Study of Pedagogical Practice and Teaching Experience in European Countries

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Summary

Globalization, development of the information society, intensification of migration processes, and internationalization of education in recent years have significantly affected the international labour market and increased competition between professionals in various fields. Academic, research and teaching staff are currently facing rapid changes and growing demand for quality educational services. Under such conditions, educational institutions around the world pay particular attention to improving the quality of the educational process in order for their graduates to be able to compete in the international labour market.

The study of the experience of teachers' professional training in advanced countries opens new opportunities for improving the system of pedagogical training in Ukraine in order to adapt it to the requirements of the European educational space. The progressive achievements of countries demonstrating a high level of teachers' professional training in accordance with international standards, having rich historical educational traditions are of considerable scientific interest; consequently, this contributes to their leadership in science and education at the regional and global levels. The purpose of the present academic paper lies in analysing the latest trends in exploring teaching experience in the European countries and performance review of passing by students and teachers of the program on studying of pedagogical practice and experience of teaching in the countries of Europe. Methodology. Analytical and empirical (questionnaire) methods were used in the research process. Results. According to the obtained results of the research, the advantages, the most common areas of educational programs and the wishes of the participants regarding the practical implementation of the experience were identified.

Key words:

teaching experience, educational strategy, pedagogical practice of European countries, organization of the educational process, experience of teachers' professional training..

1. Introduction

The pedagogical process is a specially organized interaction of various aspects of educational activities aimed at solving the education issues, training and personal development.

The European education system is a complex set of institutions with different functions that has developed over the last decades. The current educational policy of the European Union is influenced by numerous factors, being shaped by all its member countries without exception.

When analysing the experience of individual countries in terms of practical training, it is necessary to take into account the social-pedagogical dimensions determining the activities of teachers. The social dimension regulates the responsibility of the teacher towards the society for training each higher education seeker, as well as the implementation of the main task of the teacher - the fulfilment of students' potential. The pedagogical dimension regulates the didactic activity of the teacher, within which the educational goals are implemented. The organization of practical training of future teachers taking into account the dimensions outlined determines their importance as a significant factor in the training of specialists for all education levels. Along with this, an important marker of this process efficiency is the need to develop the qualities necessary for the practical training of future teachers. Students in the European educational institutions are taught to develop such pedagogical qualities as flexibility, reflexivity, professional pedagogical sociability, the ability to make alternative decisions and, in addition, to develop such personality traits as sociability, creativity, mobility, independence and responsibility for one's behaviour, personal choices, decisions and results.

In the countries of the European Union, there are different approaches to the formation of scientific and pedagogical potential of higher education seekers. In particular, special qualification requirements for research and teaching staff are applied in these countries; there are certain features of the recruitment process, working and labour conditions in universities, processes of external quality assurance of education, etc. One of the mechanisms for the selection and advanced training of scientific and educational personnel is professional standards that deserve attention, study and can be used as an example of the leading experience in the pedagogical sphere (Synorub & Medynska 2019).

2. Literature review

Ensuring the quality of pedagogical training is an important goal for European countries. In general, pedagogical practice provides a combination of professional training of future teachers with their practical work in educational institutions, contributing to the formation of a creative attitude of future specialists to pedagogical activity, as well as determining the degree of

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their professional competence and the level of their pedagogical orientation (Piekharieva, Omelchenko, Kobylchenko et al., 2021), (Tsai & Gašević 2017).

The theoretical basis of the EU pedagogy is the theory of scientific cognition, psychological theory of pedagogical activity, the concept of management of educational and cognitive activities, psychological and educational concepts of knowledge acquisition, system theory and management of complex processes reflected in the works of such educators as Altun (2019), Loukkola & Dakovic 2017) and others (Altun, 2019), (Loukkola & Dakovic, 2017).

The general trends in the professional development of teachers in the European countries are as follows:

- organizational and structural priorities of pedagogical education (Finland, France, Italy, Spain);

- diversification of forms and methods of teachers' training;

→ diversification of types of providers of educational services and training programs, namely: the activities of professional associations of teachers (Spain, Italy), vocational schools, professional teachers and teachers' associations (the UK); private educational companies; teacher training centres (Synorub & Medynska 2019).

