

ПРОБЛЕМИ ВИКЛАДАННЯ ПОЛІТОЛОГІЇ У ВИЩІЙ ШКОЛІ

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INNOVATIONS IN POLICY OF TEACHING AT THE UNIVERSITIES IN THE CONTEXT OF ACADEMIC REVOLUTIONS

Categories of the academic revolutions and innovations in a perspective of educational policy at the higher school are considered. Special attention is paid to the development of innovations in training at the foreign and Ukrainian universities, since XIX of a century up to now.

It is noted that agricultural, industrial, global, demographic and other revolutions created basis for the academic revolutions which resulted from transformations of society and caused innovations in higher education systems. The contribution of the academic revolutions in strengthening of role of the universities in society is confirmed. The major innovations in training stimulated university teaching throughout all academic revolutionary periods (after 1867, 1945, 1983) in developed industrial and developing countries, such as the USA, some states of the European Union and Ukraine.

Emergence of innovations in policy of teaching at the universities during the first academic revolution, their modification during the second one, and new turns in transformation of innovations during the third academic revolution is investigated. Introduction of innovations in teaching differed in intensity and scale during the academic revolutions. On examples of teaching it is shown how political and ideological processes in society influenced functioning of the universities.

An attempt to compare educational processes during three revolutions and to reveal the most innovational period was made. It is proved that innovations in training were implanted in three academic revolutions, the third one turned out to be the most innovative. The major innovations in policy of teaching were connected with the development of scientific and technical knowledge that contributed to the emergence of the information society. The developed countries offered the introduction of policy of cooperation in the higher education that made impact on innovations in university education. The Coronavirus pandemic of 2019/20 demonstrated the need to use various forms of Internet communications (Zoom, Google Classroom, Moodle, Whereby, etc.) to switch to new opportunities to teach students in higher education institutions around the world at the beginning of the XXI century.

Keywords: *academic revolutions, educational policy, higher education, policy of teaching, innovations in training, developed countries, Ukraine.*

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ІННОВАЦІЇ В ПОЛІТИЦІ ВИКЛАДАННЯ В УНІВЕРСИТЕТАХ У КОНТЕКСТІ АКАДЕМІЧНИХ РЕВОЛЮЦІЙ

Розглядаються категорії академічних революцій і інновацій у ракурсі освітньої політики у вищій школі. Особливу увагу приділено розвитку інновацій у навчанні в зарубіжних і українських університетах, починаючи з XIX століття до сьогодні. Відзначається, що сільськогосподарська, промислова, глобальна, демографічна та інші революції створили основу для академічних революцій, які відбулися в результаті трансформації суспільства і викликали інновації в системах вищої освіти. Підтверджується внесок академічних революцій в посиленні ролі університетів у суспільстві. Найважливіші нововведення в навчанні стимулювали університетське викладання протягом усіх академічних революційних періодів (після 1867, 1945, 1989) у розвинених промислових та країнах, що розвиваються, таких як США, деякі держави Європейського Союзу та Україна.

Досліджується виникнення інновацій у політиці викладання в університетах під час першої академічної революції, розглядається їх модифікація під час другої академічної революції, і нові повороти в трансформації інновацій під час третьої академічної революції. Впровадження інноваційних технологій у викладання відрізнялося інтенсивністю і масштабністю під час академічних революцій. На прикладах викладання показано, як політико-ідеологічні процеси в суспільстві впливали на функціонування університетів.

Зроблено спробу порівняти освітні процеси протягом трьох революцій і виявити найбільш інноваційний період. Доводиться, що інновації в навчанні були вкорінені в трьох академічних революціях, третя – виявилася найбільш інноваційною. Найважливіші нововведення в політиці викладання були пов'язані з розвитком науково-технічних знань, що сприяло виникненню інформаційного суспільства. Розвинені країни запропонували впровадження політики співпраці у вищій освіті, що вплинуло на інновації в університетському навчанні. Пандемія корона вірусу 2019/20 рр. продемонструвала необхідність використання різних форм інтернет-комунікацій (Zoom, Google Classroom, Moodle, Whereby тощо) для перемикавання на нові можливості навчати студентів у закладах вищої освіти у всьому світі на початку XXI століття.

