

Innovation strategies for education: Liberal and Utilitarian Educational Tendencies in the Higher Education System

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Abstract. This paper discusses innovation strategies for education. The authors of the paper argue that the leading modern universities are the educational and training ones. The global changes in higher education have happened due to several reasons: information playing a key role in modern society (nowadays, it is possible to find plenty of information on any questions); the task of education is to develop educational, professional and cultural skills of students, which is not the original central idea of modern European countries as well as Russia; the tendency to unite several higher education institutions. The authors acknowledge that there are several trends in higher education: the multilevel system; modern information technologies; the distant educational system and development; university complexes; new educational standards; new educational technologies and management structures etc. At the same time, the authors claim that there are at least two systems (tendencies) in the theory of university development: liberal and pragmatic. The former is connected with the educational university's mission; the later is related to the needs of modern society.

Introduction

The investigations of this research topic are considered owing to several factors. The creation of educational processes and actions is due to both the influence of global processes in the modern world and the specifics of domestic socio-economic, political, cultural and religious life. There are unlimited powers of science which are capable of creating new trends. We want to emphasize that knowledge in today's information based society is very "flexible". As to the present, it is not possible to imagine the "constant" knowledge, like it was in the Aristotle's epoch, when truth was unchangeable for a long period of time. Due to this reason, the educational paradigm is changing. Initially, fundamental science has been developing under new conditions, where information is not under control. Human consciousness sinks in information, when at some point this constant condition allows us to reveal a totally new type of mentality (evolution) which is different from classical rationality. The teacher's task in the past was to create a citizen, worthy of the society and give him/her as much knowledge as possible. It is not necessary and possible in today's informational society. "Today's informational conditions are not dictating constant existence of combined professional and cultural skills. Main skills are rapidly adjusting to the circumstances of the changing world. Information is not under control, and it is free from control of pure reason." [1]

Innovations in higher education system

Today's world is united in the sense of caring about education and educating all the citizens of the planet. International educational space is actively and rapidly developing. Due to this tendency, the international community begins the creation of the global educational strategy, which is not dependent on the place of living and the educational background. All the countries have common ideas about higher education today. Modern education has to be international. It means the higher education system tends to have poly-cultural features.

This tendency would make it possible to evaluate events and happenings originating from another person, another culture, a different social-economical formation etc. At the same time, a university must be intact and become a stronghold of creative freedom of scientific creativity; and, as a consequence, the scope of educational courses must widen. Simultaneously, a university must not only maintain the spirit of freedom of scientific works, but also upgrade its courses considerably. These steps allow creating a university multicultural environment, which results in freedom of cultural self-determination and personal enrichment of a future specialist. The entire world is integrating new trends into various types of higher education institutions (under the guidance of the classical university) and into

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the scientific and educational metropolises of continental, trans-regional and national importance. Today, the alliance of universities with industries is common in many countries. Due to such alliance, a greater possibility of academic pursuits and training for people of special professions is created. If we cast a glance into Russian history, according to the project of Peter the First, the University was created as the center of scientific, educational and worldwide activities in order to emphasize cultural significance for national development. As a result, even nowadays, the university is composed of various research centers, research institutes, scientific societies and professional associations. University professors and faculty members not only create scientific schools, but also take part in public lectures, seminars, conferences, scientific programs with mass media involvement in order to promote science and scientific achievements. The best of professors also contribute to preparation of scientific and methodological manuals and publication of textbooks for various educational systems. Traditionally Russian universities always had a national, scientific and human resource potential, and supported cultural and scientific exchanges with foreign universities [2]. The main principles of national universities development are the essence of science and practice interaction in the process of professional training, succession at educational levels and in cultural creativity, and a high level of sincerity of alumni employees and civic education.

University life must be based on knowledge, ethical and moral values, regardless of the political system and economic conditions in the country. So what are the current innovations in the system of university education? In Russia, the transformation in the higher education system is connected with a search of an optimal relationship between existing traditions in the national high school and the modern trends associated with the entry into the global educational space. In this context, there are several advancements and trends. The first trend is making a close connection between the universities and developing a multilevel and sophisticated educational system in a number of universities across Russia. The advantages of such system existence are the enhanced education structure and the availability of future professional choice and mobility. The system enables an alumnus to learn new options and professions on the basis of full-fledged education. The second trend includes the modern information technologies, university enrichment, application of the World Wide Web and development of rapid and effective distant educational systems. The third trend is a methodological blending of various Russian higher educational institutions, the fusion of all national higher educational institutions with world leading universities, which leads to the emergence of the complex-university. The fourth trend is the transfer of Russian higher education to self-financing systems.

