

TRENDS AND TRANSFORMATION OF SECONDARY EDUCATION IN THE USA, GREAT BRITAIN AND UKRAINE THROUGH REFORMS, INNOVATIONS AND ALTERNATIVE EDUCATION

Mariia Tymenko

PhD (Candidate of Science) in Education,, Researcher of Comparative Education Department at Institute of Pedagogy of the National Academy of Education Sciences of Ukraine
Kyiv, Ukraine

E-mail marytym@ua.fm

orcid /0000-0002-7639-5630

Abstract

In this article, the author discovers some aspects of the transformational processes of secondary education in the United States and Great Britain through the prism of innovation and alternative education. . The paper highlights the link between innovation and alternative education and changes in secondary education in the US and British schools. An analysis of the works of some American and British scholars dealing with the problems of secondary education development and the results of their researches are highlighted. The article reveals and identifies the core competencies in learning essential for the development of the personality of the student recommended by the Council of Europe. The author also highlights the transformational processes that take place in Ukrainian school education, in particular the new school reform called "New Ukrainian School" and the identification of the new core competencies for the development of a successful personality.

Keywords: active learning, alternative education, trends, core competencies, innovation, reform, secondary education, transformational processes.

INTRODUCTION. PROBLEM STATEMENT

The current system of education was designed in a different era and structured for a different society. Because the current system was designed nearly 100 years ago for a different society and economy. According to the American scholars such as Stuart Butler, Judy Peppler, Jennifer Humke, Robert Sherman,

Lily Eskelsen, Rendi Weingarten the system can no longer deliver on the purpose to which we are committed, nor can it provide the individual and public benefits that are sought. As Robert Sherman states “it’s an inherited system, which is based on a standardized, “factory” model where teachers are given an age-group cohort of children at the beginning of each school year, a standardized curriculum, and a matching set of assessments. Despite teachers’ best efforts to individualize along lines of difference, opportunities to tailor the content, pace, and method of instruction are limited. Students are expected to work with their assigned material and move along with their age cohort as the years pass. Grading and other assessment tools are designed primarily to assess the results of learning, rather than to improve learning as it happens”. According to an Organization for Economic Cooperation and Development (OECD) report, “the pressure to increase equity and improve educational outcomes for students is growing around the world” (Vieluf S., Kaplan D., Klieme E. and Bayer S. (2012),p.3)

LITERATURE REVIEW

The problem of coexistence and mutual influence of innovation education and educational reforms is analyzed in the works of foreign researchers (A. Velaan, L. Verd-Prud, C. Green, B. Levin, C. O'Connell, R. Kurt-Chey, D. Yang, etc. .) and requires further systematic study, adaptation of the main provisions of their proposed provisions to the peculiarities of the development of domestic education.

Peter Serdyukov is an american scholar who emphasizes the necessity of educational innovations, identifies the barriers to innovation, and outlines potential directions for effective innovations in the USA. In his article “Innovation in education:

what works, what doesn't, and what to do about it?" he outlines that "Education, being a social institution serving the needs of society, is indispensable for society to survive and thrive. It should be not only comprehensive, sustainable, and superb, but must continuously evolve to meet the challenges of the fast-changing and unpredictable globalized world. Lack of innovation can have profound economic and social repercussions.

Studies by American educators such as R. Barr, V. Smith, M. Fantini, R. Miller, R. Morley, J. Nathan, M. Raivid, W. Parrett, T. Deal, T. Gregory, G. Wehlage point to the essential role of alternative secondary education in the process of democratization and humanization of society, since it undermined the traditional vision of a single school model and teaching style by offering free choice, filling the niche of the needs of a diversified American society.

Excellent books on different aspects of innovations in education have been written by outstanding innovators such as Andy Hargreaves (2003) "Teaching in the Knowledge Society: Education in the Age of Insecurity", A. Hargreaves and D. Sirley (2009) "The Fourth Way: The Inspiring Future for Educational Change", Michael Fullan "The New Meaning of Educational Change" (2007), "All Systems Go: The Change Imperative for Whole System Reform" (2010),"Stratosphere: Integrating Technology, Pedagogy, and Change Knowledge" (2012), Yong Zhao, "World class learners"(2012), Pasi Sahlberg "FinnishED Leadership: Four Big, Inexpensive Ideas to Transform Education" (2017), "Finnish Lessons: What Can the World Learn from Educational Change in Finland?" (2011) Tony Wagner "Most Likely to Succeed: Preparing Our Kids for the Innovation Era" (2016), "Creating Innovators: The Making of Young People

Who Will Change the World” (2015), Mihaly Csikszentmihalyi “All about flow and positive psychology” (2013), and Ken Robinson “Creative Schools : The Grassroots Revolution That's Transforming Education” (2015).

