



Global challenges of education for sustainable development

Abstract: The awareness of the society that it is responsible for what the nature looks like, as well as for developing human relations, results in the popularization of the idea of sustainable development. The aim of thos study is to present an analysis of the literature on the subject focused on the description of the reality and possible directions of changes in education, considering it as global challenges in three aspects of sustainable development: the economic, ecological and social. The greatest challenge today is to create a multidimensional view of a constantly deepening social and environmental crisis. The change that should be made in education should concern the processes that are aimed at combining the three aspects and at balancing their importance. The essence of education for sustainable development was shown in shaping the values, empathy and awareness that are needed to act for society, as well as the environment and the economy on a global scale.

Keywords: intercultural education, sustainable development, society, environment, economy, global challenges

Introduction

It remains in the interests of man and the environment, that many radical changes in human behavior should be introduced. The most important challenges facing the modern world include: reducing consumption, combating poverty and hunger, promoting a healthy lifestyle, reducing the constantly growing number of the population, and reducing environmental pollution. This is why the UNESCO countries have adopted education for sustainable development as an action plan for people, planet and welfare (*Sustainable*

development, n.a) in order to meet their own needs and not to deprive them of the possibility of meeting them by future generations, as well as to maintain the natural, economic and social balance. As observed by Wals and Kieft (2010, p. 18), the role of education is not only to enable social change, but also to deepen the ability to assess different global and intergenerational problems.

Sustainable development

In 1987, the report *Our Common Future*, otherwise known as the Brundtland report, defined the concept of *sustainable development* understood as *sustainable stable development* for the first time. In Poland, however, the adopted definition of sustainable development meant a development that satisfies the needs of the present generations, without undermining the possibility of satisfying the needs of the next generations (Kafel, 2007, p. 15). Currently, there are around 300 definitions of sustainable development. According to Kafel (*ibid.*, p. 15), the first Polish definition was created by ecological movements and was the following: *sustainable development, also called eco-development (...) is where people predict the limitations related to the finiteness of the planet and the rhythm of nature independent of humans (...). It is a strategy for achieving a dignified life within what is physically and biologically possible. It guarantees that the basic needs of the present and future generations are met, while maintaining the durability of the natural environment and the natural diversity of both species and ecosystems.*

The definition adopted in 1992 and still in force today comes from the Second United Nations Conference: *Environment and Development*, and says that: *sustainable development is a strategy of ecological, social, technical and technological and organizational transformations, the aim of which is to achieve a rational and sustainable level of social prosperity, allowing it to be passed on to future generations without fear of the risk of destruction of natural resources and ecosystems* (UN Conference on Environment and Development in Rio de Janeiro, 1993). Sustainable development is currently a factor co-shaping the next stage of civilizational development. Following Hull (2008, p. 27), its goals should be developed so that their implementation would lead to the balancing of economic and social processes, taking into account the possibilities of the natural environment. Batorczak (2013, p. 35) sees sustainable development as an idea whose main task is not to repair the damage caused by excessive exploitation of the environment, but to educate how to manage the resources of nature. Kostecka (2009, p. 101) observes

that this concept refers to environmental awareness treated equally to the infrastructure necessary for further socio-economic development. In 2015, the 2030 Agenda that describes seventeen sustainable development goals was adopted. The countries of the Global South and Global North have made a decision to commit to these goals and promote prosperity while respecting the planet (UNESCO, 2017, p. 6).

Education for sustainable development

Batorczak (2013, p. 22) remarks that a necessary condition for the implementation of sustainable development is education, because society is the object and subject of building this process (Prandecki, 2011, p. 180). A change of human nature should take place and a redefinition of most of human views in order to adapt them to new requirements. The aim of such education is to educate a person who, while being a conscious citizen of the world, not only fights for order and peace on the Earth but is also a responsible consumer of goods (Konieczny, 2020, p. 55).

According to Kostecka (2009, p. 102), the global tasks of education for sustainable development should include:

- promotion and improvement of the quality of teaching, which is aimed at acquiring knowledge and skills necessary for action,
- shaping social awareness, implementing the principles of sustainable development in everyday life,
- creating new education based on stimulating motivation and value development,
- conducting lifelong learning.

