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Education in the 21st century: philosophical foundations and principles

Iryna Bushman

Ph.D. philosophy of education SKILLS VMBO College, Netherlands,

ORCID:0000-0003-1036-9066

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Abstract: Aims: The purpose of the article is to provide a philosophical analysis of the anthropocentricity of education in the twenty-first century in the context of individual, local, and global dimensions. It is noted that education in the philosophical sense is interpreted from two key positions: existential and anthropological. The twenty-first century has become a period of actualisation of the human dimensional context of educational development. The role and status actualisation of participants in the educational space in the internal educational space and in the sociocultural environment as a whole implies the need to determine the content and format of the functioning of the education system. **Methodology:** To achieve the results of the study, the general scientific and philosophical methodological arsenal is used. Since the key task is to study the human aspects, the most appropriate methods are analytical and prognostic. The philosophical understanding of educational development is provided by two most common methodological approaches - dialectical and synergistic. **Results:** The results of the study indicate the actualisation of the following anthropocentric guidelines that are the basis of educational development in the twenty-first century: efficiency, quality, creativity, responsibility, competitiveness, and innovation. **Scientific Novelty:** Based on the results obtained in the course of the study, the human-dimensional elements that require a more thorough scientific and philosophical analysis are identified. If the fundamental anthropocentric educational elements have already been actually established in development strategies, the aspects of creativity, competitiveness, and prospects are updating their guidelines online, requiring constant scientific and philosophical support. **Conclusion:** The philosophy of education proposes the principle of anthropocentrism as a correlative element between education and other spheres of social activity. Human dimensionality determines the key characteristics of the participants in the educational process, forming the dominance

of the anthropological component in this area in the twenty-first century - the era of dynamism and flexibility of the worldview paradigm.

Keywords: philosophy of education, educational strategies, education of the future, education of the XXI century, quality of education, human dimension of education, philosophical and educational principles.

Introduction

Education is a phenomenon of civilizational development, as it shapes specific socio-cultural characteristics, creating a balance between the past and the future, the traditional and the innovative, the relevant and the mundane. The twenty-first century has become a period of a clash of paradigmatic contradictions. Education in today's world is not limited to professional sectoral characteristics, expanding its spheres of influence and individual, social, and global existential dimensions.

Scientific and technological progress is confidently establishing itself in the paradigm of civilizational development. At the same time, the fact that education is the basis for unlocking the technological and creative potential of human beings should not be ignored (Samodryn et al., 2023). The focus of all spheres of social development, especially education, on people and their potential is a worldview priority. The result of such guidelines was the formation of philosophical and educational principles that determine the content and format of the acquisition of knowledge and competencies in the educational process.

Research Problem

The research problem of the article is expressed in the comprehension of the philosophical guidelines for the educational development of the twenty-first century. As of today, when a quarter of a century has already passed and this period has been marked as a time of innovation and progress in education, the problem of further development of the educational system arises. The cultural and historical experience of previous centuries indicates that the innovation cannot be the dominant factor in education for a long time (in the dimension of the current study - a whole century) and at a certain stage the educational system will begin the process of stabilisation, returning to the guidelines of fundamentality. Therefore, the article emphasises the interchangeability of sociocultural processes and trends in the educational sphere.

Research Focus

The focus of the study is on the implementation of philosophical and educational guidelines in the context of innovative processes of the early twenty-first century. The results of educational development in the period of globalisation, technologisation, and digitalisation become the basis for the formation of educational strategies in the long term, which extends throughout the present century. The relevance and effectiveness of education at the current stage of its development allows giving answer to the question of the further development vector in this sphere: innovative and progressive or fundamentally conservative.

Research Aim and Research Questions

The purpose of the article is to provide a philosophical analysis of the anthropocentricity of education in the twenty-first century in the context of individual, local, and global dimensions. It is noted that education in the philosophical sense is interpreted from two key positions: existential and anthropological. The twenty-first century has become a period of actualisation of the human dimensional context of educational development. The actualisation of the role and status of participants

in the educational space in internal educational space and in the socio-cultural environment as a whole implies the need to determine the content and format of the functioning of the education system.