Ukrainian and Russian scholars such as A. Vasilyuk, B. Wulfson, O. Dzhurinsky, N. Avshenyuk, I. Ivanyuk, O. Lokshina, A. Sbrueva, A. Epstein, K. Korsak, N. Lavritschenko, L. Berezivskaya, L. Pukhovskaya, O. Savchenko, F. Malkov, O. Matvienko, V. Myasnikov, O. Ogienko, and others - in-depth and qualitatively analyse transformations characteristic of the past and nowadays in the educational systems of developed countries, also cover the sources of innovation, the causes of change that determine their directions.

METHODOLOGY

The conducted research is a qualitative one. The applied method is the analysis, i.e. literature analysis (studies of the Ukrainian and foreign comparative educators), documentary analysis (official documents of the NAES). Besides, the interpretative method was used to understand the phenomenon of the CE in the NAES, its achievement and trends of development. The method of generalisation has provided an opportunity to present the holistic picture of the CE in the NAES of Ukraine.

MAIN RESULTS

The generalized classification of reforms was proposed by American scientist David Plank, who proposed four main types of educational reforms: additional, external, regulatory and structural. Additional reforms require the attraction of funds and fully funded by the state. External reforms, as well as additional ones, do not affect the organizational character of the school's

educational process. The last one concerns the process of enrollment of teachers to school and the release of students from the school. The third type of regulatory reform is aimed at raising the level of academic achievement of students. Reforms of this type are widely used in modern schools. Structural reforms can become more radical as they require changes in the structure and management of the school. For example, determining pay for teachers according to pupils' achievements, increasing control and responsibility of teachers, introducing more accurate report procedures.

American scholars, Allan A. Glatthorn and Jerry M. Jaihall, highlight the other side of the reforms, noting that educational content reforms are aimed not only at updating and modernizing the educational process, but also in a significant way on the activities of teachers and students (A. Glatthorn and J. Jaihall, 2015)

Works of american scholars such as: A. Velaan, L. Verd-Prud, C. Green, B. Levin, C. 'Connell, R. Kurt-Chey, D. Yang note that educational reforms are a program of changes initiated by the state and aimed at modernizing education, determine educational changes and formulate a strategy for raising its level, implement deep, systematic, stable structural and organizational changes systems of public education. They not only specify the future educational perspectives, but also help eliminate the problems identified in educational development, through the implementation of educational innovations. C. Green, R. Kurt-Chey emphasize that the result of educational reforms should be a new way of solving public problems, and its main means - new educational proposals, innovative activities. Thus, educational reforms are a manifestation of an innovative strategy of social

development, the element of the strategy of innovative learning. Innovative learning is a new, alternative to a traditional, approach to knowledge acquisition; process and result of educational and educational activities that stimulate innovative changes in society.

As a British scholar, J. Lowry states: “In the knowledge economy, memorization of facts and procedures is not enough for success. Educated workers need a conceptual understanding of complex concepts, and the ability to work with them creatively to generate new ideas, new theories, new products, and new knowledge. They need to be able critically to evaluate what they read, be able to express themselves clearly both verbally and in writing, and understand scientific and mathematical thinking. They need to learn integrated and usable knowledge, rather than the sets of compartmentalised and de-contextualised facts. They need to be able to take responsibility for their own continuing, life-long learning” (J. Lowry, 2015).

Innovative learning and training focuses on the formation of a person's social and adaptive readiness due to the development of abilities for creativity, various forms of thinking, ability to co-operate. Specific features of innovative education are openness to the future, the ability to foresee on the basis of constant reevaluation of values, focus on constructive actions in new situations, which is ensured through the development and implementation of educational innovations.

Ukrainian researcher O. Hrytsayev, who defines educational reforms as changes in the system of education, which, firstly, reflect education policy of the government, and secondly, are considered as a concept of the government and are transformed

from the state of ideas and proposals into normative legal acts, and thirdly, have strategic intentions.