Currently, the significant determinants in the educational sphere of the European countries are as follows:

 \vdash humanization in the methodology and content of pedagogical education;

- internationalization of learning content;

→ strengthening the role of non-formal education in the professional development of teachers;

- use of mobile forms of educational process, namely: training seminars (Poland), study tours (Germany), participation in international educational programs and projects, exchange of teachers between schools and international exchange (the UK, Slovakia, the Czech Republic, the USA), integration of pedagogical content (Germany, Spain) (Kosharna, 2021).

The special form of monitoring the quality of pedagogical training, which is a priority in the development of development strategies, deserves to be highlighted, as well as psychological and pedagogical support for primary school teachers, partnership or consensus approach to education management, encouraging governments, educators and other stakeholders to work on quality issues; the formation of a socially reflective "I – teacher", who, under the influence of communication, "can become an object for himself" (Geirsdóttir & Schram, 2017).

In the educational systems of European countries, various forms, methods and means of organizing the educational process are distinguished by innovation (speed training, mini-learning, open lectures, presentation lectures, discussion lectures, lecture discussions, etc.), and especially high level of computerization (Henderikx & Jansen, 2018). Recently, distance learning, individual correspondence between teachers and students, online lectures, educational blogs, video blogs, social media pages, etc., interactivity (group discussions, debates, brainstorming, interviews, business and role-playing games, etc.) have been significantly developed. Practical implementation of various forms of professional training in educational institutions where students work, conducting lectures, seminars, practical classes in connection with the internship of preschool education within the university and beyond (in development centres, centres of transcultural pedagogy), conducting courses with students of industrial specialities, etc.), is also of particular importance (Yuzkiv, Ivanenko, Marchenkoet al., 2020).

Specific tendencies in the professional development of teachers in the European Union include as follows:

- expanding access to the teaching profession (Hungary, Slovenia),

- decentralization of education management (Austria, Bulgaria, Hungary, France),

- centralized management (the UK, Poland, Italy),

→ search for the optimal balance between centralized and decentralized management (Germany);

extensive use of alternative ways of obtaining a teaching profession (the USA, Switzerland) (Avshenjuk, N., Djachenko, L., Kotun, K. et. al., 2017).

Aims. The purpose of the research lies in analysing the latest trends in exploring teaching experience in the European countries and performance review of passing by students and teachers of the program on studying the pedagogical practice and experience of teaching in the countries of Europe.

3. Materials and Methods

In the course of the research, the analytical methods for studying the issues outlined have been used, as well as a remote questionnaire survey of 204 students and 18 teachers of Ternopil Volodymyr Hnatiuk National Pedagogical University, National Pedagogical Dragomanov University, Drohobych State Pedagogical University of Ivan Franko, who have passed the educational program (curriculum) on studying the pedagogical practice and experience of teaching in the countries of Europe.

4. Research Results

According to the results of the program of studying the experience of pedagogical practice in European countries, students and teachers were asked about the aspects of the educational program that were the most valuable for their subsequent professional activities (Figure 1).

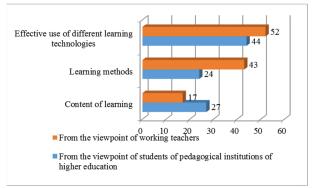


Figure 1. The spheres of pedagogical practice of European countries that proved to be the most valuable for respondents in the process of studying their experience, %

As it can be seen from Figure 1, students and teachers most highly assessed the study of the effective use of various teaching technologies. Herewith, students have estimated this aspect of the experience gained at 44%, and teachers who have already had experience in the field of education - at 52%.

The value of the experience gained in training methods was rated by teachers at 43%, while students rated the value of this type of skill at 24%; the value of the information obtained about the content of training in European countries was determined by them at 27%.

The participants of the program were asked a question concerning the spheres they would like to draw the attention on the part of the educational authorities in Ukraine, taking into account the high achievements in the educational field of European countries (Figure 2).

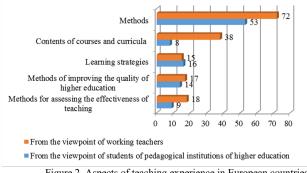


Figure 2. Aspects of teaching experience in European countries that require special attention in terms of educational process management, %

As may be inferred from Figure 2, according to respondents' viewpoint, considering the best experience of pedagogical practice in Europe, it is worth paying attention to the management of the educational process primarily on teaching methods, content of courses, as well as methods of assessing the effectiveness of teaching, methods of improving the quality of higher education and the development of strategies for the educational process.

