

22. Seewald P. Joseph kardinál Ratzinger – Benedikt XVI: křest'anstvi na přelomu tisíciletí / Seewald P. – Praha: Portál. – 200 s.

Sviatoslav Kyiak

Christian ecumenism: Catholic paradigm and its prospects

In the article the problem of Christian ecumenical as an example the ecumenism of the Catholic Church. For authoritative literature reveals Catholic ecumenical paradigm and its prospects in view of the fundamental decisions of the Second Vatican Council. In particular, analyzes formulated Cathedral category of "new people of God," which became the basis for the modern ecumenical movement. This category was introduced in Catholic theology in the second half of the twentieth century was the perfect expression of the universality of the Catholic Church.

Keywords: Christian ecumenism, the Catholic ecumenical paradigm, the Second Vatican Council, the category of "new people of God," the Catholic Church.

Надійшла до редакції 20.08.2015 р.

УДК 37.013

**© Olga Ruptas
(Czernivtsi)**

MODERN TECHNOLOGY AS A MEAN OF EDUCATION STRATEGY IMPLEMENTATION

Futurology projects stimulate to reflect on the pros and cons of the purposes of the scientific and technological progress. It is argued that important aspects of creativity as one of the cordial features of human being are objectified in the development of advanced technologies. Previous confrontation between humanism and technology has developed into a fruitful cooperation. The reorientation of innovations towards humanitarian purposes allows maintaining a constructive strategy for the education development. Modern technology (Internet, augmented reality, smart objects, 3D printing, etc.) provides resources to implement major humanitarian strategies of the new millennium in education process (education without borders, life-long education, access to education for people with disabilities, cross-border cultural communication, the formation of the global cultural community, spread of the universal values, etc.).

Keywords: creativity, education, humanitarian technology, innovation, progress, self-study, transhumanism, values.

Introduction

The last decades are characterized by rapid growth of interest in discovering, analyzing and understanding technology and its opportunities for the development of man and society. The changes of human experience, knowledge and social practice are subject of philosophical reflection. The estimating of engineering and technology in the modern Ukrainian society, as well as all over the world, is ambiguous and controversial – ranging from absolute delight (optimists) to partial acceptance (sceptics) or their complete denial, rejection (pessimists). ‘Optimists’ see in technical and technological achievements, new inventions and tools the sources of general socio-cultural (not only scientific and technological) progress (*Bohdan Hawrylyshyn, Peter H. Diamandis, Herman Kahn, Ray Kurzweil, Victor C. Ferkiss, Jacque Fresco*). At the same time ‘sceptics’ deny value of progress as moral, ethical, life-meaningful, humanistic advance (*Daniel Bell, Jacques Ellul, Michel Crozier, Lewis Mumford, Dennis L. Meadows, Donella H. Meadows, Aurelio Peccei, Jorgen Randers, Pitirim Sorokin*). ‘Pessimists’ primarily focus on the negative consequences (environmental, moral, psychological, etc.) of unrestrained development of machinery and technology that threaten the continued existence both the human species, and the

life on the Earth in general (*Nick Bostrom, Hugo de Garis, Bill Joy, Martin Rees, Theodore Roszak, Alvin Toffler, and others*). For a long time the sceptics and pessimists have been forming the largest group in the community of scientists and philosophers.

Although the different futurology projects give various scenarios of human development and polarizing views on the estimation of technology in this process, all of them stimulate to think more carefully about the pros and cons of the purposes of the scientific and technological progress and encourage exploring the theories that clear the ways of achieving the most valuable of them.

Nowadays an actual and appropriate task for researchers is to direct attention to new technologies and their implementations in the humanitarian and social spheres. In this paper it is argued that reorientation of scientific and technological progress towards humanitarian (in the broadest sense) purposes allows to build a constructive strategy for the development of human education, relying on potential of reasonable interaction between human and products of invention.

New opportunities to improve human life

It is obvious that the achievements of technical and technological progress offer new opportunities to improve human life. Although the tasks defined by the founders and promoters (such as *Francis Bacon*) of the science and scientific method – overcoming diseases and poverty; reaching equality and brotherhood of human beings; the implementation of the principle of justice; improving the moral nature of people, etc. – are still not fully implemented. But, thanks to embodiment of the successes in engineering and technology, science has managed to prolong human life and to make it more comfortable and safe, to compensate for many defects of health, to facilitate a daily work, to contribute to recreation, to vary an entertainment, etc. Due to technological innovations we enjoy high speed Internet, mobile communications and other modern means of communication, which radically changed the kinds of interpersonal and social interaction.