Liberal and pragmatic trends in theory of university development

There are at least two systems in the theory of university development: liberal and pragmatic. The former is connected with the educational university's mission; the later is related to the needs of the modern society. The liberal tendency to a greater extent is connected to the educational university's mission, oriented at spiritual component development, revealing the creative abilities of an individual. Traditionally this trend was based on books and their learning: the monastic culture, with its intellectual and spiritual essence playing the role of a treasure, while the book had become a tool of knowledge and culture. One of the major targets in the framework of the liberal trend is the human culture and creation of human personality with the focus on the patterns, set in ancient times. The second trend is pragmatic. Initially it was associated with needs of the modern society in qualified specialists. The pragmatic tendency equate the university together with the high school in general terms of their objective, especially professional training. The liberal trend was based on comprehensive personality development and ideals of classical education. Pragmatic trend was based on professional education standards. It should be noted that in different periods these two movements drifted together and apart alternatively, reflecting the transformations in the European culture. The term "liberal education" appeared during the period of Late Antiquity. This type of education was mentioned by Aristotle in "Metaphysic". Distinguishing the notions of experience and art, Aristotle highlighted "experience as the unit knowledge, and art as general knowledge, and every action and every process of production refers to the unit," so the knowledge and understanding should be correlated more with art than with experience. Thus, a person who knew any art was considered wiser than the one who knew only the craft. An important trait of a proficient was the ability to teach someone. With the breakup of the Roman Empire, the idea was filed as a history, but later, in medieval universities, it was revived. In European culture, the term "liberalism" appeared in the beginning of the nineteenth century. The term comes from the Latin "liberalis" – free, related to freedom. One should understand Liberalism as something related to personal freedom and not limited by any tradition phenomenon. "The person's revolt against the species" – this definition was given to liberalism by Hayek. [3] According to Hayek, the most significant result of individual energies release was represented by great prosperity of science that accompanied the ideological liberty spread from Italy to England and further. The form of liberalism, usually called "classic", appeared in the late XVIII – early XIX century. It is associated with the activity of the "philosophical radicals" group in England, which, in turn, relied on the works of J. Bentham, Ricardo, T. Malthus, Dzh. St. Mill and Herbert Spencer. The idea that people feel good or bad about, that is based on the feeling of pleasure or displeasure was the fundamental idea of classic liberalism. "It is the will of our nature that the humanity serves two masters, one is pleasure and another is pain. Only they can indicate what we should do and what we should not" [4] The thesis of J. Bentham "what brings me pleasure is good and what anguishes me is bad" [1]

reflects the basic concept of the individualism and utilitarianism philosophy. Bentham brings up the issue of human nature, which provokes us to make a choice in accordance with reasoning of result effectiveness and pleasure. Under the notion of society, we understand that a number of people are capable to exist together and provide each other with necessary service. In this case, the benefit of one person depends on the specific actions of other people, who care only about their own benefit. In the works of Herbert Spencer [5], it is also highlighted that the development of personal features, abilities and talents of the individual person, for him/herself rather than for public benefit, usually becomes the main goal of human life. According to the theory of "classic liberalism", people are intelligent enough to understand the need of rule compliance and existence within the human community, the need of non-interference into each other's lives. According to Spencer, in this case, society can be represented as a sophisticated system remaining in balance, and the interests of society can be represented as a complex of individual goals of individual members of society. The idea reasoned in classical liberalism is that each person is the best judge of his own interests. The society guarantees freedom and nonexistence of dictations for any citizen; it also provides all the citizens with equal rights. From J. St. Mill's position [6], freedom is not a goal in itself, but an important condition for internal social equilibrium. "A person is responsible for his/her actions to society only as far as his/her actions concern others. If human actions concern only him/herself, his/her freedom of action must be legally considered unlimited. A person is unlimited ruler of him/herself, of his/her own body and soul" [6]. It is necessary to note that the concept of freedom implies the citizen independence and privacy against state and public opinion interference. Another value of liberalism is equality. However, equality can be presented as the condition of individual suppression or adjustment. The idea of equal opportunities, which initially included the creation of equal conditions for all people's self-realization, was an expression of the idea of equality from the perspective of English liberalism. Individual freedom, market relations, based on private property, and minimal governmental intervention are the basic concepts and essentials of the classic liberal theory. Thus, the theory of liberal education focuses on the individual needs of the person for self-knowledge and self-improvement, rather than on the needs of society. The principal aim was the idea of spirituality based on potential development of the person and human intelligence. On the other hand, it is impossible to claim that the university is completely free from society, because in reality, the university is free from society in their intentions, but, as a center of science and culture, it focuses on the truth, which is presented by society. Representatives of utilitarianism also expressed the need to expand the educational system and transform higher education into a universal mode. According to representatives of utilitarianism, the concept of profit and economic benefit is associated with progress of science and practical implementation of scientific research. By the middle of the XIX century,