Analysing existing educational projects implemented both on the basis of individual educational

institutions and within the framework of grant or state programs of an educational nature, it is possible to single out the main most common areas in which such programs are implemented.

By being involved in a comprehensive educational project, participants of the program aimed at studying the experience of teaching in European countries were able to evaluate and identify the most common areas of educational projects, including mechanisms and methods for implementing educational strategies, as well as methods for attracting students to learning and historical and cultural projects (Figure 3).

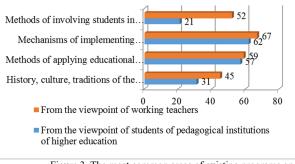


Figure 3. The most common areas of existing programs on studying pedagogical practice and teaching experience in curricula in European countries,%

An important result of the survey is the study of the respondents' attitude towards the most important areas of innovation, which, according to the viewpoint of the participants of the educational program, should be applied primarily on the basis of teaching experience in European countries (Figure 4).

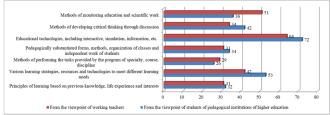


Figure 4. Priority areas for innovations desired to be applied, which were expressed as preferences by the participants of the programs for the study of pedagogical practice and teaching experience in European countries,%

As it can be seen from Figure 4, according to the survey participants' viewpoint, the most significant and topical issues that deserve analysis and subsequent implementation in Ukraine are as follows: educational technologies, including interactive, simulation, information, etc., the principles of learning based on previous knowledge, life experience and interests, different learning strategies, resources and technologies in order to meet different learning needs, methods of developing critical thinking through discussion, problem-solving and reflection, methods of monitoring education and research. It should be noted that the participants of the program, in general, turned out to be not ready to study the experience of teaching practice in European countries in some aspects. Taking this into consideration, based on the results of the experience gained, the desired topics of preparatory seminars were studied, which, according to the respondents' viewpoint, are useful if they are included in the curriculum (Figure 5).

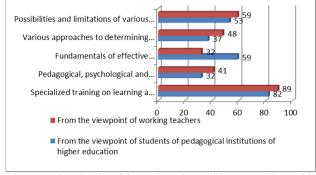


Figure 5. Selected topics of the seminars that participants consider useful prior to undergoing the program on studying pedagogical practice and teaching experience in European countries,%

According to the survey results, the study of teaching experience in European countries requires preliminary training in the areas as follows: "Specialized training in learning a foreign language in accordance with the topic of the seminar and the country of study", "Possibilities and limitations of various forms and methods of monitoring and evaluation of educational outcomes", "Pedagogical, psychological and methodological fundamentals of motivation, organization and control of educational activities". It should also be emphasized that students have noted the training direction "Fundamentals of effective pedagogical communication, laws of rhetoric and requirements for public speaking" as the as one of the priorities, forasmuch as such skills help build a more effective communication process, which is extremely important in teaching experience.

5. Discussions

Thus, according to the analysis of the literature on the research topic, taking into consideration the globalization and integration processes in education, the study of foreign experience in the organization and functioning of higher education for Ukrainian pedagogical science and practice is significant, which is especially important for training future teachers in Ukraine (Thorn & VincentLancrin 2021).

The experience of Western Europe, which, according to the Organization for Economic Cooperation and Development (44), is advanced, in particular, in the field of higher and preschool education is of particular interest (Council of the European Union, 2018)

The practical experience of professional training of teachers in Germany, France and the UK is promising and valuable for studying the progressive ideas of the European experience. The study of the experience of these countries is based on their recognition as leading and highly developed countries with established traditions and quality indicators in the field of teacher education. These countries possess significant achievements in pedagogical science and the work of highly qualified staff, guaranteed by appropriate undergraduate and postgraduate pedagogical education (Kosharna, Zhuravlova, Nieliepova et al., 2020).

According to the viewpoint of Avshenjuk, Djachenko, Kotun, Marusinec', Ogienko O., Sulima, & Postrigach (2017), the study of the experience of individual Western European countries reveals the features of the interaction of national and European educational processes; it may contain important methodological assistance for national educational policy (Avshenjuk, N., Djachenko, L., Kotun, K. et. al., 2017).

The investigators of the European educational environment, Bennetot, Kupriyanova & Estermann (2017), point to its pronounced features, in particular such as follows:

 intensity (abundance of the educational environment with specific methodological conditions, opportunities);

2) coherence (efficiency of the created educational environment in comparison with others due to interconnection of components);

3) selectivity (possibility to choose an individual way of the investigation), stimulating its participants to constant activity, flexibility, mobility (Bennetot, Kupriyanova & Estermann, 2017).

