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IMPLEMENTATION OF HIGHER EDUCATION FOR SUSTAINABLE DEVELOPMENT IN CHINA

The article is dedicated to the analysis of the current trends in implementing the ideas of sustainable development, which is aimed at combining social, economic and environmental vectors of the progress of human civilization, in the system of higher education in China. It is demonstrated that the Chinese higher education is currently undergoing its transformation from hyper-centralization of the Modernity age to non-linear 'centralized decentralization' that allows greater autonomy to HEIs. The article analyses several national-level programs that include imperatives of sustainable development in higher education, as well as effective practices of institutions of realizing the ideas of 'green university' with effective management of natural resources aimed at achieving sustainability.

Key words: *sustainable development, higher education, education in China, environmental education, green university, campus culture.*

Outlines of the problem. The phenomenon of sustainable development, as an attempt to conceptualize one of possible and most desirable directions for the further progress of human civilization, has been the subject of academic discussions for almost forty years now. Implementing the principles of long-term harmonious development – that is, one that does not threaten the future, the one that does not happen at the expense of the coming generations and the one that combines three separate vectors – economic, social and environmental – is one of the key tasks of the humankind development in the 21st century. And especially it is the task for education, especially higher education, for it is the factor that can create a human personality capable of living and acting in a world of sustainable development. Such guidelines have found its most explicit expression in the UN Resolution “Transforming our world: the 2030 Agenda for Sustainable Development” adopted in September 2015. The fourth of the seventeen goals outlined in that document is dedicated to education: “Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” [16, p.14]. However, a closer analysis leads to the conclusion that education, including higher education, is a factor that could and should promote the fulfillment of almost all other goals as well, from achieving social justice and economic well-being for all the people to ensuring sustainable consumption and nature management, – as far as education is able to lay out the foundations for appropriate behavior among graduates of HEIs. Already in the 1990s, A. Cortese has noted that role of higher education institutions in achieving the goal of sustainable development is critical, albeit sometimes being overlooked: “Higher education institutions bear a profound moral responsibility to increase the awareness, knowledge, skills and values needed to create a just and sustainable future... They have the unique freedom to develop new ideas, comment on society, and engage in bold experimentation, as well as contribute to the creation of new knowledge” [4, p.1112].

In fact, the translation of political mottos and declarations unto the education practices is not at all an easy

task, considering the amount of Weltanschauung background involved in realizing the goal of forming a new kind of human personality professing the values of the culture of sustainability. Traditionally, investigators in the field of philosophy of education refer rather to practices exercised by European and North American universities, – however, as stated by the Japanese historian Syuntaro Ito, author of the concept of “ecological revolution”, implementing ecological notions would require a certain critique of ‘Eurocentrism’ [8, p.5-12], which also stresses the importance of education reforms for the change in social strategies. The ‘ecological footprint’ of the way of life peculiar to the developed countries of our world achieved quite a dangerous level – and if other countries would follow it, that threatens us with ecological catastrophe. Such a threat makes it necessary to investigate more closely the practices in ecological and sustainable education the exists in the most populated countries, like China. The works of Ka Ho Mok prove the great potential of East Asia in the current trends of education reforms [10]; also, as demonstrated by a team of international analysts led by A. Ryan, sustainable development initiatives in the region of Asia-Pacific generally coincide with global trends, but show significant progress in the aspect of higher education [13, p.108]. That enables us to consider the analysis of the ways of implementing the ideas of sustainable development in higher education in Asia one of the most actual and insufficiently covered topics in philosophy of education, and particularly that of China as the biggest country of the region.

The aim of the paper is to conduct a philosophical investigation of the way ideas of sustainable development are being implemented in reforming higher education system in China as one of the leading countries in the contemporary world as a whole and in the East Asia region in particular.

The layout of the main material. In terms of the level of development of its higher education system, China (PRC) currently holds leading positions in the world. For example, the statistics published in September 2019 reveal that the share of the population of the relevant age receiving higher education has grown since the proclamation of the People’s

Republic of China seventy years ago from 0.26% to 48.1% [2]. In the near future, the share is expected to exceed 50%, and in 2020 alone it is planned to issue diplomas to 8.74 million graduates of higher education institutions (HEIs), their number own being about three thousand. Of the latter, 62 are among the top 500 universities in the world (the position that is second only to the United States) [1], with the government constantly improving and controlling quality, which could be vulnerable in China's higher education, given its widespread nature.

