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State and Perspectives of Development of the European Space of Education and Science: the System of Scientific Knowledge for a Period of Life

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Abstract

The article deals with the stages of formation of the European space of education and science, in particular, the key role of each international assembly is determined for 20 years. Structural-organizational and structural-functional analysis of the effectiveness of the legislative and structural implementation of higher education systems for the development of the Bologna process was conducted, as well as a chronological analysis of the forums held under the auspices of the Bologna Process.

Keywords: higher education, studying during the life, social dimension, the Bologna process, European higher education space, declaration, convention, communique, forum, conference

The evolution of a higher education system in confident country reflects its national history, culture, religion, traditions, identity of educational policy and it has been developing, gaining the worldwide experience. Criteria and indicators of internal and external effectiveness are used for ordering to evaluate the effectiveness of the education system.

In the course of its development, the Bologna process has undergone a series of stages, each of those expanded the circle of the participating countries, declared new aims, reached the communique and ratified the conventions. Since 2006, more than 10 Higher Education Quality Assurance Forums [1] (ENQA, 2017) have been held, as well as four Bologna Process Policy Forums.

The issues of development, formation, implementation of the Bologna process in the territorys of Europe and Ukraine are reflected in the works of Davydov, Andrushchenko, Bekh, Malinovsky (trends, problems and perspectives of the Bologna process are highlighted) (Bech, Malinovsky, 2004; Davydov, 2004);

Baidenko, Timoshenko, Stepko, Bolyubasha (generally accepted documents of the Bologna process) (Stepko, Bolyubash, 2003; Baidenko, 2002; Tymoshenko, 2004); Klymenko, Tovazhnyansky, Sokol (2004) (the main aspects of regulation and formation of educational process in accordance with the European requirements are disclosed). The legal aspects of the Bologna process were considered in the works of Tymoshenko (2004), philological issues were discussed at some international conferences; the economic component of the development of the European Higher Education Area was learntin the works by the editors of Bazylevych (2006).

The purpose of the study is to determine the role of international integration processes of different levels of organization according to the types of implementation in forming the development of the European Higher Education Area (EHEA) on the basis of sustainability.

Types of implementation are distinguished at different levels of organization and regulation and extent of coverage with the spheres of influence, system-organizational, respectively, institutional (internal, actually on the organizational level, between institutional in associations, consortia and other associations), national (participating countries), regional (regional partners), cross-border (within the zone of European integration), transcontinental (intercontinental), global.

According to the target tasks of the coverage and influence and functional responsibilities, respectively:

- system-functional European, regional, national, systems higher education, scientific degrees, accumulation and re-crediting, recognition of qualification and competencies, quality assurance; information networks, technical regulation (standardization, certification), social guarantees of academic international mobility of education and research; international, state, administrative regulation (including the participation of students);
- systematic-axiological social dimension, equal access to life-long studying, academic life-history, cultural heritage, informing the interested people through the information basis, recognition and confirmation of previous, cross-referencing, professional competencies, qualification, periods and degrees, quality of education, educational and scientific programs of academic freedom, autonomy and responsibility of legal guarantees of the protection of a person during education during his or her life;
- system-communication network (information), contact (supporting organizations, contact perople), institutional (associations, agencies for quality assurance, technical regulation standardization, certification, accreditation and licensing, social, administrative, legal, grant), large-spatial (national, regional, European, inter-spatial).

Prerequisites:

- a) recognition of the qualification of the Lisbon Convention (1997) in the European Region, the declaration of innovative approaches (4 countries) in the sphere of higher education "Europe of Knowledge" (Sorbonne, 1998); coordination of the aims of higher education (with 2 countries) of cycles and degrees (2-step system); introduction of a transfer system for the accumulation of loans for mobility in Euro-meters (Bologna, 1999); specifying goals and priorities for the formation of the EHEA and the enlargement of the EU (Prague Communiqué, 2001), the convention of recognition of diplomas for the purpose of studying the life of a society for scientific knowledge is ratified; network of information centers national and European, two-cycle system, euro loans, social guarantees of mobility, quality and procedures of provision, "Europeanization" of the content of courses and programs (Figure 1);
- b) the joint achievements in the Berlin Communiqué (2003) at the conference of ministers of education were approved and directions of development were identified social orientation, elimination of sexual inequality, synergy of educational and research processes, academic, historical and cultural, speech values, social and economic growth through education and science in the EU and other regions, the methodology of quality assurance of a two-cycle system;
- c) institutional and legal unification, education systems of the countries participating in the Bergen Conference of Ministers (2005) by strengthening the work of institutions of higher education, stakeholders and business, harmonization of degrees, recognition of results and employment of bachelors, adoption of the three-level European qualifications framework; the official accession of Ukraine to the Bologna Process of the formation of the EHEA; adoption of a communique to ensure a lifelong education strategy; the development of an integrated work program (2007–2009) for the creation of the EHEA by 2010;
- d) joint progress towards the academic association of educational autonomies at the London Conference of Ministers (2007) of the partners of the integration of the EFA-zone of democratic freedom (Figure 2); development of standards for quality regulation, examination of candidates (by 2010) ENQA, creation of qualification register of organizations, consolidation of doctoral degree of the third cycle of training of researchers; the establishment of associations with certain functional competencies, such as the informing network (ENIC), the international standardization organization (ESQ), the interests of educators (ENEA), academics (ERA), students (group E4), employers (EULAC), as well as the development of a methodological provision and means of technical regulation for the elaboration of general cooperation actions in coordination of the Bologna Process Support Team (BFUQ);
- e) the effectiveness and priorities of the EHEA for decades are summarized at the First Forum of the Bologna Process of the Ministerial Conference in 2009