Modernization processes in the European educational environment contribute to the emergence of another feature - student-centric. It lies in the fact that the interests and intentions of students are decisive in the planning and organization of scientific work at the university, and university science shows students their achievements, opportunities and prospects (Boghian, 2018).

Along with this, as it has been noted in the scientific works of Jayashree (2017), the features of the educational policy of teacher training in Western Europe are that they are closely related to the introduction of a fundamentally new "European approach" to the educational process, which is the basis for further strategic development of the European educational institution. The peculiarity of this approach lies in ensuring the high quality of educational services, promoting the unification and the coherence of the functioning of the system of educational institutions in different countries of Europe (Jayashree, 2017).

An important means of implementing European educational policy in the field of vocational training of educators is the European Qualifications Framework, which regulates the standards of vocational training of pedagogical workers. The development of professional standards of pedagogical education in Western Europe contributes to the specification and development of professional profiles of educators in Europe, which are characterized by variability and provide multi-vector and multifunctional education (Palamar, 2018).

The principal directions in which the educational policy is implemented, and qualification requirements are formed in the field of professional training of teachers of the Western European educational institutions are as follows:

basic training of employees, especially in the public sector;

higher education in accordance with the requirements of the Bologna Convention;

continuous training of specialists
engaged in educational activities at educational institutions;
implementation of the pan-European

concept of vocational training based on the competencybased approach (Terletska, 2020).

Thus, the key features of teacher training in the countries under consideration at the beginning of the XXI century are as follows:

1) Expanding the pedagogical and practical component in teacher training (by increasing the number of hours of training and creating a basic core of curricula, consisting of workshops). In a number of countries, pedagogical practice includes not only work at school, but also in other educational institutions, including institutions working in difficult conditions (migrants, children with special needs);

2) Increasing the number and variety of ways to obtain a pedagogical speciality. Most countries have special programs aimed at attracting the best graduates and professionals to participate in various pedagogical programs;

3) The availability of several alternative ways of professional development of teachers. Basically, the programs range from advanced training courses for teachers to bachelor's and master's programs. First of all, this is due to the difficulty of predicting the demand in teachers and the possible necessity to quickly eliminate the shortage of teachers;

4) Creation of lifelong learning systems affiliated by the university to career completion for teachers at different stages of professional development. This task is recognized as an educational priority, while the professional development of teachers is of a heterogeneous, individualized nature, connected with the interests and needs of individual pedagogical workers.

5) Development of internship programs for teachers after obtaining pedagogical education is the most dynamic component of the system of lifelong professional development. At the same time, the introductory course is either an internship and precedes the certification, or it is organized in the process of pedagogical certification. 6) Updating the content of pedagogical educational programs (curricula). For most countries, the priority lies in developing systems for monitoring and identifying the professional interests and needs of teachers (preparation for inclusive education; leadership of a group of students, which may include students with deviant behaviour; work in a digital information environment, etc.). In many countries, educational programs applied in teachers' training (even at the bachelor's level) have a significant scientific and practical component;

7) Transfer of professional development programs to schools. Professional development in the framework of school includes the interaction of teachers directly in the team (general observation, planning and analysis of lessons, joint discussion of relevant literature, joint design and research, cooperation of all teachers towards improving students' academic progress).

8) Toughening of requirements when conducting selection for pedagogical specialities. In countries where pedagogical institutions demonstrate a high international level of quality of the educational process, the requirements for selection are significantly increased both at the stage of admission to higher educational institutions and during postgraduate studies and employment.

9) Delegation of powers for certification and professional development of teachers and heads of educational institutions to the professional community (professional associations, unions, centres of pedagogical skills, training institutions) (Palamar, 2018).

Continuous improvement of the system of training and retraining of scientific and educational personnel is aimed at changing the role of a person in the modern world, the vision of the ideal of educational activity and the awareness of new requirements for the quality of human capital in accordance with cultural, spiritual, socialeconomic and technological changes and challenges in the global, European, national, regional and local levels.