All of these truly amazing achievements open new prospects for human and society development that require scientific evaluation and philosophical reflection. Amount of interdisciplinary researches is now devoted to the topic of the interaction between human and advanced technology. In particular, the interest focuses on the role of human technologies in promoting personal development and socio-cultural progress, in disseminating innovations, improving communication, enhancing professional skills and ensuring lifelong education. Humanitarian technologies and the opportunities they provide are studied by professionals in various fields of both humanities and natural sciences. On the basis of cooperation and interaction between them scientists are developing joint projects, launch new realm of integrated knowledge.

Pertti Saariluoma observed that recently a belief that humanism and technology belonged to different worlds was generally prevailing. The similar thoughts Charles Percy Snow embodied in his well-known book *'The two cultures and the scientific revolution'*, 1959. However, less than half a century ago it was found that there was no insuperable abyss between science, technology, and humanism; hence they can, so to speak, to play on the same ground. 'In the past decade, abundant research has pointed to the value – indeed, the need – for technology to be continually influenced by humanistic ideals. As a result, technologies of diverse purposes are slowly becoming more human-centered and humans are finding new ways to view and use technology' [4, p. 1]. More over, in the last five decades, as the author mentioned, discourses about technology and humanism gradually interwoven into a new one, 'new ways of thinking and imagining'. This process caused new challenges and gave birth to new concepts related to the creative potential of the technology. Finally, the previous confrontation between humanism and technology has developed into a fruitful cooperation, in which 'the ideals of humanism – that is, emphasis on human values and perhaps a deeper existence – are the winners' [4, p. 3]. The leading role in this movement plays a human desire for creativity, which is implemented in new means opened due to technology.

In the development of advanced technologies three important aspects of creativity are objectified. The first one is the ability to go beyond the traditional models, patterns, relationships and rules that is the ability to create new meaningful and useful ideas, behaviours and ways of cooperation. The second one is the ability to find new forms of emotional identification, formulate new perspectives on the human condition, to establish new types of relationship between people or between objects and

concepts. The third one is the ability to create new means of expression, new devices that facilitate, promote or alter the thinking and behaviour, new technologies of social communication, etc. This means, on the one hand, that a person gets opportunities to implement the project of the humanists to develop her/his abilities, intelligence, feelings via technology. On the other hand, a person creates new means to implement more creative ideas that are, in fact, quite unlimited or framed only by human imagination. Thus, the technologies are themselves tools and ways of creativity.

For instance, Internet is the room and environment for creating and distributing a wide range of pieces of art and literature, film, photo, and audio productions, and even art/photo exhibitions and galleries. The role and function of traditional media between the creator – artist, poet, novelist, clip maker, on the one side, and the audience – reader, listener, viewer, etc. – on the other one, is changed and much reduced. Of course, not every human creative expression is necessarily equivalent to the piece of art. However, the growth and widening of space for new quests obviously helps to activate and implement creative abilities. One of the advantages of the Internet for originative work, as Saariluoma has mentioned, is a wide access to its resources and opportunities for ordinary person to express creative intentions without significant restrictions or professional help. Thus the possibilities for creativity became really almost endless. In turn it certainly raises a number of new controversial issues in various areas: legal (copyright, privacy, safety, and protection of children, etc.), art (nature and characteristics of art, the role of the expert community, etc.), ethical (freedom and social values) and so on.

The concept of transhumanism and contemporate education values

The influence of technology on humans is studied at many levels: physical (corporal), psychological, mental, noetic, verbal, discursive, etc., thus emphasizing the complexity of human nature. In this context a number of emerging modern philosophical concepts aimed at studying the evolution of new forms of life – that result from scientific and technological progress – have been grown. Despite the considerable diversity of specific schools and trends, researchers find their common features, goals and values, allowing them to unite under a common name – Transhumanism.