Innovation in education can appear as a new pedagogic theory, methodological approach, teaching technique, instructional tool, learning process, or institutional structure that, when implemented, produces a significant change in teaching and learning, which leads to better student learning. So, innovations in education are intended to raise productivity and efficiency of learning and improve learning quality. Educational innovations emerge in various areas and in many forms. According to the US Office of Education, “There are innovations in the way education systems are organized and managed, exemplified by charter schools or school accountability systems. There are innovations in instructional techniques or delivery systems, such as the use of new technologies in the classroom. There are innovations in the way teachers are recruited, and prepared, and compensated. The list goes on.” (US Department of Education). According to American scholar Peter Serdyukov “innovation can be directed toward progress in one, several, or all aspects of the educational system: theory and practice, curriculum, teaching and learning, policy, technology, institutions and administration, institutional culture, and teacher education. It can be applied in any aspect of education that can make a positive impact on learning and learners. All innovations are ultimately directed at changing qualitative and/or quantitative factors of learning outcomes: qualitative: better knowledge, more effective skills, important competencies, character development, values, dispositions, effective job placement, and job performance; and quantitative: improved learning parameters such as test results, volume of information

learned, amount of skills or competencies developed, college enrollment numbers, measured student performance, retention, attrition, graduation rate, number of students in class, cost, and time efficiency.”

Thus, most American educational strategies are based on the results of the introduction of innovative training projects such as: “Longer School Day or School Year”, “After-School Tutoring”, “Smaller Class Sizes”, “Improved Teacher Quality”, “Improved Training”, “Higher Credential Standards”, “Internet and Computer Access in Schools”, “English-Only vs. Bilingual Education”, “Content of Curriculum Standards and Textbooks”, “Mainstreaming special Education Students”, Accelerated Schools, Center for Effective Schools, Community for Learning, The Learning Network, Talent Development High School with Career Academies, School Development Program, Modern Red School House, Direct Instruction model, Different Ways of Knowing etc.

According to OECD the list of the top five U.S. “innovations in pedagogic practice” include: 1) more observation and description in secondary school science lessons; ^[L]_[SEP]2) more individualized reading instruction in primary school classrooms;^[L]_[SEP] 3) more use of answer explanation in primary mathematics;^[L]_[SEP] 4) more relating of primary school lessons to everyday life; and^[L]_[SEP] 5) more text interpretation in primary lessons. “Innovation in organizational policy and practice” included mostly different aspects of student assessment and testing. Good innovation sometimes means doing less of something in order to make time for experimentation with new pedagogical strategies.

In particular, the Recommendations of the European Parliament and the Council of the EU identified eight core competencies that should be formed through education, needed by each individual for personal development and development, active citizenship, social inclusion and employment: communication in the native language (oral and written); communication in foreign languages; mathematical competence and basic competences in natural sciences and technologies; digital competencies; ability to study; social and civil competencies; initiative and entrepreneurial skills; general cultural literacy and ability to express themselves.

These Recommendations identify the skills and abilities that are important for achieving the competences listed above: critical thinking; art; initiative; ability to solve problems; risk assessment; ability to make decisions; ability to constructively manage emotions; ability to work in a team.

The American Partnership for Skills for the 21st Century, a coalition of 20 states and 33 corporate partners, supports an integrated approach to curriculum and training that covers the following categories: 1) Interdisciplinary themes: awareness in world problems, financial, economic, business and entrepreneurial literacy, public literacy, medical literacy, environmental literacy, ability to study, creativity, critical thinking and ability to solve problems, communication and cooperation, life and professional skills, flexibility and ability to adapt to change, initiative and self-regulation, social and intercultural skills, productivity and consciousness, leadership and responsibility. Students learn more about material and understand how to apply it in practice when a teacher performs the role of a "mentor next" rather than a "sage on the stage".

Good teachers are the core of good schools. Performing different roles, they achieve three main goals: inspiration. They inspire students with their love of the subject and encourage them to reach heights; confidence. They help students acquire skills and deepen the knowledge that makes them self-confident, independent, who will further improve the skills; creativity. They give children the opportunity to experiment, explore, ask questions and develop skills and a tendency to non-standard thinking (Kaplan D., 2012).

The concept of alternative education introduces an effective method of restructuring American and British education, reserving innovation processes, disseminating innovations that help change education into a development mode. Alternative education has significantly influenced the formation of a system of co-administration in American education with an orientation towards a single team of teachers, students, parents, and the use of flexible learning technologies. The alternative secondary education of the US in the second half of the twentieth century, focusing on the formation of an active individual of a democratic country, practically contributed to attracting a significant part of the youth outside the traditional school into social transformation activities

Variability of alternative education has greatly transformed state public schools in both countries, increasing their individualization of education; changed the possibilities of education in urban areas, creating a large number of "magnetic schools" and alternative programs; contributed to the maintenance of problem children in school, has provided wide selection of opportunities for gifted and talented children. An alternative secondary education, which solves most of its

marginal tasks, by its very existence, provokes the state system to the development and improvement.

