Publications of the European Union, 2009a. Available at: https://www.cedefop.europa.eu/en/publications-and-resources/publications/3054. Access: 02 Jan.2021.

COSMULESE, C. G.; GROSU, V.; HLACIUC, E.; ZHAVORONOK, A. (2019). The Influences of the Digital Revolution on the Educational System of the EU Countries. *Marketing and Management of Innovations*, 3, 242-254, 2019. Available at: http://doi.org/10.21272/mmi.2019.3-18. Access: 02 Jan.2021.

DAUN, H. Globalization, EU-ification, and the new mode of educational governance in Europe. *European Education*, 43(1), 9-32, 2011. Available at: https://doi.org/10.2753/EUE1056-4934430102 Access: 02 Jan.2021.

DODMAN, M. Knowledge and competence. Key concepts in an educational paradigm for a sustainable society. *Visions for Sustainability*, (5), 2016. Available at: https://doi.org/10.13135/2384-8677/1660. Access: 02 Jan.2021.

EUROPEAN COMMISSION. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Improving Competences for the 21st Century: An Agenda for European Cooperation on Schools. Brussels: European Commission, 2008. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52008DC0425. Access: 02 Jan.2021.

EUROPEAN COMMISSION. Consultation Strategy on the Review of the 2006 Framework of Key Competences for Lifelong Learning. Brussels: European Commission, 2018a. Available at: https://www.eurashe.eu/wp-content/uploads/2017/03/review-2006-III strategy.pdf. Access: 02 Jan.2021.

EUROPEAN COMMISSION. Proposal for a Council Recommendation on Key Competences for Lifelong Learning. Brussels: European Commission, 2018b. Available at:

https://eurlex.europa.eu/resource.html?uri=cellar:395443f6-fb6d-11e7-b8f501aa75ed71a1.0001.02/D0C 1&format=PDF. Access: 02 Jan.2021.

EUROPEAN COMMISSION. Proposal for a Council Recommendation on Promoting Common Values, Inclusive Education and the European Dimension of Teaching. Brussels: *European Commission*, 2018c. Access: https://www.eumonitor.eu/9353000/1/j9vvik7m1c3gyxp/vkl3ija5eszw. 02 Jan.2021.

EUROSTAT. Database, 2021. Available at: https://ec.europa.eu/eurostat/data/database. Access: 02 Jan.2021.

EUROSTAT. Participation rate in education and training (last 4 weeks) by sex and age, 2021. Available at: https://appsso.eurostat.ec.europa.eu/nui/setupDownloads.do. Access: 02 Jan.2021.

GORDON, J., REY, O., SIEWIOREK, A. et al. (2012) KeyCoNet 2012 Literature Review: Key Competence Development in School Education in Europe. Brussels: *European Commission*, 2012. Available at: https://www.econstor.eu/handle/10419/87621. Access: 02 Jan.2021.

GORDON, J.; HALASZ, G.; KRAWCZYK, M. et al. Key competences in Europe: Opening doors for lifelong learners across the school curriculum and teacher education. Report, n. 87, 2009. Warsaw: CASE Network Reports. Available at: https://hal-ens-lyon.archives-ouvertes.fr/ensl-01576387/document. Access: 02 Jan.2021.

JONES, C. *Networked learning:* An educational paradigm for the age of digital networks. Springer, New York, 2015.

KASZTELEWICZ, A.; TOMASZEWSKA, B. (2018). European Educational Concept in Environmental-Nature-and Climate-Protection to safeguard a cross border sustainable development. Project Erasmus+. *Technika Poszukiwań Geologicznych*, 57, 2018. Available at:

http://yadda.icm.edu.pl/baztech/element/bwmeta1.element.baztech-dc554b66-7427-449f-92a9-a94b465217ad. Access: 02 Jan.2021.

KOUTRAS, N.; BOTTIS, M. Institutional Repositories of Open Access: A paradigm of innovation and changing in Educational Politics. *Procedia-Social and behavioral sciences*, *106*, 1499-1504, 2013. Available at: https://doi.org/10.1016/j.sbspro.2013.12.169. Access: 02 Jan.2021.