Ключові слова: академічні революції, освітня політика, вища освіта, політика викладання, інновації в навчанні, розвинуті країни, Україна.

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ІННОВАЦІЇ В ПОЛІТИКЕ ПРЕПОДАВАННЯ В УНІВЕРСИТЕТАХ В КОНТЕКСТЕ АКАДЕМІЧЕСКИХ РЕВОЛЮЦІЙ

Рассматриваются категории академических революций и инноваций в ракурсе образовательной политики в высшей школе. Особое внимание уделено развитию инноваций в обучении в зарубежных и украинских университетах, начиная с XIX века до наших дней. Отмечается, что сельскохозяйственная, промышленная, глобальная, демографическая и другие революции создали основу для академических революций, которые произошли в результате трансформации общества и вызвали инновации в системах высшего образования. Подтверждается вклад академических революций в усилении роли университетов в обществе. Важнейшие нововведения в обучении стимулировали университетское преподавание на протяжении всех академических революционных периодов (после 1867, 1945, 1983) в развитых индустриальных и развивающихся странах, таких как США, некоторые государства Европейского Союза и Украина.

Иследуется возникновение инноваций в политике преподавания в университетах во время первой академической революции, их модификация во время второй академической революции, и новые повороты в трансформации инноваций во время третьей академической

революції. Внедрення інновацій в преподавание отличалось интенсивностью и масштабностью во время академических революций. На примерах преподавания показано, как политико-идеологические процессы в обществе влияли на функционирование университетов.

Предпринята попытка сравнить образовательные процессы в течение трех революций и выявить наиболее инновационный период. Доказывается, что инновации в обучении были укоренены в трех академических революциях, третья оказалась наиболее инновационной. Важнейшие нововведения в политике преподавания были связаны с развитием научно-технических знаний, что способствовало возникновению информационного общества. Развитые страны предложили внедрение политики сотрудничества в высшем образовании, что оказало воздействие на инновации в университетском обучении. Пандемия коронавируса 2019/20 гг. продемонстрировала необходимость использования различных форм интернет-коммуникаций (Zoom, Google Classroom, Moodle, Whereby и т.д.) для переключения на новые возможности обучать студентов в высших учебных заведениях во всем мире в начале XXI века.

Ключевые слова: академические революции, образовательная политика, высшее образование, политика преподавания, инновации в обучении, развитые страны, Украина.

The process of teaching at universities goes back to the emergence of the first universities in Europe and the USA. Since then it has experienced many transformations. Starting from the XIX-th century, teaching at universities was affected by different revolutions – agricultural, industrial, global, demographic, commercial, cultural, etc. They did not replace the political order, but transformed the existing way of life and introduced innovations into the public sphere. Altogether these revolutions created the foundation for academic revolutions which resulted from society transformations, were the reflection of them and led to innovations in higher education systems. They served as the basis for a certain change of the role of universities in society in different historical periods. An approach to academic revolutions' role is given by Etzkowitz and Viale : «The first and second academic revolutions integrated research and then economic and social development as academic missions, changing the nature of the university. The third academic revolution integrates forward and reverse linear models in a programmatic and regulatory framework, synthesizing knowledge, organization and institutions: the endogenous, exogenous and mesogenous drivers of innovation. The university, thus, becomes an increasingly important platform for societal transformation» (Etzkowitz and Viale 2010: 595).

In the world there is big and various academic literature on development of the higher education. It's hard to name all the authors who have made their contribution to this subject. Just a few names give us a picture of the scientists who wrote about university –

industry – government relations in their global dynamics: Ph. Altbach, D. Bok, Ch. Bonser, H.-G. Gadamer, Ch. Hutchison, C.Kerr, W. Ruegg, J. Salmi, H. Silver, G. Wiggan.