A definition of transhumanism discloses a wide sphere of interests and its application ranging from the philosophical and scientific researches to intellectual and cultural movement. The characteristic of transhumanism as a kind of philosophical outlook considers focusing on the meaningful and ethical attitudes to human life based on reason, science, progress, and value of existence in the present life. Obviously, transhumanism supports secularized values of humanism (the autonomy of reason and human creativity, scientific method, promoting progress in all areas to a better future, etc.), as opposed to religious belief [6, p. 4]. Transhumanism as an intellectual movement and research area is based on an interdisciplinary approach to understanding, assessment, and forecasting the possible consequences of expanding the boundaries (or going beyond) the available human form (body, existence, knowledge, etc.) due to technical and technological inventions.

A special sphere of inquiry is formed by the issues related to the impact of technology on the process of interaction between human and society, including communication, management, politics, science, and education. In the context of the study the most interesting issues of such impact are considered the influence of technology on the development of education and, further, dissemination and implementation of the ideals of humanism and humanity in modern culture.

Over the last century the international community has made great efforts to create the conditions for international cooperation to promote education, science and innovation. The majority of countries agree with the requirement to consider the state education standards according not only to national (state) interests, but also to humankind values and norms. Nowadays the educational goals are formed not at the level of states, but at the international level. Basic education priorities and aims are proclaimed in international conventions and documents and are the strategic guidelines for the international community. Education policies of different states aim at its integration into the international community. Common educational principles and norms create preconditions for the formation of cross-border education space primarily on the mental level.

One of the leading organizations concerned with the intellectual and moral development of humankind – UNESCO – believes science and education the major means to promote peace,

support sustainable social and economic development, and maintain environmental security. The activities of this organization is governed by guidelines of holistic and humanistic vision of education quality throughout the world, the right of everyone to educate and trust in the fundamental role of education in human, social and economic development. It is ruled by principles of respect for life, human dignity, cultural diversity, social justice and international solidarity [1]. In order to implement these guidelines UNESCO widely promoted the use of new technologies in education and cultural space.

Technological innovations in the education process

Modern technology provides physical and information resources to implement major humanitarian strategies of the new millennium, particularly education without borders, life-long education, access to education for people with disabilities, cross-border cultural communication, the formation of the global cultural community, spread of the universal values and meanings, and so on. Researchers emphasize the importance of basic education trends in recent years which are mainly directed to strengthen the cognitive activity of pupils/students and to change the role of the teacher (mentor, coordinator) in the educational process. Firstly, there is a redistribution of hours for pupils' or students' classroom training and self-regulated learning. Secondly, it is mentioned the flexibility of schedule and workload. Thirdly, the preference for such forms of study as exploratory, projective, self-directed, and problem-, discovery-, game-based learning is popular nowadays. Distribution of these trends was made possible by electronic (video/audio lectures, eBooks, training tasks on electronic media, educational games, etc.) and networked learning (e.g., on-line lectures, on-line testing, distribution of educational objectives and monitoring their implementation through social networks, discussion forums). Due to the mobile applications' expansion and tablets' use network training has become more flexible and accessible at any time and in any place.

The latest technical and technological innovations open more and more unexpected possibilities for the modernization of education, which become the subject of international organizations' interest, particular their spreading [2; 3]. For example, so-called 'augmented reality' that arises as a result of supplementation of real objects with virtual information –computer-generated sensory input such as sound, video, graphics or GPS data – allows to visualize dynamical processes; increase or reduce, simplify or complicate the objects of study, generally to provide the shape required for the effective operation with them; simulate phenomena and processes in 3D format, and so on. Internet of things is a network of interactions between physical objects without direct human intervention by using embedded devices for storage, processing and exchange of information. Smart objects, which appeared in this case, provide access to data collection, observation and other operations, which were previously inaccessible to humans. More over, they provide means by which information can be shared in education process.

Expanding the boundaries of traditional academic learning analytics of pupils'/students' achievement and success enables the monitoring and evaluation of large amount of data on the different types of their education and training activity (considering educational space of the Internet, social networks, etc.). This makes possible to take into account the challenges and difficulties, which learners face while studying, to give necessary assistance and counselling, to increase reserve capacity of introspection, self-assessment, and forecasting the training results.

However, the researches draw attention that the analysis of the projected results of the newest technique and technology implementation in the education process in the past few years shows that education, despite all expected changes, remains one of the most conservative social sectors. For example, the expectations associated with the introduction of massive open online courses were much overestimated. "Following the 'hype cycle' model for new technology products developed by the Gartner research group, MOOCs have fallen from their "peak of inflated expectations" in 2012 to the 'trough of disillusionment'." [5]. The study authors call several reasons of the observed disappointment, such as: 1) the real audience's basic education does not match the necessary and sufficient level of the target audience, which the courses developers expected; 2) low percentage of knowledge quality and success of students who passed the online

courses; 3) inability of many professors to fit the online format, and others. In general, online courses are a good educational tool for a small number of top students.