Pedagogical training is fundamental for any specialist involved in the formation, education, development and socialization of the person. The level of pedagogical training determines the effectiveness in solving the future professional goals of the educator, both the teacher of secondary school and the teacher of higher educational institution, as well as the adult education system. In this context, training and advanced training of scientific and educational and pedagogical specialists is considered an important condition for the modernization of education based on an understanding of domestic and foreign experience (Norwich, Fujita, Adlam et al. (2018).

6. Conclusion

Thus, there is an increasing need to adapt the forms and methods of the educational process in accordance with the requirements of the time and taking into account new high educational standards.

The creation of a modern, highly efficient education system in Ukraine is one of the most significant prerequisites for the competitiveness of the state in the European market. Currently, there is an objective need to improve the training quality of qualified and skilled specialists. Solution to this problem requires a proactive approach, the introduction of innovative learning technologies, modern information tools, updating the content of education and the effective development of state educational standards. State standards should be aimed at creating a minimum of mandatory competencies for graduates, taking into account the current and future needs and requirements of employers, ensuring the competitiveness of graduates of educational institutions in the national and European labour market.

Ensuring the training of highly qualified personnel should become the content of the educational system, which can be implemented with the introduction of innovative pedagogical technologies using the best practices of the European Union. This is precisely why the main direction of development of the Ukrainian educational system is European integration.

The conducted analysis of scientific sources allows us to state that cooperation, mutual exchange of information, existing practical achievements and experience of the European Union in the field of education will contribute to the development of the domestic educational system, subsequent training throughout the working life, which corresponds to the realities in the context of changes in the labour market, implementing mechanisms in order to increase transparency and recognition of domestic qualifications and competencies in European countries.

References

- Altun, T. (2019). INSET (In-Service Education and Training) and Professional Development of Teachers: A Comparison of British and Turkish Cases. US-China Education Review, № 6, 846-858. Retrieved from: https://www.academia.edu/4711609/INSET_In_Service_Ed ucation_and_Training_and_Professional_Development_of_ Teachers_A_Comparison_of_British_and_Turkish_Cases
- [2] Amundsen, G. & Haakstad, J. (2017), Teaching in Higher Education: consistency and change in context and role. Paper presented at the 12th European Quality Assurance Forum. Retrieved from: http://www.eua.be/Libraries/EQAF-2017/p3_andersen---haakstad.pdf?sfvrsn=0
- [3] Avshenjuk, N., Djachenko, L., Kotun, K.., Marusinec' M., Ogienko O., Sulima, O. & Postrigach N.(2017) Zarubizhnij dosvid profesijnoï pidgotovki pedagogiv [Foreign experience of professional training of teachers]: analitichni materiali. Kiïv. DKS «Centr». 83 p. Retrieved from: https://lib.iitta.gov.ua/708029/1/%D0%90%D0%BD%D0% B0%D0%BB%D1%96%D1%82%D0%B8%D1%87%D0% BD%D1%96_%D0%BC%D0%B0%D1%82%D0%B5%D1 %80%D1%96%D0%B0%D0%BB%D0%B8_2017_%D0%

