



FUTURITY
Education

DOI: <https://doi.org/10.57125/FED/2022.10.11.20>

How to cite: Sanetra, B., & Małodobry, Z. (2022). Toward a postclassical paradigm for the education of the future. *Futurity Education*, 2(1). 14-21. <https://doi.org/10.57125/FED/2022.10.11.20>

Toward a Postclassical Paradigm for the Education of the Future

Bożena Sanetra*

PhD, Head of Scientific Council, Dean emeritus of Faculty of Tourism and Administration, Żywiec Institut of Social Economy, Poland, <https://orcid.org/0000-0001-5359-3506>

Zbigniew Małodobry

PhD, Head of the National Security Department, Podhale State Vocational University in Nowy Targ, Poland, <https://orcid.org/0000-0002-6721-3786>

***Correspondence email:** sab_san@poczta.onet.pl.

Received: January 11, 2022 | **Accepted:** March 1, 2022 | **Published:** March 25, 2022.

Abstract: The authors of the article analyze the implementation of post-classical education at the present stage of society development and forecast its future. The researchers define the concept of classical and post-classical education, highlight the factors of a crisis situation in the educational environment, highlight the demands of modernity on human skills and competences. The main legacy of the study is to offer solutions to crisis situations and predict the future based on the fall environment as an institution and as a set of techniques, methodologies, and learning principles (e.g., STEAM education, flipped classroom, electronic portfolio, active work in pairs or group, preparation of presentations, the involvement of technology in learning, etc.). The authors of this study used the following methods: comparative- historical, systematic and inductive. The future of education lies in the constant rethinking of being and transformation under the demands of the twentieth century. But for

now, the future is in the vein of “freedom and dignity of the child”. This work is theoretical, but its insights are useful for state structures in education and educational institutions to recall and give impetus to greater implementation of the newest systems and methods of education, so that the next generations no longer face severe crises, have quick adaptation, and be modern people.

Keywords: education, post-classical education, classical education, trends, personality, development.

Introduction

Research Problem

The world is constantly going through stages of transformation in all spheres. The material side of the world affects the spiritual side as well as the spiritual side effects the physical side. Economy - culture, politics - religion constantly influence each other and together endure all crises and upheavals. Thus, education has been in crisis because of economics (Mikiewicz, 2022) and technology. Adding to it are the COVID-19 pandemic and socio-political conflicts.

Research Focus

Classical education was aimed at acquiring certain knowledge in a certain field, at memorizing and reproducing it. Such an institution does not push the child to synthesize knowledge, analyze a problem and find a solution (Kwieciński, 2019). On the contrary, scholars around the world hint at a crisis of education because of the following problems in students and in the world: erosion of academic freedom, decline in spiritual values, low rates of desire for new knowledge, weakening of mental and physical abilities, the gap between humanities and general knowledge, deepening into the virtual world. But the problems of being educated: one model of the world, the thought of one single solution to a problem, one single correct theory, and the absence of pluralism of knowledge and multidimensionality of the solution to the task at hand. Until now, all states of the world are trying to solve this situation, and there is a turn toward humanization, toward the individual, the human being, and the multidimensionality of the world. There is a construction of non-classical education.

Research Aim and Research Questions

The work aims to analyze the current situation in the educational environment and the form of the post-classical paradigm in education and to predict future trends.

To achieve the goal, it is necessary to solve the following tasks: to analyze classical and post-classical education, to find the place of the student and his problems in modern education, to formulate new goals and objectives, to explore the problem of commutation, work in groups, creativity ability to critical thinking and synthesis of knowledge in students, to formulate prospects of the post-classical paradigm of education in the future.

Research Methodology

The essence of our study requires the use of the following methods: comparative- historical method in the analysis of classical and classical education. A systematic method in the analysis of requirements for the student and teaching methods. As well as the inductive method when considering post-classical teaching methods.

Literature review

The post-classical paradigm serves as a model for transforming education by gradually moving away from traditional dimensions towards innovative formats. Clearly, such reorientation has not bypassed the academic discourse, which has defined key characteristics of the changes in the educational paradigm.