Many scientists explored the phenomenon of the academic revolution in their works: L. Benson, H. Etzkowitz, I. Harkavy, J. Puckett, G. A. Olson, J. W. Presley, A. M. Ross, C. Rodrigues, etc. These scholars viewed the role of academic revolutions in the transition from old educational forms to innovative processes as crucial points in higher education history. The majority of scientists considered them as global phenomena in higher education transformations, possessing institutional and educational characteristics. They admitted that revolutions had their own periods of duration, and location on a certain territory. Many of them agreed that starting from the XIX-th century the world witnessed three academic revolutions that began in 1876, 1945 and 1989. These dates as bifurcation points were connected with significant historical events. In 1876 the opening of John Hopkins University gave rise to the formation of the research system in higher educational establishments, existing in the USA to this day; 1945 marked the end of World War II; 1989 was known for the fall of the Berlin wall and the beginning of the socialist system's collapse.

The academic revolutions triggered *the innovations* in higher education in the most countries of the world. The term *innovation* became very popular as a scientific category. At the end of the XX-th century Silver states: «In relation to learning and teaching, there were often reservations about the value of a vocabulary of 'innovation' rather than, say, 'development', which had less of a connotation

of novelty and more one of serious and safe planning» (Silver 1999: 146).

Academic revolutions brought numerous innovations to all segments of higher education, thus contributing to the growth of universities' influence in society. Their introduction into the educational sphere depended upon socio-economic transformations and differed from country to country. But the innovations started to have common features in teaching, when universities began competing for providing services in instruction for additional sums of money. This article will trace the dynamics of the most important innovations which stimulated the development of university teaching throughout revolutionary periods in advanced industrial and developing democratic countries like the USA, some European Union states, and Ukraine.

The first academic revolution: beginning of innovations in universities' teaching policy

After 1876, higher education systems experienced the influence of economic growth, revolutions, and political apathy of the 1920s, Great Depression, World Wars, etc. The innovations in teaching went in line with the emergence of universities all over the globe – in Japan, Brazil, Australia, Russia, etc. While contributing to modernization processes in their countries, new higher educational establishments performed mainly cultural and educational functions. Little by little universities incorporated varieties of regional traditions, religious doctrines and approaches to the quality of education in different educational systems. Later they have been marked as «classical or ideal». There was strengthening of the new universities, problems of the academic freedom have become aggravated, cooperation between science and education started to develop.

During the first academic revolution, political and ideological processes in society affected the functioning of universities. The ideological assessment of teaching from the point of view of the leading state ideology was observed in countries with various political regimes. If, for example, the political views of academics were considered to be ideologically improper, then the professors were not allowed to work at universities. For example, Hegelian A. Ruegg (1802-88), representative of radical materialism L. Buchner (1824-99), and theorist of communist and socialist movements K. Marx (1818-83) were not allowed to teach at universities for political reasons. Similar attitudes to professors existed in the former USSR after the October Socialist Revolution,

during Stalin's regime in the middle of the 30-ies. Changes in ideological views, happened in the second half of the first academic revolution, had also made their impact on teaching.

The first academic revolution was also characterized by an ideological penetration into the teaching process, which differed from country to country. Some researchers considered it even meaningful, for example Hans-Georg Gadamer (2002), who stated that in Germany in the early twentieth century «ideologization of science and academic teaching took place only in extreme cases, which are now reluctant to mention and which intelligent, eager to education and knowledge a student was trying to avoid then» (Гадамер 2002: 174-175). In the former USSR, especially during the Stalin's regime, the Communist ideology was part of the teaching process and its ideas were added in different forms into every science study.

At that academic revolution period universities used mostly traditional forms of instruction with the main accent on lecturing. Practical and seminar classes began to develop, and the involvement of students in the research work at laboratories, clinics, etc. started to take place. Besides, as the volume «History of the USA» states, «learning the materials narrated by the teacher in the classroom was a very popular mode of teaching then» (История США 1983: 518).

