

Original paper

Milica J. Andevski¹
University of Novi Sad, Faculty of Philosophy, Novi Sad



Paper received: Aug 25th 2016
Paper accepted: Oct 30th 2016
Article Published: Jan 30th 2017

Sustainable Environmental Education – a Perspective for the Change of Learning Culture

Extended summary

Environmental education cannot truly be called sustainable before its developmental and cognitive potential is implemented in the new content of formal education, as well as integrated in a traditional scientific discipline, or in a school subject.

Critical and interpretative approaches have been used in this paper to describe the timelines of development of environmental education: the first timeline encompasses the period 1960-1980; the second timeline includes the last decade of the previous century: the third timeline describes the period from the mid- 90s of the 20th century, up to the present moment, the period when the concept of sustainability was introduced and education for sustainable development began to be considered. The timelines are flexible, fluent, and overlapping, while the time distance between them should be understood only provisionally. This adds clarity to the structure of the paper, the aim of which is to present, from historical, chronological, scientific and applicative perspectives, as well as by offering both positive and critical insights, the development of environmental thought in the context of educational processes, learning and pedagogy which have already received the attribute of – environmental.

In the context of the first timeline, in the early 70s of the previous century, some authors developed a model of human behaviour towards the environment based on the reestablishment of the lost link with nature in terms of our experience, knowledge and behaviour, by tackling environmental issues in education and integrating them in traditional academic topics.

The second timeline of environmental education (the 80s and 90s of the 21st century) gave rise to a powerful didactic-methodological thought. Environmental education, within the dominant didactic discourse, made an exclusive connection with the right selection of educational practice, particularly with teaching and learning methods, orientation towards systems

¹ andevski.milica@yahoo.com

Copyright © 2016 by the authors, licensee [Teacher Education Faculty](#) University of Belgrade, SERBIA.

This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0) (<https://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original paper is accurately cited.

theory, situational learning, instruction which is not confounded to specific school subjects (interdisciplinary and trans-disciplinary approaches), action-oriented project and problem-solving teaching and learning, as well as the computer simulation methods. These advanced methodological intentions of environmental education and environmentally oriented teaching become clearer when juxtaposed with the traditional whole-class or frontal teaching, learning different subjects, textbook oriented teaching, and knowledge and learning which is not oriented towards action and experience.

During the third timeline, and in a relatively short time, in the mid-90s, environmental education was replaced with a new dimension – “education for sustainable development” or “learning for a sustainable society”. Everyday environmental activities focused on: environmental management, resource efficiency, economic and social issues for environmentally responsible actions, the relationship between human system and natural system. Environmental topics encompassed both local and global dimensions, as well as the dimensions of the past, present and future. Environmentalism encouraged the development of sensitivity, awareness, understanding, critical thinking, and problem solving. In the process of teaching and learning, environmental dimension initiated a wide spectrum of learning techniques and techniques for the expansion of knowledge, focusing particularly on practical activities and direct experience.

Despite the stated intentions, critics claimed that environmental education had been built on wrong premises, adding that, except for a complex mixture of occasionally very different concepts, a uniform environmental education had never existed. In addition, there were very few “traditions”, “schools”, or didactic concepts that could be clearly distinguished. Though a sharp criticism of environmental education was not lacking, dynamic shifts in development of environmental education were still not in sight. Environmental education lost its functionality in the rift created between didactic-methodological, teaching dimensions and the real, human, environmentally friendly actions in relation to the environment. Owing to its openness, environmental education was able to overcome the rift and integrate in its programme the new impulses of the 90s. New intentions, at least in the beginning, looked promising in terms of new dimensions in the development of the environmental views. These intentions were summed up in the Rio Declaration which opened the path towards the concept of sustainability and sustainable development as the third line of development of environmental education – education for sustainable development.

Given that the world and the environment are still viewed from the reductionist perspective, segmented into separate subjects and phenomena, it is questionable whether environmental education, in terms of sustainability and sustainable development, can focus entirely on the network of life and the content promoting stronger networking of knowledge. Regarding this issue, there are many questions that still remain unanswered. There is a need for the revision of not only the content, but also the methodology of traditional teaching and the organisation of teaching oriented towards traditional scientific disciplines, compact conveyance of knowledge in an easily recognizable rhythm which does not follow the dynamics of environmental projects and problem-solving and situational learning. Sustainable environmental education addresses real problems; it connects systematic, situated and cumulative learning processes, and reflects the competencies which are needed for the future.

Key words: environmental education, sustainable development, sustainable environmental education, learning culture.