The purpose of the article is to define the philosophical and educational characteristics in the modern world that are focused on the priority of a person (as a creator and consumer of educational services). The constant cultural and historical confrontation between the existential and anthropological components of education in the twenty-first century has transformed into a dynamic manifestation of change and permanence. The purpose of the article is to determine the philosophical and ideological principles of the functioning of the educational system in the context of anthropocentric priorities. Human-dimensional constants are a kind of stabilising element in the educational space, which ensures the fundamentality (stability) and innovation (progress) of this sphere.

Literature Review/Theoretical Overview

Coates (2021) notes an obvious tendency to increase the number of philosophical works in the scientific and educational discourse. There is a revival of the philosophical and educational cluster of the twenty-first century, which became a logical continuation of the philosophical and scientific revival of the twentieth century. Initially, philosophy regulated the scientific and technological realities of industrial societies (1.0 - 4.0). Later, there was a need to regulate these innovative elements in the education system, which is a platform for the systematic implementation and use of global trends in culture, technology, or science.

Kwaku Kankam (2019) presents several approaches in the scientific and educational literature to highlight the functioning of the educational system in the twenty-first century. The traditional interpretive and positivist approaches are supplemented by a pragmatic way of interpreting the development of education. The practical orientation is gradually approaching the status of a scientific and narrative style of characterising the educational sphere. This opens up more prospects for education to integrate into the overall social dimension. At the same time, the influence and possibilities of broadcasting educational components through the innovative information technology cluster are increasing.

Scientific and technological progress in the philosophical and educational interpretation has a slightly different positioning in the modern scientific and worldview picture of the world. While the socio-cultural character of innovative technologies is focused exclusively on progress, the philosophical analysis puts forward a number of prejudices about the total benefit of this process. The concept of “destructive achievements of innovation” has been introduced into the philosophical and educational discourse (Didem Gürdür et al., 2022). Under such conditions, a number of scientific studies have been actualised to balance the educational system and protect it from the challenges of time and threats of the twenty-first century.

Namely, the experience of the COVID-19 pandemic has drawn a line between the expectations of 21st-century education and the realities of this era (Korkmaz & Toraman, 2020). At the beginning of the century, education went hand in hand with scientific and technological perspectives and created a rather optimistic mood among the scientific community. Innovation in the organisational and human dimension in the value clusters of education have become factors of invulnerability in this area. Overcoming the pandemic crisis has confirmed the structural potential of education. At the same time, the question of the limits of education's potential in the course of society's further development has arisen. It is obvious that the rapid development of natural, cultural, and historical phenomena will shape the permanence and instability of civilization in the near future. It is difficult to predict whether the integrity (organisational and value) of education will be able to cope with potentially more crisis phenomena in the future.

Yilmaz (2021) explores the multidimensionality of education as a result of the integration effect inherent in the globalised world. Ultimately, in the scientific and educational literature, multidimensionality is a response to the dynamism of socio-cultural life. Classical educational structures are not able to respond to the challenges of the times. Traditionally, education has been saved by either its purpose or the human factor. In the twenty-first century, which is rich in events, processes, and phenomena, these elements have significantly expanded in the internal educational space and have begun synergistic interaction with other spheres of public life.

Research Methodology

General Background

The study of education system development in the philosophical, ideological, cultural, and historical dimensions actualises a specific set of methodological tools. The traditional scientific and educational methodological arsenal is not able to provide adequate support when considering issues of a socio-cultural nature and is also burdened by time frames, some of them relate to the future.

A group of researchers Jalinus et al. (2021), analysing the prospects of the nonlinear paradigm of blended learning, focus on philosophical and scientific methodological approaches that will be useful for researching educational development in the future. Particularly, it is proposed to harmonise the philosophical components of essentialism and pragmatism. In the context of the current study, this approach is important because it reconciles the concepts of behaviourism, cognitivism, and connectivism in the formation of criteria for the philosophical and educational guidelines of educational strategies.

It emphasises the combination of randomised and controlled trials, experiments, and observations that have become the basis for interpreting the impact of sociocultural factors on the development of education (Petscher et al., 2020). Every year, the value of problem-based learning (PBL) is deepening that is a consequence of the expansion of the social base of education (Tan, 2003).