Apparently, looking at such figures, it may seem that China is still experiencing a period of 'massification' of higher education peculiar to the age of Modernity, while other countries and educational systems (mostly European) have already reached the stage of 'post-massification', and it is difficult to speak of personal and humanistic intentions of higher education in China considering the traditionally low importance of the individual against the background of almost total state control we had seen in recent Chinese history. If we turn not to the official Chinese sources, but to the responses of international employers' corporations, we can notice certain shortcomings of Chinese higher education – at least, that the mid-late 2000s. In particular, it is noted that Chinese HEIs graduates are highly disciplined and hardworking, they are well prepared theoretically – but they lack practical skills and independent, critical thinking: characteristics that are fully consistent with the tradition of centralized education in the 20th century, with all its disadvantages and advantages, well known in Ukraine as well. For example, it is claimed that a Japanese outsourcing IT company, while reviewing the applications of 1,200 graduates from Xian's six best technical universities, found only 7 that were suitable and meeting the required professional qualifications [12].

However, even among such critics, no one denies the huge potential of Chinese higher education, which is able to overcome these growing pains. Since the 1980s, educational reforms in China have been somewhat slow but steadily moving in the right direction, such as decentralization, diversification, and proliferation, in stark contrast to the hypercentralization of the Mao era. It was at this time that the country's first private free economic zones, the Minban (民办 – literally: 'people's', 'public or 'self-governing' institutions) emerged – as reported, due to lack of adequate financial and manpower resources, these minban higher education institutions were set up without campus, funding, and teachers [10, p.104]. And the government, which since the early 1950s, when Chinese higher education largely followed the style and structure of Soviet universities, has not always been willing to give up its administrative functions in favor of such institutions; according to Chinese author J. Lin: "Private [minban] higher education in China has been a contested terrain with regard to control and autonomy. Private universities are calling for the loosening of government controls. Government officials argue that the private sector requires rigorous supervision and control" [9, p.17].

In general, such a contradictory trend is referred to as "*centralized decentralization*": on the one hand, free economic zones are now given greater autonomy, but on the other hand, they still remain subject to strict regulation to

ensure quality and accountability. However, despite the relatively small share of private universities in higher education in China, the emergence and relatively successful development of private education allows researchers to argue that the transition from party authoritarianism to university autonomy has now become a fact [6].

However, in a country with a difficult demographic situation, numerous unresolved social problems and a significant share of unemployment among freelance graduates, i.e. in a country whose economic well-being is still in its infancy, environmental problems are not given as much attention as in the West. According to Kelsie Defrancia, the sheer pace of China's economic growth makes establishing a sustainable development strategy a difficult task, and one which requires a standardized, localized system to measure and manage sustainability in order to seriously assess progress [5]. As an example of an attempt to form such a system, which has appeared in 2018, we can cite a series of reports called 《中国可持续发展蓝皮书》 ('China Blue Paper on Sustainable Development') and the China Sustainable Development Indicator System [3], which assess the development of cities and provinces based on the newly developed system of economic, social and environmental indicators (the first issue of this document was released in November 2018, and the second one – in August 2019). Despite the great importance of education stated among these indicators (in particular, the level of its funding by local authorities), not much could be said in relation to our topic, that is to the practices of defining higher education strategies for sustainable development.

However, the China's global strategy for the development of education in the 21st century has been rather profoundly manifested in the plan adopted by the Central Committee of the Communist Party of China in February 2019: 《中国教育现代化2035》 ("Modernization of education in China – 2035") [17]. That document does reflect China's efforts to implement the UN Resolution "2030 Agenda for Sustainable Development" based on the tradition of its own culture and its own approach to the education development. The year 2035 was chosen because it is by this time that the 19th Party Congress of 2017 has been planned to modernize the whole society on socialist principles ("socialism with a Chinese face"). According to Xiong Bingqi, deputy director of The 21st Century Education Research Institute in Beijing, and Chu Zhaohui, senior researcher at the National Institute of Education Sciences, the areas of Chinese education development strategies are delegating the central authority's power to local authorities and schools and expanding schools' right to function independently, overcoming the educational imbalances between urban and rural students, and reducing excessive academic workload faced by students and overcoming academic corruption and misconduct [15].

"Modernization of China's education – 2035" formulates eight main imperatives of education reforms, among which we should be single out those that promote sustainable development of human society as well as personal growth: "Pay more attention to morality, first of all pay more attention to comprehensive development"; "Pay more attention pay to lifelong learning", "Pay more attention to student education according to their abilities", "Focus on

integration and development and pay more attention to creation and exchange” [18], – and other imperatives of education reforms also include adherence to party leadership, compliance with Chinese traditions, persistent service to people and insistence on reforms and innovations. Among the ten strategic goals of modernization of education, there are the development of high-quality education with Chinese features – by educating ideals and beliefs, moral and aesthetic education (task two), achieving equality in education at all levels (task four), accelerating educational reforms under informatization, including the development of ‘smart campuses’ and computerized platforms of administration and service (task eight) [17].