The first academic revolution, known for the spread of a classical German University model of the XIX century, was oriented toward the unity of teaching and research in higher educational establishments. Some scientists connected the emergence of the first academic revolution with the process of the introduction of research into the life of higher educational establishments as a consequence of German Universities' initiative. Rodrigues said: «The first Academic Revolution occurred when... the generation of new knowledge through research has been integrated into the mission realm of academia, hitherto centered on the dissemination of existing knowledge through teaching» (Rodrigues 2009: 3614).

The main accent started to be transferred from lecturing to seminars and laboratory classes in which an opportunity to be engaged in research began to be given to students. Ruegg points to the appearance of «university research centers in the form of seminars, which arose before the First World War at only a few universities... After 1818 the German model started to be implemented not only in restored but also in newly created states» (*A History of*

the University in Europe 2004: 440). Introduction of the research mode to training has laid the foundation for unprecedented academic experience of connection of teaching and research. There appeared the innovative idea which prevailed among academy: the best teachers - those who are competent and ready to spend their time in libraries to participate in a research.

One of the most remarkable innovations in teaching during the first academic revolution was the emergence of new forms in training by means of remote education. At the end of the XVIII-th century growth of communication in society thanks to regular and available post service promoted to the distribution of a new correspondence form of education in Europe. Usage of a new innovative teaching method presupposed the correspondence of students with teachers and receiving training materials by mail. Little by little distance education started to be implemented in different countries, for example, in Russia (of which Ukraine was a part at the time) where this method began to develop since the end of the XIX-th century.

So, higher education systems experienced the spread of innovations in teaching during the first Academic Revolution. The teaching process in universities during that time was subjected to ideological influence. Western universities stimulated new trends in teaching process happened in higher education systems of many countries, mostly Germany and the USA. They set a classical university model of the XIX-th century, in which the unity of teaching and research was attained. During the first Academic Revolution new methods, such as transition from traditional use of a lecture to new forms of education, introduction of a research to training, emergence of new technologies and development of use of distance learning, freedom of choice of teacher's and student's behavior in the course of education became innovative attempts of material transfer in a class. They started to undermine the traditional forms of knowledge transfer in the teaching process at universities at that time.

The second academic revolution: innovations development in universities' teaching policy

After 1945 the development of the second academic revolution was affected by new economic and political processes that happened after World War II. The higher education systems experienced the influence of scientific and technological revolution that marked a new step in humanity development. It was based on

scientific and technological knowledge, internationalization and the rise of the information society. The introduction of information technologies, the spread of globalization processes, and the democratic transition in many countries characterized the second half of the XX-th century. At that time higher education gained political importance mostly because of the necessity for economic recovery and the need to develop the economies of European states after World War II. During that period educated experts were in great demand for the implementation of social and economic reforms.

The role of higher education in society got a new turn in scientific discourse. Discussions about educational problems happened not only in sociological and philosophical terms, but also in political ones. Some people argued that education won't be able to survive without becoming the area of politics. As A. M. Ross says, the «educational questions became **political** (L.P.) questions» (Ross 1992:102). It turned out that many academic problems could be solved only with the help of political decisions. At that period research universities which started to be recognized as «a dominant model», a «golden standard», strengthened their contacts with governments. They emphasized their new social role aimed at service to society and were called «multiversities» (C. Kerr). The policy of higher education became a social issue. In many European countries this fact involved the lengthening and expansion of higher and professional education.

New demographic changes demanded new actions in higher education policy due to the growing diversity in students' contingent. As C. Kerr stated, higher educational establishments began to «educate previously unimagined number of students, merge its work with industry as never before» (Kerr 2001: 65). The mass nature of the higher education, its social expansion, the insufficient quality level in education, inflation of diplomas, overproduction of qualified specialists in some fields of economy was characteristic of the higher education systems in many countries. The aspiration of employers to receive graduates for their vacancies with diplomas from prestigious institutions of higher education, also contributed to the importance of educational process.