utilitarianism was manifested in all spheres of public life in England and had a great impact on the educational process. The social function of universities in terms of utilitarianism was to conduct scientific research and prepare qualified specialists. Consequently, universities activities should be less abstract and more practically applied. Elitism and religious leaders in higher education in England, drew a protest against utilitarianism representatives. Representatives protected the postulate proposed by the Czech humanist John Amos Comenius. "Education is necessary for everyone! The process of education of a person should last up to 24 years and it should be affordable for everyone regardless of gender and origin. It is necessary to teach people to recognize those values toward which they should work for, and what values must guide them during their lives. [7] An increase in an educational level will help to avoid the influence of subjugation on modern society," - considered Comenius. He attached great importance to the personality of a teaching staff. He saw science as an integral part of general education and he dreamed about creating a college, where experimental philosophy could be taught and practiced. The courses of college would include a wide range of humanitarian subjects, political science, and law. Comenius arrived in England by invitation of the Parliament hoping to realize his dream and create his own college. Though he did not succeed, his ideas had a great influence on the formation of the Royal Society. The basis of the Comenius educational concept is the idea of humanism; the cult of a person, cheerfulness, optimism, the desire to create conditions for freedom, balanced personality growth are some of the dominant ideas. Comenius beliefs opposed medieval church teachings on human sins. The basic principle of Comenius educational system was the principle of compliance with nature. According to this principle, the Nature presents the existence of the unity of macro and micro worlds. A person, represented as a micro world, reflects the rational part of the nature, the macro world. The educational and conditioning system of humans must be guided by sequence and harmony as it is done by nature itself. Taking this principle into consideration, the process of education will be successful and fruitful. The principle of the natural conformity was applied in "natural methods" of education. The educational system must be brought into compliance with the laws of nature. According to this principle, the logic of J. Comenius educational theory's success depends on independent observation, practice, the ability to apply one's knowledge and skills in new situations, as well as the ability to present the results of one's work. In his work "Czech Didactic" J. Comenius for the first time substantiated the system of school education from the perspective of the natural conformity. Academies had become a final stage of school education. They were oriented at young gifted people aged from 18 to 24, who expressed their desire to become public officials and politicians. The primary intention of education was the establishment of balance between harmonies and will of the young people. Thomas Huxley [8] was also an outspoken representative of utilitarianism. The purpose of utilitarianism was to adopt adequately higher forms of

education to development of scientific and technical demands of the English society. Thomas Huxley, as a supporter of the scientific approach, the basis of which was to conduct advanced scientific studies, considered the model of the German University of Humboldt as the example of educational reform, which, in our point of view, supports the idea of utilitarian and liberal policies complementarily. The supporters of liberalism denied the theory of utilitarianism, because they did not take into consideration the importance of cultural and spiritual life, considering it useless for the immediate practical benefits. Supporters of liberalism condemned the “swinish” attitude to pleasure, and, as a result, the term “swinish-philosophy” had appeared. But the charges were not fully reasonable: utilitarianism did not merely present pleasure as a sensual and physical notion.