The example of STEM education clearly demonstrates the benefits of integrated learning (McComas & Burgin, 2020). In the context of the current study, the integrated methodological principle allows tracing the relationships between the epistemological, axiological, and anthropological components of the educational system.

Ortiz-Revilla et al. (2020) propose considering STEM education as a model of “epistemological reconciliation” when technological and natural sciences correlate their fundamental principles with the flexible manifestations of the humanities. Among the scientific and educational community, such a convergence of sciences in the educational space is considered situational, but the twenty-first century can transform such a methodological construct to paradigmatic status, finally determining the role of the philosophical and epistemological component in the educational system. Park et al. (2020) propose to study the development of education through the prism of paradigmatic research. This approach appeared in the context of the development of interdisciplinary synergistic principles of philosophical and scientific discourse. The use of this methodological perspective is beneficial in the study, as it ensures the integrity and, at the same time, the multi-vector interpretation of educational processes.

Data analysis

Couldry (2020) notes the need for increased criticality in the processing of data on educational development. If earlier information was one of the translators of an educational activity (along with the authority of a mentor or an educational institution), now the information cluster is actively gaining the status of a dominant source of knowledge and competencies. Therefore, datafication in education has

not only an organisational and methodological dimension but also a socio-cultural one. This principle can be traced throughout the study, as the key guidelines that are the core of the work are evaluated and analysed both in a purely educational and socio-cultural sense. This leads to the collection of data not only within the educational space but also to the involvement of results from other areas of social activity.

In the practice-oriented dimension, the educational process is permeated by changing contexts (Taranto & Buchanan, 2020). The practicality of education has adopted the experience of research activity (Kelly & Cordeiro, 2020). Collecting data on the problem of philosophical understanding of education is complicated by the heterogeneity of socio-cultural influence on the participants of the educational process and on the fundamental principles of education.

Research Results

The results of the study focus on the achievements and prospects of education in the twenty-first century not in the conceptual and sectoral sense, but in the cultural, historical and philosophical, and ideological sense. This format of the study provides for the coverage of the key guidelines of the philosophy of education in a strategic dimension, rather than a practically oriented one. The subject-practical relevance of the study focuses on the issues of educational development at the global level (or even at the individual level, but in the context of the public space).

One of the relevant aspects of the quality of learning in the modern world is the formation of context-specific understanding through the educational process (Kim et al., 2019). The dynamism of the present reveals the insufficiency of the classical educational purpose at the level of knowledge-competence. The development of a cluster of flexible (and later digital) skills has led to the need to integrate the acquired knowledge not only in a narrow disciplinary (general education) or sectoral (vocational education) specialisation but also in the general worldview paradigm of the modern age.

Education in today's world is closely intertwined with society's constant expectations of change and readiness for it. The twenty-first century for education is a kind of platform that combines catastrophic (crisis related to pandemic restrictions), optimistic (belief in the global potential of technological progress), and fundamental (preservation of individual and local beliefs and traditions) realities of civilizational development (Facer, 2019). Under such conditions, the education is flexible, preserving its integrity and effectiveness in different scenarios of civilizational development.