Bonfield et al. (2020) pose the question of the direction of educational development: transformation or evolution? This dichotomy is particularly relevant in the context of the global trend towards shaping principles of sustainable development (Holfelder, 2019). In this context, the pertinent question arises – is the post-classical paradigm a perspective for the future of education (Wong et al., 2017)?

This process is characterized by instability and variability, which become distinctive features of the educational environment. Mielkov (2020) emphasizes the peculiarities of the post-classical reality in education: variability, uncertainty, complexity, and ambiguity. Consequently, the correlation between educational and sociocultural development occurs spontaneously and lacks a systematic character (Gajek et al., 2022).

Among the accompanying factors of the education transformation process, the total technologization of the learning process (Hajar Halili, 2019), the use of innovative resources (Zhang & Begum Aslan, 2021), and the establishment of new education standards (Egger et al., 2017) are actualized.

The post-classical model reintroduces human-centric principles into the mainstream, focusing on continuity and individual direction of educational activity (Himmetoglu et al., 2020). Fayolle (2018) adds that the personalization of education is one of the fundamental characteristics of the post-classical paradigm.

Research Results

The place of education in a transformed world. Classical and post-classical education: similarities and differences. The modern world has finally and categorically moved into a new dimension of existence. From classical, we have moved to the addition of “post” in all spheres of socio-cultural existence. According to researchers, the being of not only one particular person, but the being of all has changed and is in crisis (Adamczak, 2021). And the Covid 19 pandemic and socio-political transformations only add to the obstacles. But it must be recognized that crisis situations provide points of growth for all spheres. Rethinking, searching for new ways, and synthesis of knowledge help to find new, sometimes non-standard solutions to the actual problem. Education found itself in such a crisis situation. It became hostage to political, economic, and social problems. Education was faced with the fact that its object of influence transformed itself and its environment. Therefore, education needs to be given a new environment and to build a dialogue with students.

Wrońska (2019) reminds us that education began its active development since the Enlightenment. At this time, education takes on a special significance and becomes the focus of politics. Education became the ideology of the time. Most importantly, it was not a means of obtaining qualifications, or specialization, it was the education of the individual, the guarantor of education, the acquisition of

norms and values, the guarantor of the acquisition of human dignity. Or as Marthy C. Nussbaum's modern program refers us to the term "man of the world" (or Socratic man) (Lis, 2021).

Classical education, as we said of the work we began, related us to a process: to listen- remember and then reproduce knowledge. And the test of knowledge was on the principle: right - wrong. This model of classical education aims at mechanical problem-solving. The new postmodern education consists of a postmodern worldview that proclaims a plurality of concepts, a plurality of interpretations, metaphorically, and the unification of different forms of knowledge. And the main thing that changes to the humanitarianization of knowledge. It will lead to the development of society, the rise of important problems to the development of everything for the sake of man and humanity.

Webb (2018), describing the state of the modern university, uses the metaphor of a "corporate-imperial environment." Emphasizing the economic and political component of the university. The educational environment becomes a market sphere with investment consumption of goods. The imperial component lies in state control and leads to the erosion of academic freedom. This is why the pedagogue-utopian must look for ways to allow his activities and students to exist. We would like to mention another author, Pllana (2019), who investigated the development of creativity in the context of academia. The main factors in the development of education he considered the equality of all subjects, quality, the introduction of modern educational reforms. According to the author, it is necessary to develop cognitive skills, interpersonal communication, personality qualities. The world economy affects the person as a whole.

Thus, post-classical education aims to cultivate a humanistic person who will think critically and analyze, have creative thinking and education, communication, and cooperation skills. Given the trends of technologization and be an active actor in the media space. To put it simply, to keep up with the times and the ability to exist comfortably in existence.

The student should combine ordinary and humanitarian knowledge. Today there is not only a crisis of education in general, but also characterized as a crisis of activity (Szmyd, 2021). To what extent human activity is realized, to what extent human beings self-actualize and use their own potential? But such a problem is based not only on the development strategies of universities, schools, etc. but also more subjectively. In the classroom (practice) it is necessary to take into account mental, personal behavior. Yes, European states are changing the educational system to educate children of "peace". It is necessary to change methodological approaches to teaching and pedagogical practices in order to develop basic skills.