(Leuven, Leuven-la-Niev) and the role of higher education (for all); student-centered learning, academic mobility, synergy in higher education, science and innovation, and the quality of flexible educational and research programs of tricycle training are provided by state, public and international investment; the introductionic needs of the applicants, labor markets and society; the updating of training and study programs requires improvement of the quality of teaching, the improvement of the skills of teachers and researchers, coordination with employers for the development and implementation of educational and research programs; improvement of career structure, formation of open international employment procedures; monitoring of education policy in the EHEA and the adjoining regions (HEIs, education and science systems) provides data collection, development of identification procedures, comparison systems, quality management, recognition of studying outcomes for the next conference;

- f) the creation of the EPAO was officially proclaimed in 2010 by the Budapest-Vienna Declaration at the Ministerial Conference, which is considered the second forum of the Bologna Process for cross-border dialogue; The main principles of the EHEA Academic freedom, autonomy and responsibility of universities play an important role in guaranteeing peace, democracy, unity of societies through the modernization of degrees and programs of training, quality assurance, recognition, mobility, social dimension, employment with key participation and support of the academic community for the development of managerial decisions;
- e) the spread of the Bologna process not only on the national level, but also on the regional and global levels, since the Third Forum of the Bucharest Conference (2012) was aimed at the formation and admission of the aforementioned spaces of higher education; The unification of national, regional and global spaces is designed to ensure the sustainable development of society through the prominent role of higher education as an engine and mechanism for ensuring democracy, global academic mobility, improving the quality of education, recognizing its results and improving employment; it was considered the recognition the regional conventions of Asia and the Pacific Ocean(along with the Lisbon-Pacific) in Europe, also a convention on quality issues with the participation of the government of France and the European Commission; it was supported the financing of mobility in joint programs and degrees with the assistance of the EU;
- h) it was emphasized the need for global and regional approaches for ensuring and improving the quality of higher education, the introduction of quality control systems, the role of qualifications frameworks in the process of recognition of qualifications and professional competences; it was noted on the mission of higher education in long-term employment, its close interaction with the economic, the importance of reforming higher education in order to increase professional occupation, the need to diagnose studying outcomes of recognition and

confirmation of prior studying, and data on the positive experience of graduating employment.

h) the voluntary coordination of reforms in the higher education system and the promotion of their unification in the EHEA was aimed at the Fourth Forum of the Bologna Process Policy (Armenia, Yerevan, 2015); The forum focuses on the basic principles of space organization – global responsibility, freedom of academic choice, institutional autonomy of academic honesty;; the benefits from the implementation of reforms in the conditions of globalization of the EHEA's international dialogue with other regions of the world for the development of useful models of modernization and integration of systems are established; it was noted the need to eliminate the inhibitory factors of integration, bureaucratic and superficial methods of reform; there were Specified global problems-challenges of the educational Euro-space – economic and social crisis, unemployment, migration, extremism, radicalization; The priorities of the renewed EHEA's vision for 2020 are: to ensure trust in the education systems of the participating countries in recognition of qualifications to guarantee the mobility of students and graduates, the development of inclusive societies of democratic values and human rights, the creation of competences for citizenship, innovation and employment in the EU; Enhancing interaction between the EHEA and the ENP; it was recommended measures of synergetic reform - mutual recognition of credits, qualifications and preliminary results of training, synchronization of reforms; developing a methodology for evaluating the results of reform and reporting; The emphasis is on effective management and selection of best practices for the work of the EPLO Bologna Working Group.

The next meeting will be held in France in April 2018.