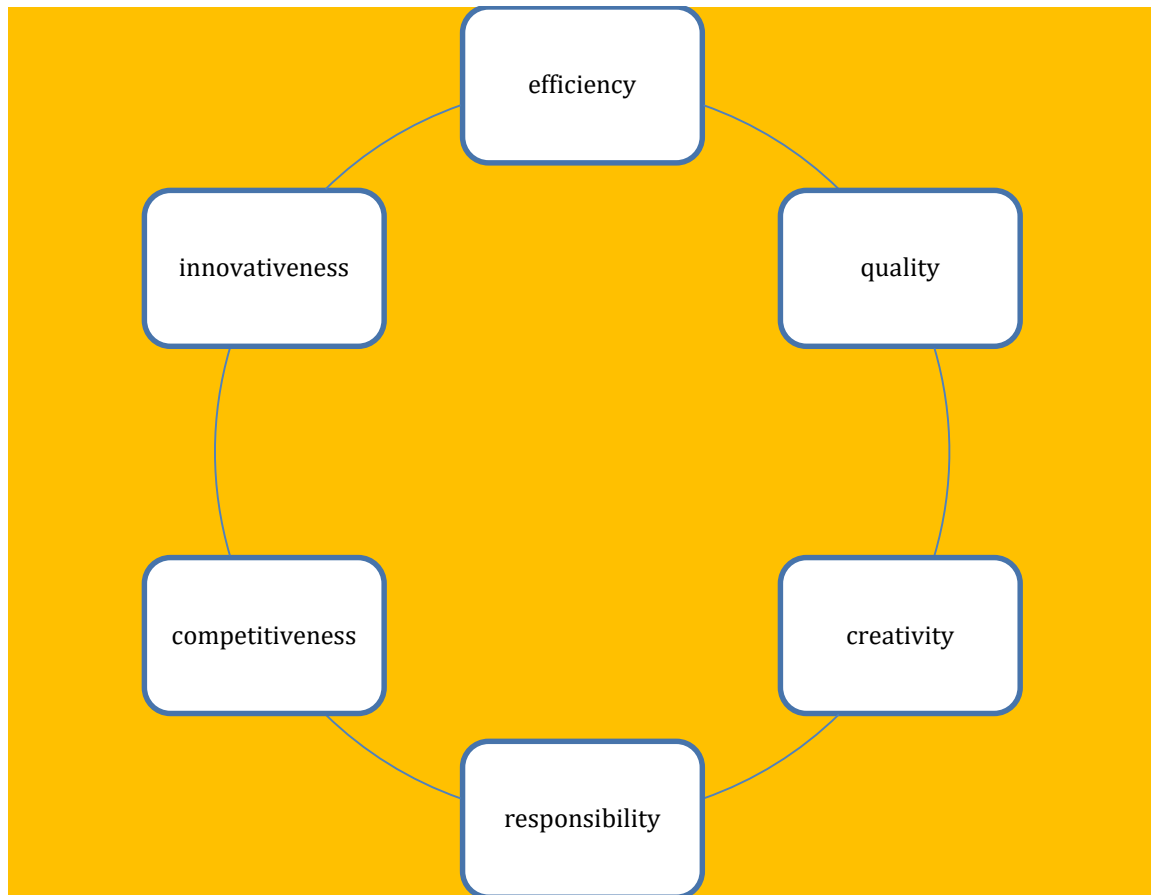
The modern development of social relations is characterised by high volatility in the cultural and ideological environment. Technology, information, global trends - all this only increases the instability of civilizational progress (Teo et al., 2021). The educational system usually responds to such innovations after the fact. At first, innovations are implemented in the practical and every day or professional and sectoral dimensions. Later, these innovations become principles of educational programs of general or vocational education.

It is noted that education can play a consolidating role in various social structures (Karpan et al., 2020). The requirements for the educational system of the twenty-first century are correlated with the focus on the development of a globalised world dominated by information and communication space, intercultural interaction, and critical and creative thinking (Teo, 2019). The format of dialogic teaching is being actualised, which completely changes the traditional subject-object balance among the participants of the educational process.

According to the results of the study, an attempt was made to unite philosophical and educational guidelines that actualise the anthropocentric dimension of education in the twenty-first century (see Figure 1).

Figure 1

Human characteristics of modern education



Source: author's own development

Since effectiveness is one of the key output components of the educational process, the issue of experience is relevant (Hagg & Gabriellson, 2020). The empirical component in the educational process plays an extremely important role, as it is one of the fundamental ways to obtain and accumulate knowledge. The experience is an integral element of the philosophical and educational guideline of effectiveness. Empiricism is becoming not only a standard methodological and scientific tool in the educational structure but also determines philosophical and ideological guidelines in this area.

The issue of education quality in the philosophical sense is not identical to the professional and sectoral characteristics of this concept. The philosophy of education does not compare the quantitative-qualitative dichotomy, focusing on the reference of the qualitative dimension of education (Susan, 2020). The formation of guidelines for educational development, norms for balance within the educational system, and the relationship of education to other segments of social activity are two key points of the philosophical interpretation of the quality of education in the XXI century.