First, the selection of students, which became widespread when a large number of elite schools appeared, led to the stratification of knowledge by status, secondly, the appearance of paid education also fixed inequality in access to such schools, which did not guarantee the quality of knowledge. In order to eliminate the contradictions that can not be avoided with the advent of innovations in the field of education, it is necessary know objectively the demands of different sections of the population regarding certain knowledge. This is confirmed by the American experience. Reforming of education stops being just a narrow matter.

Alternative secondary education also proved that it is not a collection of marginal pedagogical innovations and small pilot experiments, but is an avant-garde movement, the largest long-term secondary education sector that used the legalized strategy for the emergence of new, non-traditional schools, introducing new choices. (Robinson K., 2016)

One of the most popular topics among educators who master innovation online, communicating in various chat social networks - the method of "active learning" through exciting life stories, instead of unrealistic examples from the textbook. By this method, the teacher first introduces the students to a certain phenomenon, describes the event - the main thing is that the plot encourages the audience to find answers, to identify the causes the matter. The story that students study must meet certain requirements: deal with science, be understandable to the students to make them interested, be comprehensive with a wide range of related topics so that the answer to it does not appear in

the first link from Google search, the search of the answer should take approximately 2 months of study (P. Serdyukov, 2016) .

A modern British trend in alternative education is personalised learning. This emerging idea is that systems capable of achieving universally high standards are those that can personalise the programme of learning and progression offered to the needs and motivations of each learner. Personalisation can mean adopting a more holistic, person-centred approach to learner development, as well as more demand-driven, market-friendly approaches to system change. In part, it reflects a change in social climate, driven by the affluence and value change that arise from sustained economic growth.

In the official paper of British organization OECD “Measuring Innovation in Education” the key findings on innovation in education were highlighted. They are: in education, innovation can take place through either significant changes in the use of a particular educational practice or the emergence of new practices in an educational system; contrary to common belief, there is a fair level of innovation in the education sector, both relative to other sectors and in absolute terms; within education, innovation intensity is greatest in higher education, with secondary and primary education approximately equal; compared to other sectors, knowledge and method innovation is above average in education, product and service innovation is below average, and technology innovation is at the average sectorial level; in Europe, higher education stands out in terms of speed of adopting innovation compared to the economy average as well as the rates in primary and secondary education; there have been large increases in innovative pedagogic practices across all countries studied for the report in areas such as relating

lessons to real life, higher order skills, data and text interpretation and personalisation of teaching; in their pedagogic practice, educators have innovated in their use of assessments and in the accessibility and use of support resources for instruction; educational organisations have innovated in the areas of special education, creation of professional learning communities for teachers, evaluation and analytics and relationship building with external stakeholders, such as parents (Bayer S. 2012).

Having analyzed different sources of information we can distinguish British top five innovations in pedagogic practice: more observation and description in secondary school science lessons, more self-directed experiments in secondary science lessons, more group work in secondary mathematics classrooms, more relating of lessons to real life in secondary school science; more individualised reading instruction in primary school classrooms.

The strategic task of modern Ukraine is the innovative development of society. This task is noted in the parliamentary on-line hearings "Strategy of innovative development of Ukraine for 2010-2020 in the context of globalization challenges", the Law of Ukraine "On Innovation Activity" (2002), the Law of Ukraine "On Priority Areas of Innovation Activity in Ukraine" (2003), Regulations on the Procedure for the Implementation of Innovative Educational Activities (2000), other documents.

The main characteristic of innovative development of modern education is innovative education which is the cause of the new reform. Presenting the concept "New Ukrainian School", the Minister announced an important priority of the MoES activity to update the content of education and introduce a competent approach in high school. The idea of reform involves the

introduction of 12-year school education. Primary school is four years as a base period, an adaptation cycle and 3-4 grades, then a basic secondary school, which will be called a gymnasium, there five years, where 5-6 classes have their own peculiarities, 7-9 are their own, profile secondary school (three years) - two cycles.

According to the presented concept, the formula of the “New Ukrainian school” will comprise eight basic components: new content of education, based on the formation of competencies necessary for successful self-realization in society; pedagogy, based on a partnership between a student, a teacher and parents; a motivated teacher who has the freedom of creativity and develops professionally; orientation to the needs of the student in the educational process, childhood center; through process of education, which forms values; a new school structure that allows you to master the new content well and gain competence for life; decentralization and effective management that will provide real autonomy to the school.

Formation of the model of innovative development of education in Ukraine needs to change the priorities of reforming this sphere. It should be noted that qualitative modernization of the national education involves not only the unification of the theory and practice of education innovations and their promotion, but also the appropriate and timely response of state institutions to the results of its effective implementation, the development on this basis of a state strategy for the formation of educational perspectives that would ensure compliance of schools to the requirements of education innovations, and ofcourse - the most urgent requirements of society.