However, this form of education serves, so to speak, as a touchstone for those who want to try to master a profession and have limited resources and time for such task, even if those attempts fail. It is effective form for improving vocational education and solving urgent educational issues and challenges, which need immediate solution. Online courses are also often considered as one of the elements of the combined training.

In the short term (from two to five years) 3D printing, flexible displays, wearable technology, virtual games and gamification of study routine procedures and processes are expected to be introduced in the educational sector [2; 3].

Conclusion

All these innovations are not an end in itself and are intended to implement values, which are based on the prevalence of self-study and developed in a number of educational principles and approaches. First of all it is recognized that pupils' or students' independence, activity, involvement and responsibility create grounds for accentuation of subject-centered approach in the education process. At the same time there is a need to combine a personal approach with the interactivity instructions, teamwork, and synergy of subjects in the cognitive and educative process. It is valuable since one of the characteristics of the human way of being and activity has been acknowledged the capacity for self-development and creativity. Respectively, the aim of education appears not only and not so much to learn and develop the skills, but to promote the development of harmonious personality and her/his creativity. An important role also plays an education orientation to the real needs, causes a constant dynamic variability of educational content.

The main educational resource is internal potency of the learners, their interests and needs. The task of humanitarian technologies in the learning process is to satisfy the individual requires and at the same time to take into account the given social request for the formation and implementation of universal values.

intellectual and practical pupils'/students' requests, which

Modern universities aim to train teachers who are able not only to teach, advise, design and control the learning process, but also to lead and inspire lifelong learning, constant growth, and self-development in order to respond to the changes and challenges that a human faces in the unstable, dynamic society. In this context it is necessary to involvement technical and technological innovations, which are constantly updated and developed, in the education process.

Bibliography

1. Education for the 21st Century [Electronic source]. – Available at: <http://en.unesco.org/themes/education-21st-century>
2. Horizon Report 2014 Higher Education Edition [Electronic source]. – Available at: <http://cdn.nmc.org/media/2014-nmc-horizon-report-he-EN-SC.pdf>
3. NMC Horizon Project Short List: 2013 Higher Education Edition [Electronic source]. – Available at : <http://www.nmc.org/pdf/2013-horizon-higher-ed-shortlist.pdf>
4. Saariluoma, Pertti. "Making it Possible" [Electronic source] / Pertti Saariluoma // Human Technology. Volume 3, Number 1, February 2007. – Pp. 1–3. – Available at: <http://www.humantechnology.jyu.fi/articles/volume3/number1/2007/humantechnology-february-2007.pdf>
5. Selingo, Jeffrey J. Demystifying the MOOC [Electronic source] / Jeffrey J. Selingo // The New York Times. – Oct. 29, 2014. – Available at: http://www.nytimes.com/2014/11/02/education/edlife/demystifying-the-mooc.html?_r=1
6. The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future. First Edition / edited by Max More and Natasha Vita-More. 2013. John Wiley & Sons, Inc. – 480 p.

Ольга Рупташ

Сучасні технології як засіб впровадження освітніх стратегій

Стаття присвячена розгляду актуальних аспектів технологічних інновацій в галузі гуманітарних ініціатив, зокрема освітніх. Увага акцентується на подоланні попереднього протистояння між цінностями гуманізму й науково-технічного поступу, що зумовлює потребу в переосмисленні цілей останнього. Стверджується, що переорієнтація поступу в бік гуманітарних цілей сприяє розвитку освіти. Виокремлено спеціальні можливості сучасних технологій (Інтернет, розширена реальність, розумні об'єкти, 3D-друк тощо), які забезпечують реалізацію головних стратегій розвитку освіти (освіта без кордонів, освіта впродовж життя, доступ до освіти людей з обмеженими можливостями, транскордонна культурна взаємодія, формування глобальної культурної спільноти, поширення вселюдських цінностей тощо).

Ключові слова: гуманітарні технології, інновації, освіта, поступ, самоосвіта, творчість, трансгуманізм, цінності.

Надійшла до редакції 30.10.2015 р.