Learning autonomy is one of the main features that shape competitiveness and quality of education (Howlett & Waemusa, 2019). At the same time, the principles of self-organisation of participants and systems of the educational process define competition as a source of another

philosophical and educational guideline, namely responsibility. The democratic principles of modern civilized society require a balance between rights and responsibilities. If the quantitative characteristics of the educational process are aimed mainly at the formation of individual autonomy and freedom, the quality of education is primarily realised through the responsibility and duties of all participants in the educational system.

The ethical component in education is actualised by the concept of integrity and is a determining factor in the formation of guidelines for responsibility in this area (Berkovich & Eyal, 2020). Education is one of the main sources of the formation of moral and ethical principles in both individual and social understanding. Philosophy, possessing axiological tools, is called upon to actualise the value potential of education. The problem of values is especially relevant in today's unstable and dynamic world. Responsibility is the essential power of a person, which is both their natural virtue and a principle that is formed in the course of the educational process.

The attitude of creativity in education has mostly socio-psychological characteristics (Ismailovych, 2021). The creative thinking, which is actualised in the twenty-first century, is the key to the formation of independence and self-sufficiency. Behaviourism and cognitive abilities are the primary components that are formed during educational activities. The philosophical and educational guideline of creativity requires coordination of the educational sphere with other clusters of social activity. The education is closely intertwined with the artistic segment in its purpose (Braund & Reiss, 2019). The importance of creativity consists not only in the direct creation of cultural elements but also in forming the basis for the scientific and technological progress of the current century.

The innovativeness in education is actualised not only by the usual scientific and technological vector. Another component of innovation, which is no less important in the global dimension, is the human resource aspect (Hermawan & Arifin, 2021). Achieving efficiency has both an objective and subjective character. The education is the optimal environment for developing a strategy for regulating the innovation factor in the socio-cultural development process. The traditional nature of education is a counterweight to the total onslaught of new technological, digital, and information flows. The balance of the fundamental nature of experience and the flexibility of progress is acquired in education and later integrated into other segments of the cultural and historical era.

An important point in the analysis of innovation is that in the educational sphere, this process is evaluated in the context of efficiency as well as in terms of moral and spiritual values (Trynyak & Yakymchuk, 2021). The moral and ethical cluster of educational training at different levels should not be dismissed. Singh (2019) notes the prospects for educational development in preserving the value component, particularly the impact on the formation of character and individual qualities of a person (leadership, responsibility, tolerance, humanity, etc.). The new information and digital environment, which is gradually embracing the educational system, requires new personal qualities from participants in the educational process, including: agility, adaptability, communication skills, initiative, entrepreneurship, and optimism (Al Kandari & Al Qattan, 2020).

Despite the total pragmatism of the educational space, the philosophy of education still ensures the preservation of human-dimensional constants of the educational space. This is expressed in the observance of such norms of educational development as: moral considerations of education, the presence of anthropological disciplines, the concepts of will and freedom, ethical and environmental contexts actualisation (Lee et al., 2021).

It is worth noting that modern educational development is a complex socio-cultural process with ambiguous cause-and-effect manifestations. Particularly, the use of artificial intelligence radically transforms the concept of the general intellectual potential of a person. Changes affect the criteria of

analytical, critical, and creative thinking (Alam & Mohanty, 2022). Such epistemological transformations lead to a change in the cognitive potential of a person (as an individual researcher) and society (as a scientific and disciplinary community).

Discussion

The promising educational guidelines indicated in the results will shape the design of the educational space of the future (Meyer & Norman, 2020). However, the format of education is always burdened by the content characteristics of this area. As a result, a key dichotomy in the twenty-first century education is emerging. Progressive innovative educational environments significantly optimise the practice-oriented segment of education. However, the totality of innovations claims to transform the purpose of the educational system. At the same time, one of the philosophical and ideological guidelines of modern education is a responsibility, which dictates that the educational sphere needs to preserve the fundamental principles of education. Here a contradiction arises when, on the one hand, education is tempted to eliminate human principles, and on the other hand, adherence to humanistic ideas is the key to preserving civilization as a whole.