The Newest Teaching Techniques: Implementing the Postclassical Paradigm of Education

Let us consider the latest teaching methods for implementing the post-classical education paradigm through the necessary competencies and ideals of post-classical education itself. Analyzing the literature and modern trends, we consider the following as the main ideals (competencies of a modern person): information analysis and synthesis, critical thinking, creative thinking, technological competence, communicativeness, teamwork, oratory skills. It will be appropriate to notice that thus there is a high role of "soft skills" in the professional growth of the person. When communication skills are more important than professional skills.

Analysis of information and its synthesis. A modern person has access to a large number of sources of information in the media space (including books, movies, programs, etc.), as well as the ability to obtain information in a practical way (experimentation, observation, etc.). Such information can be false, incomplete, multi-form and a person needs to collect, sort, analyze it. Note the need to do this independently. Therefore, independent and project work is aimed at this goal.

For example, STEAM education. An American educational system that is radically opposed to classical education and uses project work. The student chooses a topic of interest and will receive the variety of knowledge he or she needs. Thus, a system of collecting information, sorting, summarizing, drawing up the work, and presenting it is used. A more conventional job is to write written work. For example, like essays, abstracts, theses, and tests. The basis of the same - the search for and processing of information.

Critical thinking. The formation of critical thinking is not engaged in any particular subject, it is the whole system of education. STEAM education fits here, too. Or the system of the flipped classroom (when the student gets acquainted with the topic independently, and then the teacher clarifies incomprehensible points). Essay writing also pursues the goals of expressing one's own opinions on the analysis of the problem.

Creative thinking. Modern problems need unconventional solutions. The development of creative industries requires a large number of workers and content creation. Therefore, project work, performances, and fine art lessons contribute to children's creativity and self-actualization. Students and pupils also need to express themselves, to sublimate their own energy. For example, Chawrilka (2019) explored learning Polish as an inclusion, learning a second language. One of the practices was just participating in performances. In addition to learning words and phrases, children thought about the emotionality of phrases, nonverbal communication, creating images, and automatically being interested in the process. So that the student wants to learn.

Technologicality. Today's world has two dimensions: the real world and the media. Phones, computers, VR glasses, printers, etc. They open up an unlimited world in new ones. So, students, today use technology in addition to studying computer science to learn. For example, in European countries, there is a combination of mathematics and programming. Creating their own projects. Or when learning to introduce elementary presentations. Which emphasizes the transformation of even the usual educational system. Presentations, the use of audio and video materials, the use of educational programs, etc. are in circulation in almost every subject.

Technology took on a special role during the Covid 19 pandemic when almost every nation in the world was at home (Veljković et.al, 2020).

Communicability. Nurturing active listening, the ability to negotiate, distribute responsibilities, have respect for the other can only be on practical tasks. Therefore, working in groups/pairs allows for close contact between one student and another. For example, drawing posters, preparing presentations and reports, checking the tasks of the neighbor at the desk, claiming a colleague, etc. are allowed to communicate with each other. A modern person needs to argue his position, to convey information qualitatively, that's why rhetoric is important. Classical education had an angle on the cultivation of this skill. For example, studying poetry, reading one's own works of reflection, and extracurricular activities such as participating in concerts, etc. Nowadays children can record videos, make project presentations.

A form of control can be an electronic portfolio of the student, where all the work and grades are collected based on which the teacher can give tasks that positively influence the results of the student, give such tasks that are more interesting. Therefore, methods and forms of learning play a special role in post-classical education. Various methods and techniques of learning have a complex effect on the child and form a modern person. Extracurricular work provides another platform for the realization of creativity and communicativeness. The future of education in reorienting the individual.