As a result, by 1870 an experimental science took its place in the system of university education in England. The formation of the educational concept was enormously influenced by the philosophy of positivism. The representatives of classic positivism of the XIX century such as G. Spencer, A. Comte, J. Mill outlined the importance of the educational process from the perspective of the social changes. The basic concept reflects the process of cognition which changes the content of the cognition subject (the content changes in the process). A. Comte paid special attention to human intelligence abilities, which were seen as the engine of progress, and Herbert Spencer in his turn paid attention to individual features, specific to perceptual knowledge, and believed that education helps people in the process of socialization. He considered natural sciences to be the most important one for education rather than human sciences. According to Spencer, the objective of education is the formation of people who would be able to control themselves and not to be controlled.

Conclusion

The leading modern university must be scientific and, at the same time, an educational and training institution. The main idea and purpose of each department is not only to provide students with a certain sequence of stable scientific knowledge, but also to distinguish methods and techniques of the scientific reserve, with the help of which many scientific truths will be discovered. By this means, we can make new scientific discoveries and understand how to use these techniques in solving specific problems. It is necessary to provide students with the opportunity to develop scientific curiosity, capacity for scientific thinking and creativity on the ground of basic knowledge. In contrast to the classical universities, other educational institutions, which merely pretend to be universities, the leading modern university must understand its mission clearly. This mission consists in providing students with such knowledge and skills that will be useful for them in their professional activities, professional training and retraining, in carrying out both fundamental and applied researches. There are at least two trends in the development of

universities: on the one hand, providing the universal knowledge or complex knowledge, and on the other hand, the desire to train specialists able to apply their knowledge in practice. With the emergence of the first universities and the establishment of science, European culture of the middle Ages acquires special features, such as intellectualism and rational consciousness. Significant changes, especially transformations in spiritual organizations, are taking place in the public consciousness. The issues of consciousness and self-awareness have an important place in culture. At the same time, society being in need of educated specialists – priests, theologians, healers and clerks – defines a different trend in the development of the university associated with the new demands. Thus, the first trend develops the ideals of classical university education, and the second – ideals of professional higher education. From our point of view, all the transformations of universities must be strategic. The great importance and emphasis placed on modern world rankings, highlighting the success and the reputation, is not always positive. Practice shows that the demand for quick results is not favorable for the development of innovative and long-term studies. The increase in the number of publications leads to a deterioration in their quality, damaging the value and significance of the research results. Creativity and passion towards science, the desire of self-improvement should not be measured financially. In fact, the prevalence of pragmatic tendencies in the university, inevitably leads to a crisis of creative thinking.

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References

1. Nataliya Pogukaeva, *Procedia – Social and Behavioral Sciences*. **166**, 456-459 (2015)
2. Iliya A. Ageev., Vera. V. Ageeva, *Procedia – Social and Behavioral Sciences*, **166**, 24 – 29. (2015)
3. Friedrich A. Hayek, *A road to Serfdom*. London (2002). URL: <https://mises.org/sites/default/files/Road%20to%20serfdom.pdf>
4. Jeremy Bentham, *Theory of Legislation* (1914). Oxford university press https://archive.org/stream/benthamstheoryof01bent/benthamstheoryof01bent_djvu.txt

5. Herbert Spencer, *Spencer: Political Writings* (Cambridge University Press, 1993)
6. John Stuart Mill, *Utilitarianism* (1863). URL: http://www.gutenberg.org/ebooks/11224?msg=welcome_stranger
7. Daniel Murphy, *Comenius: A Critical Reassessment of his Life and Works* (Irish Academic Press, 1995)
8. Sherrie L Lyons, *Thomas Henry Huxley: the evolution of a scientist* (New York Publisher: Prometheus Books, 1999)
9. Irina V. Brylina, Alla A. Kornienko, Kabanova, Nataliya. N. *International Multidisciplinary Scientific Conferences on Social Sciences and Arts. Psychology and psychiatry, sociology and healthcare, education: Conference Proceedings*, (Albena, Sofia: STEF92 Technology Ltd, 1005-10126 2014)
10. T. Mahmood, M. Ahmed, H. Shoaib, M.A. Ghuman, *Mediterranean Journal of Social Sciences*, **4 (2)**, 563-570 (2013)
11. Mihail G. Minin, *Joining forces in engineering education towards excellence*. (Miskolc, Hungary, 83-85, 2007)
12. N. M. Pankova, N. N. Kabanova, A. A. Kornienko, V. A. Ponomarev, *The European Proceedings of Social and Behavioural Sciences*, **7**, 279-284 (2016)