In this period special innovations in teaching embraced the integration of research with economics, thus making research innovative and commercialized. Some professors and faculty members started to work as scientific advisers at private and state

enterprises, others conducted their research at universities with industry financial support.

At that time the teaching process varied from university to university all over the globe in the area of education content, activities, principles of organization, availability of resources, their deployment, and attitude towards teaching. Since the 1970s-80s, innovations in teaching were made mostly by enthusiasts and became the focus of academy attention. Some of them were aimed at changing the traditional forms of teaching done in conventional universities.

One of the greatest innovations in teaching was the shift from a traditional lecture to a new presentation of lecturing material that stimulated thought. According to Silver, «confidence in conventional lecturing as a means of stimulating thought rather than simply presenting information was being undermined» (Silver 1999:150). Among other innovations in higher education instruction one can name the adaptation of news media to the teaching process; responding to the psychology of students' learning; introduction of case-studies, student-led discussion groups, self-study courses, etc. The quality of teaching and accountability became the central duty of a university.

The second academic revolution, accompanied by the scientific and technological revolution, gave rise to the introduction of innovations in the form of information technology into the teaching process. At its beginning, as D. Bok mentioned, «out of all the new technologies, only the humble audiocassette won a substantial following in the United States for educational purposes» (Bok 2003: 88). 16mm films, linear teaching machines, multimedia approaches and TV were among the first technologies used in teaching all over the globe. Eventually they were ousted from higher education instruction and replaced by computers, which were slow in performance and not widely spread in the fields of exact sciences and humanities.

The beginning of the innovative introduction of electronic and computer technology into teaching referred to the process of preparing first students of technical specialties (late 1950s - early 1960s), and then the humanities (late 1960s – early 1970s). The mid 1970s witnessed a growth in the number of more powerful computers with better interfaces; their introduction into higher education was followed by such innovations as the internet and new forms of distance education.

The internet is undoubtedly considered to be the main higher education innovation of the second academic revolution. This technology can be hardly overestimated as it offers a considerable amount of material that can be used for conducting lectures, seminars and producing research. There are pro and contra voices for internet usage in teaching. For example, Bok (2003) said: «The Internet may do well at performing some educational functions, but it is not yet clear how effective it will be at fostering interest in new ideas, or building a commitment to helping others, or developing leadership talents... Still, the Internet does have features that make it unusually attractive as a teaching vehicle. Compared with radio, television, and other technologies, it allows instructors to update material more easily and tailor teaching programs to suit the needs of particular audiences» (Bok 2003: 88-89).

Use of the Internet opened a new way of teaching by means of distance learning which continued the intensive development in Europe and America during the second academic revolution. A number of benefits made distance learning an important innovative method of university teaching by the end of the XX-th century: individual pace; freedom and flexibility; accessibility; mobility; technology usage; social equality, etc. Critics pointed to the absence of a teacher close by; lack of emotional presentation of the knowledge obtained; the absence of individual approach to a learner, etc. But the policy of higher educational establishments in advanced states, possessing high technological resources, was aimed at the introduction of distance learning into their curriculum.

The end of the second academic revolution was marked by innovative steps in the sphere of cooperation in higher education. In 1995, when the process of unification and cooperation in Europe was on the way, the European Commission elaborated the «White Paper on education and training. Teaching and learning: towards the learning society» (White Paper 1995). It was aimed at propagating new democratic teaching goals. The concept of mobility and the expansion of citizens' rights in higher education gave new turns in teaching and learning cooperation between educational institutions in the global world.

So, the second academic revolution, that lasted more than 40 years, brought new ideas to society connected with the necessity of modernization of higher education system and introduction of new policy into the process of

teaching. It was marked with strengthening university - industry - government relations. Its main innovations in teaching and learning were inherent more or less to all states mostly due to information technology development, emergence of the first educational programs, the unification of the educational field in Europe, changes in traditional forms of teaching, and the appearance of ideas aimed at improving university teaching world-wide. The advanced industrial democratic countries, which possessed the utmost amount of financial and intellectual resources, were the first to introduce new technological innovations in teaching.