CONCLUSION

Consequently, one of the most important conditions for changing the traditional culture and forming the background of the innovative culture of the school American and British scholars consider first of all the constant individual and collective, professional development of all members of the school community. Along with this, one of the most important signs of the school's innovative culture is high school readiness to implement changes.

Most educators in America, Great Britain and Ukraine agree that effective educational reforms and innovations are necessities nowadays. The US and British experience helps to reveal some controversial moments in the development of a modern Ukrainian school

The analysis of documents presented on the main portal of educational initiatives in the USA showed that innovative education is the main object and means of educational reform, which indicates the existence of clear mechanisms of state regulation and support of innovative processes in the educational sphere.

According to the UNESCO Innovative Teaching and Learning (ITL) Research project conducted in several countries, “ICT has great potential for supporting innovative pedagogies, but it is not a magic ingredient. When considering ICT it is important to focus not on flash but on the student learning and 21st century skills that ICT can enable” ([UNESCO, 2013](#))

As Peter Serdyukov notes: “the key to a prosperous, inventive society is a multidimensional approach to revitalizing the educational system (structures, tools, and stake holders) so that it breeds learners’ autonomy, self-efficacy, critical thinking,

creativity, and advances a common culture that supports innovative education. Therefore, in order to succeed, innovative education must become a collective matter for all society for which we must generate universal public responsibility.

REFERENCES

- Baily, T. Henry, L. McBride, J. Puckett (2011) Report “Unleashing the potential of technology in education”. Boston Consulting Group.
- Education Reform at the Open Directory Project. - [Online]: [www/dmor.org/Society/Issues/Education/Education_Reform](http://www.dmor.org/Society/Issues/Education/Education_Reform). [20 September 2017].
- Education Reform at the Open Directory Project. - [Online] [www/dmor.org/Society/Issues/Education/Education_Reform](http://www.dmor.org/Society/Issues/Education/Education_Reform). *Entsyklopediy a osvity / Akad. ped. nauk Ukrainy; holovnyy red. V.H. Kremen'. – K.: Yurinkom Inter, 2008. – 1040 s. – S. 211–212.* [16 September 2017].
- Entry, Encyclopedia of the Social& Cultural Foundations of Education, EF Provenro, Jr.(Ed.). (2008) Thousand Oaks.CA: Sage, – [Online]: www.macalester.edu/~Kurthschai/pdf/%20EVCYReform.pdf. [16 September 2017].
- Khiminets V.V. (2007) Innovative educational activity. - Uzhhorod: Information and Publishing Center ZIPPO, 2007. - 364 p. [in Ukrainian].
- Newmann F. (2013) Professional development that addresses school capacity: Lessons from urban elementary schools / Newmann F., King B., Young S. // Papers of Annual Meeting of the American Educational Research Association. – New Orleans (USA): AERA, 2013. – 35 p.
- OECD: Better policies for better lives. Measuring Innovation in Education (2012) <https://www.oecd.org/unitedkingdom/Measuring-Innovation-in-Education-England.pdf>
- Peter Serdyukov (2016) "Innovation in education: what works, what doesn't, and what to do about it?", Journal of Research in Innovative Teaching & Learning, Vol. 10 Issue: 1, pp.4-33. [Online]: <https://doi.org/10.1108/JRIT-10-2016-0007>

- Robinson K. (2016) Creative Schools: The Grassroots Revolution That's Transforming Education. 2016. Penguin books. New York. 120p.
- Senge P. (2007) The Fifth discipline. The art and practice of learning organizations. / Senge P. – New York: Doubleday / Currency, 2007. – 423 p.
- Transforming America's Education through innovations and technology (2016). The Aspen Institute. 2016. Washington, DC [Online] https://assets.aspeninstitute.org/content/uploads/files/content/upload/2010_Education_CR-Whistler.pdf
- Vieluf S., Kaplan D., Klieme E. and Bayer S. (2012), Teaching Practices and Pedagogical Innovation: Evidence from TALIS, OECD Publishing, Paris, available at: [www.oecd.org/edu/school/TalisCeri%202012%20\(tppi\)-Ebook.pdf](http://www.oecd.org/edu/school/TalisCeri%202012%20(tppi)-Ebook.pdf)
- Young J., Levin B. (2010) The Origins of Educational Reform: A Comparative Perspective. Canadian Journal of Educational Administration and Policy, Issue № 12, January 19, 2010.–[4.09.2017]: www.umanitoba.ca/publications/cjeap/articles/younglevin.html