In the course of research, the stages of the synergy of cross-border integration of the education system on the basis of sustainable development are singled out to ensure the global development of the EHEA, training and employment during the life:

- Innovative and innovative (1998–1999) declarative (Sorbonne and Bologna Declaration, Lisbon Convention), international departmental initiatives and agreements of ministers of education, associations, associations, universities, students of partner countries:
- Consolidation (2001–2007), adoption (Prague, Berlin, Bergen and London Communiqué) organizational, structural and functional associations and institutions of the global, regional, national, institutional level (higher education and science, associations, universities, universities, student unions) of European and national quality, information networks, registers, standardization, monitoring, coordination and expert groups; on ensuring the quality of introduction and efficiency of European standards, registers; Strategic Policy, Social Dimension, Monitoring of Effectiveness ensured the development of a pan-European policy

strategy for social dimension (2007–2009), the global scale of European higher education – informing recognition of qualifications, competitiveness, mobility, social guarantees, accessibility, European standardization and monitoring of the development of tricycles (with the addition of a doctoral) of the Higher Education Area by working groups and the Bologna Process Steering Group;

- Political-formative (2008–2012), qualitative (Leuven Communiqué, Budapest-Vienna Declaration, Bucharest Communiqué) are Forums of Bologna Process: The First Organizational (Leuven, Lewen Le Nov, 2009) defined the priorities of the EHEA the key role of continuing education in the next decade to build creative and innovative Europe of knowledge, student-centered studying, integration of education, research, innovation for sustainable development of society, reforming of higher education systems and educational policies agreed upon with the European values and priorities of autonomy of educational institutions, academic freedom, social guarantees, involvement of students in the modernization of the three-tier structure for training for the future, taking into account the national qualifications and self-certifications structure, will be worked before 2012 harmonization of the European system of qualifications and employment for lifelong studying learning in EPA; the quality of educational and research portable programs, the symbiotic combination of education, research and innovation, academic and cultural internationalization will be ensured under the conditions of international openness and mobility, a three-cycle training system, since till 2020 one fifth part of graduates must be trained abroad; the mobility of teachers, researchers and university executives will be ensured by social guarantees of employment and career development; Achieving the organizational aim of the forum was the cooperation of academic communities, EU Governments and beyond, and stakeholders; The Steering Group of the Bologna Process presented a report and a plan of work for 2012, in conjunction with the EuroStudent, the Hewlett-Packard Network and Eurostat.

The second organizational and declarative (Budapest, Vienna, 2010) officially proclaimed the creation of the EHEA as an innovation engine for socioeconomic development on the basis of knowledge, for the implementation of missions in the sphere of education by students and teachers, the principles of space are defined academic freedom, autonomy and university responsibility, student-centered studying and their role in enhanced social cohesion; democratization of society through the provision of lifelong studying and placement, the quality of educational and research programs, recognition of qualifications, mobility, social guarantees for all members of the academic community, support for different levels of government (European, national, higher education institutions), the introduction of contact methods for communication networks to facilitate the exchange of information and joint coordination; not all aims were achieved, therefore, further work was corrected by attracting employees and students of higher educational institutions;

The third constructive is devoted to the creation and connection of national, regional and global spaces of higher education (Bucharest, Yerevan, 2012–2015 biennium), there were specifies updated priorities – national and regional responsibility of states for higher education, global academic mobility, higher quality of higher education, recognition studying outcomes and prior qualifications in a global and regional context; international cooperation in the field of higher education plays a significant role in ensuring unity, sustainable and open development of a democratic society, the protection of human rights, the steady growth of the world economy after the economic crisis; public responsibility involves financial support for higher education, encouragement of the active participation of the academic community in its management and development; contributed to supporting the reform of higher education systems and their unification, outlined the reasons for the slowdown of integration and ways to overcome them, identified problems-the challenges of building the EHEA on the economic and social sides; there were aims to guarantee confidence in the EHEA, improve ment quality of training and further employment and self--employment in the need of new specialties.

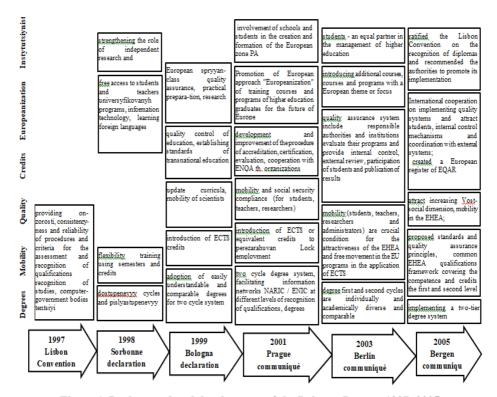


Figure 1. Background and development of the Bologna Process 1997-2005

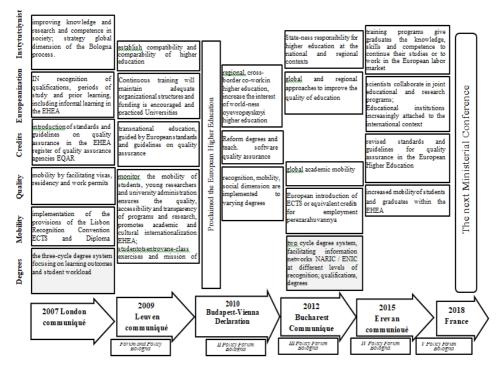


Figure 2. Status and prospects of the Bologna Process 2007-2018

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