Adopting the above principles means striving for a new development of education, departing from its narrow understanding associated with the intellect, and adopting a new developmental paradigm based on combining the issues searched for and found in economic, social and environmental education. Their implementation should be based on the transfer and shaping of values such as good, empathy, honesty, love (Borys, 2010, p. 59). Thus, according to Prandecki (2011, p. 192), education for sustainable development should shape the development of thinking and direct teaching in such a way as to teach how to think and not what to think. It influences the development of knowledge, skills, values and attitudes. It is a transformative and holistic learning throughout life integrating content, requiring a shift from teaching to learning (UNESCO, 2017, p. 7). When creating curricula, it would be

worth considering three aspects of sustainable development, which show the three theoretical layers – the components of human development striving for a balance between society and the environment.

The economic aspect of education for sustainable development

Introducing the idea of sustainable development requires adopting a model of human behavior in the economic theory in line with its ethics. The anthropological concept of *human homo oeconomicus* was adopted in mainstream economics. Kiełczewski (2011, p. 215) remarks that the idea behind this idea was to formulate a reference point for management in which the decision-maker is a human being, that is, an individual. Another goal was to distinguish such features of an individual as an economic entity that would be universal, indisputable and part of human nature. In this idea, as Kiełczewski writes (*ibid.* p. 217), all individual features should be rejected to create a uniform system of individuals. The adoption of such a human theory allowed for the creation of economic laws that are objective and universal in nature. This theory, however, groups both supporters and opponents. The undoubted advantage is the fact that the assumptions of the economic theory of politics are useful for explaining simple decisions (Prandecki, 2011, p. 184) and for searching for theorems that are simple and verifiable (Kiełczewski, 2011, p. 217). One of the disadvantages was selfishness in its purest form, which is not considered immoral but which still gains the approval of society (Rogall, 2010, p. 185).

Prandecki (2011, p. 184) rightly observes that the rejection of short-term economic rationality could be the reason to create a new vision of man that would include a comprehensive explanation of human behavior. As if acting in this genre, H. Rogall (2010, p. 189) proposes to adopt the concept of *homo cooperativus* in the economy of sustainable development, where the ability to cooperate and the potential of idealism need to be taken into account. What is more, D. Kiełczewski (2011, p. 213) points to *homo sustinens* as a new model of man. As these visions are much similar to each other, and – additionally – their features complement each other, for the sake of this paper it was resolved to give up the division resulting from the names of individual authors and an assumption was made that what should be indicated first of all is what the direction of change ought to be, disregarding the issues of nomenclature adopted by individual authors. Therefore, it is recognized that everyone is naturally ‘equipped’ with an elementary sense of justice and can

adapt to the requirements of moral behavior. Following Rogall (2010, p. 190), as people are capable of empathy and love, they also understand the need to achieve long-term goals, and see their dependence on the consent and help of others.

Education for sustainable development should place emphasis on changing the theoretical approach to human beings. As stressed by H. Rogall (2010, pp. 192–193), the new approach allows for shaping a specific type of person; ready to cooperate and to take responsibility for others. The condition for creating a new unit is to take into account the following elements:

- consideration of unequal preconditions (abilities, education, property relations, etc.),
- behavior, which is determined by various factors: economic, socio-cultural, psychological, and/or idealistic goals,
- character traits, which are varied, e.g. self-interest, self-sacrifice, compassion, cooperation, etc.,
- ability, readiness to cooperate and responsibility,
- lack of resistance to manipulation and cruelty.

Rogall (2010, p. 194) observes that adopting the above-mentioned elements has some kind of consequences. If one assumes that the preconditions are unequal, one should strive to provide equal opportunities and ensure minimum social, ecological and economic standards. The human is a being who shows various, often contradictory features, e.g. empathy, often paired with selfishness, is susceptible to the influence of socio-economic factors and does not fully use the potential for communal and idealistic actions. One cannot resign from codifying moral norms only because the human is capable of doing both good and evil. Establishing them can help maintain peace and life in harmony with the environment, preserving one's goods for future generations.

The social aspect of education for sustainable development

Adopting an appropriate human theory allows for a change in social behavior and the implementation of the concept of sustainable development. As K. Prandecki (2011, pp. 185–192) rightly points out, the society can be an object and also a subject of sustainable development: this is because it is not only able to change people and their way of relating to the environment, but also makes the successful implementation of these principles in life dependent on it. The new aims of sustainable development include: eradication of

poverty and hunger; growth of human health and welfare; gender equality; sustainable cities and communities; responsible consumption; peace and justice (the so-called Global Goals). A sustainable society focuses on two areas: the consequences of human activity and consumption. Following Hull (2008, p. 28), the activities of society have been detached from the environment, which results in an increase in the population, greater demand for renewable and non-renewable land resources. Drastic disproportions have arisen between people, generating numerous divisions and conflicts. According to Nagórny (2011, p. 143), the biggest social problem is the constant consumption caused by shortening of the life of products, fast development of technological progress, and unstoppable greed to buy goods. The society as an entity includes the family, local society, non-governmental organizations, enterprises and refers to their role on the Earth. Its main foundation is the human entity; it presents a human being as responsible, aware, having the appropriate knowledge to create social, economic and environmental conditions for their own development and for other people.