The third academic revolution: new turns in innovations' development in teaching

Starting from 1989, the global processes of the XXIst century - economic crises, introduction of a new configuration of world order, emergence of new independent states on the world map (Ukraine example in 1991), deterioration of transparent national borders, development of modern technologies, military and terrorist threats, spread of mass culture, etc., – served as the background for higher education transformation. Since that time there have been numerous discussions about the third stage of the academic revolution, based on world higher education realities. Ph. Altbach referred to them massification of education; growth of private sector and privatization of state higher educational institutions; on-going discussions, concerning the advantages of state and private higher education; rapid development of some Asian countries as scientific centers; recent economic crisis and its impact on higher education (Дорога к академическому совершенству 2012: 13). All these global changes affected the status of the university in the global world.

At the end of the XXth century, the university became a global institution and strengthened complex relationships with state and private business. Its new name, «entrepreneurial», was connected with the development of commercial activity that affected the academic life of the university. Since that time the «entrepreneurial» university became «the center of gravity for economic development, knowledge creation and diffusion in both advanced industrial and developing societies» (Etzkowitz & Viale 2010: 596). Later it gave rise to the «emergence of the democratic, engaged, cosmopolitan, civic university – the radically new type of «great university»» (Benson, Harkavy, & Puckett 2009: 43).

All these and other realities of the third academic revolution brought either diversification or unification processes to universities and made them respond to different demands of the globalizing world. The diversification of higher educational establishments was connected not only with their types and differences in financing, but also with changes in student composition because of demographic fluctuations (growth in the number of minority students, foreign students, women students in comparison to men almost in all countries). There appeared the necessity to work with students having different educational and intellectual background and, sometimes, inadequate level of language study. These factors demanded the usage of new innovative teaching methods in higher education. Their emergence was connected to the technological breakthrough at that time, which manifested itself in the diverse introduction of ICT (information and communication technologies) and the new correlation between teaching and research at higher educational establishments.

The most widespread notion of ICT products having relevance to higher education, included «teleconferencing, email, audio conferencing, television lessons, radio broadcasts, interactive radio counseling, interactive voice response system, audiocassettes and CD ROMs, etc.» (Noor-Ul-Amin 2011:1-2). Their usage in teaching all over the globe at different higher educational establishments boosted the process of education. At present, knowledge of computers, gained at school, helps the overwhelming majority of university students' complete assignments in the form of presentations, written essays, thesis projects; participate in Skype conferences; create short films; search for information in the internet; use YouTube; work with iPads, etc. Such technologies as audio / video conferencing, e-learning, online teaching, internet conferences, and internet broadcast also found their place at universities. They allow students to consult their teachers in real time, take tests, pass exams, etc.

The introduction of multi-media technologies and distance education into university life differs from country to country, from university to university. For example, in Ukraine, the introduction of innovative informative technologies in the form of PC usage was rather slow in implementation; it evolved gradually over the last decades. At the beginning of the author's teaching career at universities, the majority of students had neither laptops nor stationary PCs at home. But there is

a reverse side of this process based on an opposite effect while learning. Students became dependent on their gadgets, some prefer to conduct their own internet search instead of reading the assigned material; sometimes it's hard to locate, download and store the desired texts, etc.

The pandemic of 2019/20 demonstrated the necessity to use different forms of Internet communication (Zoom, Google Classroom, Moodle, Whereby, etc.) for switching to new possibilities to educate students at higher educational establishments worldwide. Under the threat of Corvid, the policy of universities in teaching process is oriented toward the advantages of usage of ICT in present and in future. Distance education started to occupy more and more space in the teaching process worldwide.