Discussion

Factor in the crisis situation in education is economic, political, technological, and cultural transformations. They have not only changed the world, but also the person himself (his interest in the world, self-realization, etc.). Having considered post-classical teaching methods and techniques, they are aimed at bringing the individual back. Returning the person to the fascinating world and become part of it. Since education is constantly being influenced by economics and politics, it is important to predict a concrete and detailed future, as there may be twists and turns and branches of history that will redirect education. Unless the world is cyclical. But, of course, education must constantly be rethought, analyzed, and transformed. Crisis situations cannot be triggered, do not lose control. Therefore, it is really necessary to monitor and control the educational environment to educate students and pupils in the direction of modernity, morality, communicativeness, etc. The positive results of STEAM education, e- portfolio, flipped classrooms, entering tasks for projects, working in pairs, presentations, etc. give the right to their introduction and existence. No batch (within national limits) changes so far, but the current trends are encouraging. As the question of mastery of technology came up, so will the question of mastery of other technologies. The main condition will not be the weighing of the state, but its support. The above theoretical study can be useful for those scientific cells that want to introduce the latest practices and educate modern people, people of peace. So, our future is based on a transformative modern education, with a variety of practices for cultivating universal human beings.

Conclusions and Implications

Analyzing the situation in post-classical education we can draw the following conclusions:

1. The educational environment is influenced by a complex of all spheres of human existence (economy, politics, scientific and technological progress, culture). But the modern world with its problems has put it in a crisis situation. The main problems: the fall of ethical values, the fall of the thirst for knowledge, the irrelevance of teaching methods, no work with the plurality of information, the need to be in the honeymoon space, the problems of comfortable human existence in society. And accordingly, our existence today requires a person: to be communicative, creative, critical thinking, to analyze information, to be technologized.

2. Post-classical education should work on two levels: education as an institution, to use new methods and techniques of education, and to train and re-train new specialists.

3. To such methods and practices, we can include: STEAM education, electronic portfolio, flipped classroom, work in groups or pairs, preparation of presentations and speeches, extracurricular work. Note that such techniques should involve all subjects from different areas of science (humanities and natural sciences), and it should be a set of knowledge.

4. Predicting the future of education is based on an analysis of the past situation, present and current measures. Many countries around the world, including European countries, are restructuring their education systems to meet the child, effective learning, acquiring modern competencies. A crisis situation can happen if you put education on the path of fossilization. Therefore, the future lies in the constant rethinking of being and transformation under the demands of the twentieth century. But while the future is in the “freedom and dignity of the child”.

References

- Adamczak, A. (2021). Edukacja humanistyczna dla społeczeństwa obywatelskiego [Humanistic education for a civil society]. In R. Kania & M. Kazimierczuk (Eds.), *Społeczeństwo obywatelskie: Historia, teoria, praktyka* [Civil society: History, theory, practice] (pp. 224–239). Difin. <https://ruj.uj.edu.pl/xmlui/handle/item/270749>
- Bonfield, C. A., Salter, M., Longmuir, A., Benson, M., & Adachi, C. (2020). Transformation or evolution?: Education 4.0, teaching and learning in the digital age. *Higher Education Pedagogies*, 5(1), 223–246. <https://doi.org/10.1080/23752696.2020.1816847>
- Care, E., & Kim, H. (2018). Assessment of 21st-century skills: The issue of authenticity. In E. Care, P. Griffin, & M. Wilson (Eds.), *Assessment and teaching of 21st century skills: Research and applications*. Springer. https://doi.org/10.1007/978-3-319-65368-6_2
- Chawrińska, I. (2019). Transmedialność jako transkulturowe doświadczenie ucznia [Transmediality as a transcultural student experience]. *Postscriptum Polonistyczne*, 2(24), 235–245. https://doi.org/10.31261/ps_p.2019.24.14
- Egger, A. E., Kastens, K. A., & Turrin, M. K. (2017). Sustainability, the next generation science standards, and the education of future teachers. *Journal of Geoscience Education*, 65(2), 168–184. <https://doi.org/10.5408/16-174.1>
- Fayolle, A. (2018). Personal views on the future of entrepreneurship education. In *A research agenda for entrepreneurship education* (pp. 127–138). UK: Edward Elgar Publishing. <https://doi.org/10.4337/9781786432919.00013>
- Gajek, A., Fabiano, B., Laurent, A., & Jensen, D. (2022). Process safety education of future employee 4.0 in Industry 4.0. *Journal of Loss Prevention in the Process Industries*, 75, Article 104691. <https://doi.org/10.1016/j.jlp.2021.104691>
- Hajar Halili, S. (2019). Technological advancements in Education 4.0. *The Online Journal of Distance Education and e-Learning*, 7(1), 63–69. <https://tojdel.net/journals/tojdel/volumes/tojdel-volume07-i01.pdf#page=70>
- Himmetoglu, B., Aydug, D., & Bayrak, C. (2020). Education 4.0: Defining the teacher, the student, and the school manager aspects of the revolution. *Turkish Online Journal of Distance Education*, 21, 12–28. <https://doi.org/10.17718/tojde.770896>
- Holfelder, A. K. (2019). Towards a sustainable future with education?. *Sustainability Science*, 14, 943–952. <https://doi.org/10.1007/s11625-019-00682-z>
- Kwieciński, Z. (2019). *Grzędawisko: Eseje z pedagogiki społecznej i krytycznej socjologii edukacji* [Quagmire: Essays on social pedagogy and critical sociology of education]. Studio Kropka dtp-Piotr Kabaciński.