BE%D1%81%D1%82.%D0%B2%D0%B0%D1%80%D0% B8%D0%B0%D0%BD%D1%82%20(1).PDF

- [4] Bennetot, E., Kupriyanova, V. & Estermann, T. (2017) Public Funding Observatory Report. Retrieved from: http://eua.be/Libraries/ governance-autonomy-funding/euapfo-report-december-2017. pdf?sfvrsn=2?utm_source=webpage&utm_medium=publica tion&utm name=publication-webpage-12-12-2017
- [5] Boghian, I. (2018) Methodological Guidelines for Elaborating the Curriculum of Intercultural Education with a Focus on the Values of Tolerance. Revista Romaneasca pentru Educatie Multidimensionala, 10(4), 249-264. Retrieved from: https://doi.org/10.18662/rrem/86.
- [6] Council of the European Union (2018). Council Recommendation on Key Competences for Lifelong Learning. Interinstitutional File: 2018/0008. 29. Retrieved from: https://eurlex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CONSIL:ST 9009 2018 INIT&from=EN
- [7] Geirsdóttir, G. & Schram, A. (2017), Challenges in 21st century. Curriculum Design. Update on the status of the University of Iceland. Pesentation at the VLOR Peer Learning Activity on Curriculum Design Retrieved from: https://assets.vlor. be/www.vlor.be/attachment/Gu%C3%B0r%C3%BAn%20G eirsd%C3%B3ttir.pdf
- [8] Henderikx, P. & Jansen, D. (2018) The Changing Pedagogical Landscape. In search of patterns in policies and practices of new modes of teaching and learning (Maastricht, EADTU). Retrieved from: https:// tinyurl.com/CPLreport2018
- [9] Jayashree, R. (2017) A Study on Innovative Teaching Learning Methods for Undergraduate Students. International Journal of Humanities and Social Science Invention, vol. 6(11), 32-34. Retrieved from: http://www.ijhssi.org/papers/v6(11)/Version-2/E0611023234.pdf.
- [10] Kosharna, N. (2021) Suchasnij €vropejs'kij dosvid praktichnoï pidgotovki vchiteliv. [Modern European experience of practical teacher training], № 32, вип. 1, с. 143-155/ https://doi.org/10.28925/2312-5829.2021.1.10 Retrieved from: https://od.kubg.edu.ua/index.php/journal/article/view/813 [in Ukrainian].
- [11] Kosharna, N., Zhuravlova, L., Nieliepova, A., Sidorova, I. & Lopatynska, N. (2020) Professional training of primary school teachers (experience of Great Britain, Sweden) / Applied Linguistics Research Journal (İstanbul (Turkey). 4 (9). p. 159-173. DOI: 10.14744/alrj.2020.82712
- [12] Loukkola, T. & Dakovic, G. (2017) EUA's Learning and Teaching Initiative. Report from the thematic peer groups (Brussels, EUA). Retrieved from: http://www.eua.eu/Libraries/publications-homepage-

list/eua-s-learning-and-teaching-initiative--- report-fromthe-thematic-peer-groups-in-2017

- [13] Norwich, B., Fujita, T., Adlam, A. et al. (2018) lesson study: an inter-professional collaboration approach for ducational Psychologists to improve teaching and learning.Educational Psychology in Practice 34(4), 370-385. Retrieved from: https://www.tandfonline.com/doi/abs/10.1080/02667363.20 18.1468733.
- [14] Palamar, S. (2018). Kompetentnisnyy pidkhid yak metodolohichnyy oriyentyr modernizatsiyi suchasnoyi osvity [Competence approach as a methodological landmark of modernization of modern education]. Educological Discourse, 1 – 2 (20– 21), 267- 278. DOI: 10.28925/2312-5829.2018.1-2.77621 [in Ukrainian].
- [15] Piekharieva, A., Omelchenko, I., Kobylchenko V. et al. (2021). Pedagogia da parceria na educação inclusiva dos países da UE. Laplage Em Revista, 7(Extra-C), p.10-19. https://doi.org/10.24115/S2446-622020217Extra-C979p.10-19
- [16] Pursnik, S. (2020) Innovative teaching methods in higher education. BSSS Journal of Education, vol. IX, issue-I, 67-75. Retrieved from: https://doi.org/10.51767/je0907.
- [17] Synorub, H. & Medynska, O. (2019) Development of information culture of students of humanitarian specialities. Information Technologies and Learning Tools, 9, vol. 72, 4,

152-167. Retrieved from: https://journal.iitta.gov.ua/index.php/itlt/article/view/2922.

- [18] Terletska, L. (2020). Modern technologies of teaching English language of students of pedagogical specialties. Pedahohika formuvannya tvorchoyi osobystosti u vyshchiy i zahal'noosvitniy shkolakh. Vol. 3 (69). 129-132. DOI: https://doi.org/10.32840/1992-5786.2020.69-3.26
- [19] Thorn, W. & VincentLancrin, S. (2021), Schooling During a Pandemic: The Experience and Outcomes of Schoolchildren During the First Round of COVID-19 Lockdowns, OECD Publishing, Paris. DOI: https://doi.org/10.1787/4889728b-en Retrieved from: https://www.oecdilibrary.org/docserver/4889728ben.pdf?expires=1645110325&id=id&accname=guest&chec ksum=A42C68455B2A532BFC73E46F34CECD74
- [20] Tsai, Y. & Gašević, D. (2017) The state of learning analytics in Europe – Executive Summary. SEILA project. Retrieved from: http://sheilaproject.eu/wpcontent/uploads/2017/04/The-state-of-learning-analytics-in-Europe.pdf
- [21] Yuzkiv, H., Ivanenko, I., Marchenko, N. et al. (2020). Innovative Methods in Language Disciplines During Profile Training Implementation / International Journal of Higher Education 9(7):230 DOI: 10.5430/ijhe.v9n7p230.