The time – span of the third Academic Revolution was also marked by new attitudes towards the dichotomy “teaching or research” at higher educational establishments: either teaching is neglected by universities because of research or teaching is prior to research because of necessity to meet the demands of different cohorts of students in times of demographic changes. These two approaches had their supporters and opponents, their correlations depended mostly on university's traditions in different countries, types and peculiarities of higher educational establishments.

In the time of the third academic revolution the old contradiction about the priority of either teaching or research in education was affected by global transformations and got a new pragmatic understanding. As Ph. Altbach (2012) proved, there was some reduction in financing of academic scientific research in many countries, mostly Anglo-Saxon. But an increase in financing was found in such countries as India and China. The financing in Asian countries is on the same level (except Japan) (Дорога к академическому совершенству 2012: 14). Unfortunately, the reduction of research programs in higher educational establishments took place in some new democratic countries, including in Ukraine.

Educational initiatives, exercised by the USA, Canada, and some Eurasian countries also contributed to innovative ideas in teaching at this period. These countries started to raise the quality of higher education through unified training systems. Creation of a European Higher Education Area (EHEA) modernized the teaching process in Europe with an accent on quality assurance as «the corner stone of Bologna process» (Bonser 2009: 40). Cross-

cultural exchange of knowledge, orientation to quality of training, development of the educational modules, courses and programs leading to joint recognition of steps at the higher school, introduction of lifelong training had an impact on world educational process.

The unification actions contributed to great changes in innovations in teaching in many countries. For example, Ukraine, as a newly formed state, introduced some innovations in university teaching during the years of active participation in the Bologna process (starting from 2005). Among them there were democratic approaches to educational process; introduction of programs of the author (contrary to the existing state standards); attention to a new way of assessment of knowledge; emphasis on the use of the latest information technologies in training, orientation on learning of foreign languages; introduction of individual and group methods of training; use of psychological methods of impact on students, etc. Different educational programs organized by the USA, Canada, some European countries became popular in many parts of the globe. For example, the Fulbright Scholar program allows teachers from different countries to master their teaching skills in a USA university and American teachers are able to introduce their skills in foreign countries as well, thus contributing to the spread of democratic teaching methods world-wide.

So, the most important innovations in the policy of teaching were connected with the development of scientific and technical knowledge that contributed to the emergence of information society. The policy of innovations in teaching during the third academic revolution was influenced by globalization that resulted in the implementation of European educational integration (Bologna agreement, European Higher Education Area, etc.). It was marked by the implementation of European educational initiatives that affected the modernization of teaching process. The main accent was made on its quality, attained first of all with the help of ICT, introduction of the concept of mobility and the expansion of citizens' rights in higher education. The changing role of a university in society and university- business – government relations were deteriorated in a new epoch of crisis. There happened the reduction in financing of academic research in some states.

Out of three academic revolutions the third one turned out to be the most innovative.

Each academic revolution had its own impact on the policy of teaching in different

countries. But only during the third one the most highly technical innovations found their place in the global process of teaching at universities. All three academic revolutions were connected to many political, economic and social events that happened in different parts of the globe. They were characterized by technological developments, fluctuations in politics and finance, demographic growth that changed the student social portrait, etc. They resulted in a new role of the university in society, alongside with transformations in university systems. All academic revolutions, accompanied with innovations in teaching, differed in their intensity and scope and reflected the global trends in educational politics.

The academic revolutions took place not only in established democratic countries; they embraced new states that emerged in the XX-th century. But in the newly emerged countries the academic innovations in teaching were incorporated slower than in the advanced industrial states. It turned out that the introduction of innovations into the teaching process was not an easy thing. The conservative approach, which manifested itself not only in the unwillingness to introduce new methods of teaching, but in the absence of decent financing and mismanagement on different educational levels, became its main barrier. In order to catch up with the advanced industrial countries in the area of teaching methods, the developing countries should demonstrate their will to follow the models and policy of advanced industrial democratic states in the introduction of new ideas into teaching practice.

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