The key problem of education in the twenty-first century is the contradictions caused by the dominance of the socio-cultural trend of dynamism and short-termism and the incompatibility of these principles with the sustainability and fundamentality of the educational sphere (Qadir et al., 2020). Educational institutions are the centres of the formation of the sustainability of social development (Giesenbauer & Müller-Christ, 2020). This characteristic of the educational space is ensured by the systematic functioning of the entire sphere of social activity. At the same time, the contradiction of such a guideline with the philosophical and educational perspectives of innovation and creativity is actualised. The discussions of the modern scientific and educational community are aimed at correlating innovative elements to the general educational systemic context of development.

Godfrey & Lewis (2019) emphasise the pluralistic nature of the educational characteristics of our time. Education needs new modifications to prevent existential shifts in this area (Mooney Simmie et al., 2020). The twenty-first century may become a period of final convergence of the anthropological and ontological dimensions of the educational sphere. This convergence will mean the end of the confrontation between the content and format of education. This perspective is a consequence of synergistic trends in the worldview paradigms of our time. Researchers dealing with the problems of educational philosophy are faced with the urgent question of whether it is advisable to move away from the dialectical principle of educational development. Despite the popularity of the synergistic paradigm, the vast majority of researchers see imperfections in the self-organising and interdisciplinary components of the educational system. Considering this issue through the prism of the results of the current study, it is worth noting the unreadiness (but not the inability) of the synergistic model to combine human and systemic-professional elements of education.

Scientific knowledge and educational competencies need to be aligned with life skills (Toha Tohara et al., 2021). Only in such positioning the educational sphere can develop in the context of the dynamic civilizational development of our time. In this context, there are several algorithms for the development of education in the socio-cultural space:

- The dominance of the practice-oriented pragmatic dimension in the educational sphere, focused on the formation of knowledge and competencies that will be in demand in social development;
- The autonomy of educational strategies that retain relative independence in the formation of their own theoretical, methodological, practical, and epistemological principles of functioning;

- The harmonising educational perspectives with cultural and historical realities and using appropriate sociocultural trends in the educational system.

The education of the future is not a linear set of knowledge, skills, abilities, or competencies. The realisation of the potential acquired through educational activity is a key leitmotif of educational strategies (Lavy, 2020). The twenty-first century is now actually divided into two periods:

- the first quarter of the era, which is already in the past and has left its mark on educational development in the form of attempts by the educational system to respond to innovative and crisis phenomena;
- the future stage of the century's development, which predicts educational progress that will correlate with civilizational trends.

Conclusions and Implications

Thus, the twenty-first century education is characterised by the dynamism and instability of processes both within this sphere and in the global cultural and historical dimension and is manifested in the following contexts:

- The educational process requires a balance between the trends of innovation and tradition that will improve and enhance the development of the education sector in the practical and organisational segment while maintaining the target characteristics of the industry.
- The use of information, digital, technological, and methodological innovations in education has led to the expansion of its philosophical and epistemological potential, which has led to an increase in the status of this sphere on a global scale, while significantly increasing the level of responsibility for the knowledge or competencies acquired or provided.
- The pluralism of the modern world expands the mechanisms of actualisation of educational potential, adding new segments of creativity and self-organisation to the standard set of thinking activities.
- The pragmatism of modern education puts forward requirements for the quality and effectiveness of education, which will not only be declared by educational strategies or plans but also confirmed by the results of the implementation of acquired knowledge, skills, and competencies in a competitive environment.
- The preservation of moral and ethical norms deepens the philosophical and axiological aspect of the modern educational system, which is designed to regulate the positioning of the rights and obligations of participants in the educational process (which remain by default even after obtaining an educational level and are an imperative in the future life of a person) by updating such values as responsibility, tolerance, dignity, etc.
- The educational development in the XXI century was marked not only by the usual transformations and improvements in the internal educational space but also integrated into a holistic paradigm of sociocultural development, offering its own relevant models and adapting to innovative trends of our time.

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