Referring to the previously presented theories of *homo oeconomicus*, it should be emphasized that such an attitude leads to an increase in global consumption (resource consumption is greater than production). Action is only taken when financial benefits are achieved, detachment of a human being from natural cycles takes place and putting the human above the natural environment occurs. This attitude leads to a catastrophe and the collapse of civilization.

As indicated above, the theoretical vision of the human being should be changed and the adoption of *homo cooperativus* as a new goal of educating society should be maintained. A tendency to change is the key to achieving sustainable development; the greatest threat is the noticeable lack of interest in the desire to change and the growing reluctance to participate in social communities (Putnam, 2008, p. 468). The first stage of change that should occur is a change of attitude, embracing both a sense of responsibility for the world and the belief that the world can be changed. It is also necessary to combat the belief that the expected threats will not occur. What Prandecki (2011, p. 188) recognizes as important is to abandon selfish thinking in favor of the community. Sustainable social development leads to the development of society as a whole. Its main goal is the balance and cooperation of societies in accordance with the ecosystem and its dependencies. The activities of society take into account ecological ethics, the quality of life, as well as care for the future of generations. However, the society should take into account

the cultural identity of individuals and provide the opportunity for the development of culture and tradition (Jutvik and Liepina, 2005, p. 8).

The ecological aspect of education for sustainable development

At the beginning of his very interesting book, Berdo (2006, p. 1) remarks that the human being is dependent on the environment because it is nature that provides the livelihoods. Later on, Berdo (*ibid.*, p. 80) develops this approach and adds an observation that the basic assumption of the environmental aspect should be the adoption of the principle that people can draw from the environment more than it can give them. Hull (2008, p. 29) assists him in a way writing that both nature and the human world are a dynamic, constantly evolving whole, its creative element being the human and the structures they create. The current consumer society presents a position where self-interest is more important than the common interest. Such an attitude is the cause of many drastic climate changes and the degradation of the ecosystem, as evidenced in the research presented by Rokicka and Woźniak (2016, pp. 211–212):

- poor quality air is the cause of 10 percent of deaths worldwide,
- 24 billion people around the world do not have access to clean water,
- the fish stocks in the seas are used unsustainably,
- the most endangered water and land areas are not under protection,
- evident land loss can be observed,
- there is an excessive use of nitrogen fertilizers,
- carbon dioxide emissions are still very high.

As observed by Żber-Dzikowska (2013, p. 102), the principal function of education is to shape human ecological awareness and change the functioning of a consumer into a citizen of the world who uses ecological solutions that require the use of locally available raw materials. Naturally, following Berdo (*ibid.*, p. 78), their introduction is technically simple and can be introduced independently. Environmental education supports the human's cognitive contact with the outside world, their development of perception, observation, sensitivity to the problems of the natural environment and human life. These are the fundamental issues in education, as Więckowski (1993, pp. 153–154) sees them. Sustainable development focuses on ensuring the abundance of natural resources, where their management does not exhaust them and does not lead to degradation of the natural environment (Berdo, 2006, p. 17).

Conclusions

Following Tyburski (2011, p. 12), sustainable development is a kind of social and economic progress that integrates political, economic and social activities, while maintaining the balance of nature and the processes taking place in it. Its overarching goal is to meet the needs of contemporary and future generations. One of global challenges to education for sustainable development is focused on the development of knowledge, values and skills that develop a sense of awareness, in this way stimulating individual and group activities that have local and global impact. These challenges are defined by Batorczak (2013, p. 25) as follows: they improve the quality of life now and ensure the prosperity of the next generations. However, it is important to understand that education for sustainable development is primarily related to ethics, i.e. a life in which one cares for the natural environment while rejecting the attitude of consumption and sharing what one has in excess. Such activities should take place naturally (Gerwin, 2008, p. 4).

Following Szempruch (2012, p. 9), the fundamental change that should take place is the new vision of school as a place where critical analysis of reality, learning for life, alternative, creative thinking, and a critical distance to reality take place, which – according to Ciążela (2005, p. 181) – requires starting from an elementary sense of solidarity, community and responsibility. This is why the principal challenge of modern education is to keep up with the advancement of technology and globalization. Societies all over the world struggle with the overflow of information that is not always true. Understanding the complexity of this world is a principal challenge of global education for sustainable development. It emphasizes the vision of a human whose own benefits will not be more important than the common interest. It is a departure from *homo oeconomicus* in favor of *homo cooperativus*, which makes it possible for the development of responsible human beings, aware of the undisputable fact that it is them who work for nature.