MULDER, M. Conceptions of professional competence. In: Billett S, Harteis C and Gruber H (eds) International Handbook of Research in Professional and Practice-Based Learning. Dordrecht: Springer, p.107–137, 2014. Available at: https://link.springer.com/chapter/10.1007%2F978-94-017-8902-8_5. Access: 02 Jan.2021.

MULDER, M.; WEIGEL, T.; COLLINS, K. The concept of competence in the development of vocational education and training in selected EU member states: a critical analysis. *Journal of Vocational Education & Training*, *59*(1), 67-88, 2007. . Available at: https://doi.org/10.1080/13636820601145630. Access: 02 Jan.2021.

Padakis, N. Towards a new LLL paradigm? EU police on key competence and reskilling: facets and trends. *Bulgarian Journal of Science & Education Policy, 3*(1), 2009). Available at: http://bjsep.org/getfile.php?id=50. Access: 02 Jan.2021.

PASIAS, G.; ROUSSAKIS, Y. "Who marks the bench?" A critical review of the neo-European" paradigm shift" through higher education policies and discourses. *Journal for Critical Education Policy Studies (JCEPS)*, 10(1), 2012. Available at: https://eric.ed.gov/?id=EJ970848. Access: 02 Jan.2021.

SCHLICHT, R.; STADELMANN-STEFFEN, I.; & FREITAG, M. Educational inequality in the EU: the effectiveness of the national education policy. *European Union Politics*, *11*(1), 29-59, 2010. Available at: https://doi.org/10.1177/1465116509346387. Access: 02 Jan.2021.

SYSOIEVA, S.; MOSPAN, N. Concept of competence in the international and national educational contexts. *Continuous vocational education: theory and practice*, (1-2), 7-15, 2018 Available at: https://doi.org/10.28925/1609-8595.2018(1-2)715. Access: 02 Jan.2021.

TELLING, K.; SERAPIONI, M. The rise and change of the competence strategy: Reflections on twenty-five years of skills policies in the EU. *European Educational Research Journal, 18*(4), 387-406, 2019. Available at: https://doi.org/10.1177/1474904119840558. Access: 02 Jan.2021.

WORLD BANK. Government expenditure on education, total (% of GDP). Available at: https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS. Access: 12 Jan. 2021.

Doctor of Sciences in Education, Professor, Deputy Director for Research and Experiment Work, Institute of Problems on Education of the NAES of Ukraine, Kyiv. mazila060192@ukr.net. ORCID: https://orcid.org/0000-0002-4190-1601.

^{II}Associate Professor, Doctor in Education, Chief Research Scientist of the Institute of Problems on Education of the NAES of Ukraine, Institute of Problems on Education, Laboratory of Nonscholastic Education, National Academy of Educational Sciences of Ukraine. E-mail: svitlanatsv@ukr.net. ORCID: https://orcid.org/0000-0002-9262-2311.

iiiAssociate Professor, Doctor in Education, the Faculty of Pedagogy and Psychology, the Department of Pedagogy and Psychology of Preschool Education and Childrens Creativity, National Pedagogical Dragomanov University. E-mail: ovoitovskaya@ukr.net. ORCID: https://orcid.org/0000-0002-1814-5895.

Doctor of Pedagogical Sciences, Professor of the Aviation English Department, Faculty of Air Navigation, Electronics and Telecommunications, National Aviation University - Ukraine. E-mail: pershoks@gmail.com. ORCID: https://orcid.org/0000-0002-9717-778X.

YPhD of Pedagogical Sciences, Lecturer at the Department of Informatics, Socio-pedagogical Sciences and Foreign Philology Faculties, Departments Informatics, Municipal Establishment "Kharkiv Humanitarian Pedagogical Academy" of Kharkiv Regional Council. E-mail: osvita2019.2020@gmail.com. ORCID: https://orcid.org/0000-0002-3675-5611.

Received: 20 Dec.2020 Approved: 12 Fev..2021

Annexes

Annex 1. Classification of EU countries by the mechanism of financing education, according to 2017 data

because to continuous
Expenditure of government after intergovernmental transfers
24,3
33,0
9,4
2,6
0'0
16,4
100,0
93,6
10,8
9'99
93,5
100,0
8'0
12,0
76,9
988
100,0
84,5
9,1
3,5
80,4
2,7
87,7
22,4
3,2
1,4
1,3
0,1
38,7
200