- Lis, E. (2021). Program kształcenia ogólnego Marthy C. Nussbaum jako remedium na „cichy kryzys” edukacji [Martha C. Nussbaum's general education program as a remedy for the „quiet crisis” of education]. *Edukacja Dorosłych*, 85(2), 119–134. <https://doi.org/10.12775/ed.2021.018>
- Mielkov, I. (2020). Higher education under the conditions of complexity and uncertainty of the world: Post-non-classical development strategies and personal dimension. *International Scientific Journal of Universities and Leadership*, 9, 62–77. <https://doi.org/10.31874/2520-6702-2020-9-1-62-77>
- Mikiewicz, P. (2022). Edukacjonalizacja i jej znaczenie we współczesnym świecie [Educationalisation and its meaning in contemporary world]. *Youth in Central and Eastern Europe*, 8(12), 43–51. <https://doi.org/10.24917/ycee.2021.12.43-51>
- Pllana, D. (2019). Creativity in modern education. *World Journal of Education*, 9(2), 136–140. <https://eric.ed.gov/?id=EJ1215357>
- Szmyd, J. (2021). Edukacja w kryzysie. Próba wstępnej charakterystyki i oceny [The education in crisis. The initial description and assessment of the phenomenon]. *Rocznik Pedagogiczny*, 43(1), 7–26. <https://www.ceeol.com/search/article-detail?id=1126674>
- Veljković, A., Stanković, S., Golubović-Ilić, I., & Herodek, K. (2020). The differences in students' attitudes about online teaching during COVID-19 pandemic. *Pedagogy*, 92(7s), 205–210. <https://www.ceeol.com/search/article-detail?id=901708>
- Webb, D. (2018). Bolt-holes and breathing spaces in the system: On forms of academic resistance (or, can the university be a site of utopian possibility?). *The Review of Education Pedagogy & Cultural Studies*, 40(2), 96–118. <https://doi.org/10.1080/10714413.2018.1442081>
- Wong, T., Moulds, P., Browning, P., Dean, W., & Priest, D. (2017). The future of education. *Independence*, 42(1), 4–19. Retrieved from: <https://search.informit.org/doi/10.3316/aeipt.215722>
- Wrońska, K. (2019). Sens i wymiary edukacji w pedagogice klasycznego liberalizmu [The meaning and the extent of education in the educational theory of classical liberalism]. In J. Kostkiewicz & S. Opozda-Suder (Eds.), *Pedagogika, niepełnosprawność, edukacja : ku szerokim przestrzeniom rozwoju pedagogiki specjalnej : księga jubileuszowa dedykowana Profesorowi Franciszkowi Wojciechowskiemu z okazji siedemdziesiątych urodzin [Pedagogy, disability, education : Towards the broad fields of the development of special pedagogy : The jubilee book dedicated to Professor Franciszek Wojciechowski on the occasion seventieth birthday]* (pp. 47–57). Wydawnictwo Uniwersytetu Jagiellońskiego.
- Zhang, K., & Begum Aslan, A. (2021). AI technologies for education: Recent research & future directions. *Computers and Education: Artificial Intelligence*, 2, Article 100025, <https://doi.org/10.1016/j.caeai.2021.100025>