Berdo (2006, p. 20) emphasizes a common truth when he writes that it is a human who lives for the Earth, not the Earth for human beings, and that their dependence on the environment has not decreased. Human actions affect not only the country where one lives, but also other citizens of the world. Prandecki (2011, p. 185) adds that it is also important to underline the necessity to introduce changes in the functioning of education of a human being, and the fact that the evident human reluctance to be positively edu-

cated should be overcome. Education should be oriented towards declining the attitude of consumerism, where most actions are taken either when there is an opportunity to achieve benefits or when they are conditioned by the price. The human should not strive to satisfy their selfish needs, which are always related to the demand for raw materials and products. Thus, following Reimers (2017, p. 40), the global challenges of education for sustainable development mostly consist in striving to shape some specific attitude in students – and this is the attitude to understand their position towards the wider world they live in.

One more time it should be emphasized that the basis of economy and society is the environment. Neither aspect is possible without the proper functioning of species and natural processes. The ecological aspect of sustainable development places emphasis on people's moral development and their responsibility for the entire ecosystem as well as the relations taking place within it. This is the basis of the functioning of life on the Earth and every element in it is important. It is a common truth that the limits of the Earth's capabilities have already been exceeded and that the existing ecosystem needs rebuilding. In order to rebuild it, one may take the way of which Berdo (2006, p. 80) writes when he proposes a necessary change of the direction of development so as to meet a sustainable one – the one where life will be balanced in economic, ecological and social aspects. As a result of the activities that openly address these issues in a holistic and multidimensional manner, one will be allowed to obtain not only the right amount of information, but also the ability to construct knowledge and evaluate it, which, according to Szadzińska (2017, p. 22), will result in action based on respecting ecological and social rights. Appropriately targeted educational activities make it possible to correct the current direction of development, affecting both locally and globally the existing tendencies.

Bibliography

- Batorczak, A. 2013. *Edukacja dla zrównoważonego rozwoju w Polsce i w Wielkiej Brytanii* [Education for Sustainable Development in Poland and Great Britain]. Warszawa: Uniwersytet Warszawski.
- Berdo, J. 2006. *Zrównoważony rozwój w stronę życia w harmonii z przyrodą* [Sustainable Development towards Living in Harmony with Nature]. Sopot: Earth Conservation.
- Borys, T. 2010. Dekada edukacji dla zrównoważonego rozwoju – polskie wyzwania.

- wania [A decade of education for sustainable development – Polish challenges]. *Problemy Ekorozwoju [The Problems of Eco-development]*. **5**, pp. 59–70.
- Ciążela, H. 2005. Edukacja wobec etycznego wymiaru idei rozwoju trwałego i zrównoważonego [Education towards the ethical dimension of the idea of sustainable development. Praxeology]. *Prakseologia*. **145**, pp. 171–182.
- Gerwin, M. 2008. *Plan zrównoważonego rozwoju dla Polski. Lokalne inicjatywy rozwojowe [Sustainable Development Plan for Poland. Local development initiatives]*. Sopot: Earth Conservation.
- Global Goals. 2017. https://www.sightsavers.org/policy-and-advocacy/global-goals/?gclid=Cj0KCQjwnbmaBhD-ARIsAGTPcfXxTHAN6YtEgzmceh8-VDv5AUk3Ef11gU9ESlrSWsyLPfLO1U5ZqAwaAgApEALw_wcB (18.10.2022).
- Hull, Z. 2008. Filozoficzne i społeczne uwarunkowania zrównoważonego rozwoju. [Philosophical and social conditions of sustainable development]. *Problemy. Ekorozwoju [The Problems of Eco-development]*. **3**, pp. 27–31.
- Jutvik, G. and Liepina, I. eds. 2005. *Edukacja ku zmianie: podręcznik edukacji na rzecz zrównoważonego rozwoju [Education for Change: A Textbook for Education for Sustainable Development]*. Kaliningrad: Uniwersytet Bałtycki.
- Kafel, K. 2007. W gąszczu definicji dla zrównoważonego rozwoju [In a jungle of definitions for sustainable development]. In: Kalinowska, A. and Lenart, W. eds. *Wybrane zagadnienia z ekologii i ochrony środowiska. Teoria i praktyka zrównoważonego rozwoju. Wybór wykładów z lat 2004–2007. [Selected issues in ecology and environmental protection. Theory and practice of sustainable development. Selection of lectures from 2004–2007]*. Warszawa: Uniwersyteckie Centrum Badań nad Środowiskiem Przyrodniczym, pp. 13–15.
- Kiełczewski, D. 2011. Homo oeconomicus i homo sustinens jako wyzwania ekonomii zrównoważonego rozwoju [Homo oeconomicus and homo sustinens as challenges in the economics of sustainable development]. In: Poskrobko, B. ed. *Teoretyczne aspekty ekonomii zrównoważonego rozwoju [Theoretical aspects of the economics of sustainable development]*. Białystok: Wyższa Szkoła Ekonomiczna, pp. 213–239.
- Kostecka, J. 2009. Dekada edukacji dla zrównoważonego rozwoju – wizja, cel, strategia [A decade of education for sustainable development – vision, goal, strategy]. *Problemy Ekorozwoju [The Problems of Eco-development]*. **4**, pp. 101–106.