As for the practices of individual Chinese higher education institutions, in addition to (or in contrast to) national-level programs, their analysis is somewhat difficult due to the lack of representation of the vast majority of them online and/or in English. However, some such practices are described in the research papers of the teaching staff of the respective institutions. For example, Shandong University in Jinan was the subject of a case study and a place for interviewing students on the implementation of the concept of a ‘green university’ focused on the principles of sustainable development. Particular attention here is paid not only to the contents of the disciplines taught, but also to the practices of energy efficiency in campuses (there are six campuses in this institution), with increasing social responsibility for environmental protection and the transition to renewable energy, food and other materials used in the activities of the university. Thus, the installation of a solar panel on the roof of a WC saves 700 tons of coal annually; electric lighting on the streets is operated by an automatic system that switches it on and off according to the level of natural illumination, and similar system indoors are based on voice activation or sensors that recognize the presence of students in the room; plants are planted on the roofs of libraries and laboratory buildings, both for landscaping campuses and for maintaining a constant comfortable indoor temperature. Free energy limits have been in place since 2006: students, graduate students and doctoral students have to pay for exceeding the monthly limit of 5 kWh, 8 kWh and 16 kWh, respectively. Of course, the academic side of the university life is following that trend as well: there are twenty or so courses on sustainable development taught to students of different faculties, such as “Energy and Environment”, “Clean Production and Circular Economy”, “New and Renewable Energy” etc.; such disciplines are mandatory for all students majoring in science and technology and for some students of humanities, arts and medicine. There are also ecological groups organized, as well as various environmental events held on relevant topics – from the celebration of World Water or Earth Days to the annual competition in saving energy and reducing emissions [11, p.485-486].

In fact, *the culture of a campus* is quite an interesting subject of investigation – and a very promising direction of modernization of education for sustainable development, which is not very well known in Ukraine due to excessive centralization and urbanization (in architectural sense) of domestic higher education. Chinese researcher Xi Shen argues in his article “Academic Culture and Campus Culture

of Universities” that campus culture is a combination of various cultures on campus created jointly by all university person and accumulated in the long-term practice of school-running. There are three main components of campus culture: first, it is material culture, in the form of the buildings themselves, the facilities and the environment; second, it is institutional culture that includes the system shared in common and the distinctive system, which refers to rule and regulation system, management and operation rule and restriction mechanism; and third, it is the most interesting component of all, spiritual culture, which includes values, ideology, psychological quality and aesthetic consciousness of a student who participates in the life of the campus. Spiritual culture is the core component of campus culture, and it influences academic culture as a whole, that refers to ethics of teaching and research (up to the principles of academic integrity), even to the Weltanschauung principles in general [14, p.62].

Conclusion. The short analyses conducted shows that Chinese higher education is still undergoing its transformation from Modernity, with its massification, linear methodology and standardization, to Post-Modernity, with its orientation on human individuality, non-linearity personal approach. A large country with many social and economical problems still unsolved has some troubles following the strict lines of environmental vector of sustainable development, and in that it resembles Ukraine that faces similar problems (rather unknown to the more developed countries in Europe and North America). Still, the development of higher education strategies in China shows great progress in such trends as ‘centralized decentralization’ and long-term goal setting as for building an environmentally sound higher education with national features. Practices of Chinese HEIs that involve successful realization of the ideas of ‘green university’ and the principles of ‘spiritual culture’ of university campuses are especially worth noting when outlining strategies if implementing higher education for sustainable development in Ukraine, that could well serve as a topic for further investigations of the problem in question.

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УПРОВАДЖЕННЯ ВИЩОЇ ОСВІТИ ДЛЯ СТІЙКОГО РОЗВИТКУ В КИТАЇ

Статтю присвячено аналізу наявних тенденцій з упровадження ідей стійкого розвитку, спрямованого на поєднання соціального, економічного та інвайронментального (екологічного) векторів розвитку людства, в системі вищої освіти Китаю. Продемонстровано, що китайська вища освіта на даний момент здійснює перехід від гіперцентралізації доби Модерну до нелінійної «централізованої децентралізації», що надає більшої автономії ЗВО. У статті аналізується декілька програм національного рівня, що включають до себе імперативи стійкого розвитку у вищій освіті, а також ефективні практики закладів з реалізації ідей «зеленого університету» з ефективним використанням природних ресурсів, спрямованим на досягнення стійкості.

Ключові слова: стійкий розвиток, вища освіта, освіта в Китаї, екологічна освіта, зелений університет, культура кампусу.