- Nagórny, W. 2011. Polityka społeczna a zrównoważony rozwój [Social policy and sustainable development]. *Pragmata Tes Oikonomias*. 5, pp. 137–146.
- Prandecki, K. 2011. Człowiek i społeczeństwo w koncepcji zrównoważonego rozwoju [Man and society in the concept of sustainable development]. In: Poskrobko, B. ed. *Uwarunkowania rozwoju zrównoważonej gospodarki opartej na wiedzy: monografia naukowa*. [Conditions for the development of a sustainable knowledge-based economy: a scientific monograph]. Białystok: Wyższa Szkoła Ekonomiczna, pp. 180–192.
- Putnam, R. 2008. *Samotna gra w kregle: upadek i odrodzenie wspólnot lokalnych w Stanach Zjednoczonych* [The Lonely Bowling Game: The Fall and Revival of Local Communities in the United States]. Warszawa: WAI P.
- Reimers, F.M. 2017. *Empowering students to improve the world in sixty lessons: version 1.0*. North Charleston, South Carolina: CreateSpace Independent Publishing Platform.
- Rogall, H. 2010. *Ekonomia zrównoważonego rozwoju: teoria i praktyka* [The economics of sustainable development: theory and practice]. Poznań: Zysk i S-ka.
- Rokicka, E. and Woźniak, W. 2016. *W kierunku zrównoważonego rozwoju. Koncepcje, interpretacje, konteksty* [Towards sustainable development. Concepts, interpretations, contexts]. Łódź: UŁ.
- Sustainable development. 2015. <https://sustainabledevelopment.un.org/post2015/transformingourworld/> (18.10.2022).
- Szadzińska, E. 2017. Projekt zmian procesu kształcenia akademickiego ukierunkowanego na wartości społeczne [Project of changes in the academic education process oriented towards social values]. *Zeszyty Naukowe Wyższej Szkoły Humanitas. Pedagogika* [Scientific Journals of the University of Humanities. Pedagogue]. 14, pp. 15–24.
- Szempruch, J. 2012. *Nauczyciel w warunkach zmiany społecznej i edukacyjnej* [A teacher in the conditions of social and educational change]. Kraków: Oficyna Wydawnicza "Impuls".
- Tyburski, W. ed. 2011. *Zasady kształtowania postaw sprzyjających wdrażaniu zrównoważonego rozwoju* [Principles of shaping attitudes conducive to the implementation of sustainable development]. Toruń: UMK.
- UN Conference on Environment and Development in Rio de Janeiro. 1993. <https://digitallibrary.un.org/record/168679> (18.10.2022).
- Unesco 2017. *Education for sustainable development goals: learning objectives*. <https://unesdoc.unesco.org/ark:/48223/pf0000247444> (18.10.2022).

- Wals, A.E.J. and Kieft, G. 2010. *Education for sustainable development: research overview*. Stockholm: SIDA.
- Więckowski, R. 1993. *Pedagogika wczesnoszkolna [Early School Pedagogy]*. Warszawa: WSiP.
- Żeber-Dzikowska, I. 2013. Edukacja ekologiczna i zrównoważony rozwój w klasach I–III szkoły podstawowej [Environmental education and sustainable development in grades 1–3 of primary school]. In: Szadzińska, E. ed. *Dydaktyczne "Tropy" zrównoważonego rozwoju w edukacji [Didactic "Tips" of sustainable development in education]*. Kraków: Oficyna Wydawnicza "Impuls", pp. 133–144.