References

- Andevski, M., Knežević Florić, O. (2002a). *Obrazovanje i održivi razvoj*. Novi Sad: Savez pedagoških društava Vojvodine.
- Andevski, M. (2002b). Ekološko obrazovanje – mogućnosti i ograničenja. U: Makević, S. (ur.). *Zbornik radova* (9–16). Naučno-stručni skup: *Ekološka svest i ekološko obrazovanje dece i omladine*. Šabac: Viša škola za obrazovanje vaspitača.
- Andevski, M., Halaši, T. (2002c). Razvojne linije ekološkog obrazovanja. U: Marković, S. Z. (ur.). *Zbornik radova* (361–364). X naučno-stručni skup o prirodnim vrednostima i zaštiti životne sredine *Ekološka istina*. Bor: Tehnički fakultet, Univerzitet u Beogradu.
- Andevski, M. (2002d). O nedoslednosti ekološkog obrazovanja. *Pedagoška stvarnost*. 9–10, 655–664.
- Andevski, M. (2002e). Ekološko obrazovanje i preokret u kulturi. U: Zagorac, D., Jelena Bjegović, J. (ur.). *Revija rada. XXXII, specijalni broj* (109–117). Nacionalni naučni skup sa međunarodnim učešćem *Društvene promene, zaštita životne sredine i obrazovanje*. Niš: Fakultet zaštite na radu, Univerzitet u Nišu.
- Andevski, M. (2003a). Etičke dileme ekološkog obrazovanja iz diskursa održivog razvoja. U: Marković, S. Z. (ur.). *Zbornik radova* (363–365). XI naučno-stručni skup o prirodnim vrednostima i zaštiti životne sredine *Ekološka istina*. Bor: Tehnički fakultet, Univerzitet u Beogradu.
- Andevski, M. (2003b). Uloga održivog razvoja u reformi (ekološkog) obrazovanja. U: Pujin, V. (ur.). *Zbornik radova* (87–92). *Eko-konferencija*. Novi Sad: Ekološki pokret grada Novog Sada.
- Andevski, M., Kundačina, M. (2004). *Ekološko obrazovanje – od brige za okolinu do održivog razvoja*. Užice: Učiteljski fakultet u Užicu, Univerzitet u Kragujevcu.
- Andevski, M. (2005a). Ekološka kompetencija – skoro sasvim uopšten cilj obrazovanja. U: Marković, S. Z. (ur.). *Zbornik radova* (561–565). XIII naučno-stručni skup o prirodnim vrednostima i zaštiti životne sredine *Ekološka istina*. Bor: Tehnički fakultet, Univerzitet u Beogradu.
- Andevski, M. (2005b). Ekološko obrazovanje u sistemu visokoškolskog obrazovanja – inovativni i komparativni pristup. U: Zagorac, D., Bjegović, J. (ur.). *Zbornik radova* (309–320). Naučni skup *Zaštita radne i životne sredine u sistemu nacionalnog i evropskog obrazovanja. Čovek i radna sredina*. Niš: Fakultet zaštite na radu, Univerzitet u Nišu.
- Andevski, M. (2005c). Ekološko obrazovanje u pedagoškoj refleksiji. U: Pujin, V. (ur.). *Zbornik radova* (195–299). VI Međunarodna *Eko-konferencije*. Novi Sad: Ekološki pokret grada Novog Sada.
- Andevski, M. (2006a). *Ekologija i održivi razvoj – na putu ka društvu učenja*. Novi Sad: CEKOM-books d.o.o.

-
- Andevski, M. (2006b). Etička utemeljenost održivog razvoja. *Teme – časopis za društvene nauke*. 3, 411–426.
 - Andevski, M. (2008a). Mogućnosti i granice učenja za održivi razvoj. U: Uzelac, V., Vujičić, L. (ur.). *Cjeloživotno učenje za održivi razvoj. Svezak 1* (249–254). Međunarodni skup *Cjeloživotno učenje za održivi razvoj (Lifelong learning for sustainable development)*. Rijeka: Sveučilište u Rijeci.
 - Andevski, M., Kliček, T. (2008b). Održivo obrazovanje – put u globalno društvo znanja. U: Jovanović, L. (ur.). *Zbornik radova* (247–252). Međunarodni naučni skup *Životna sredina danas*. Beograd: Naučno-stručno društvo za zaštitu životne sredine Srbije, Ekologica.
 - Andevski, M., Urošević, S., Stamatović, M. (2012). Discourse of Sustainable Development a base of Environmental Education in Serbia. *Environmental Engineering and Management Journal*. 11 (9), 1611–1626.
 - Andevski, M., Šćepanović, V., Šćepanović, I. (2013). Održivo ekološko obrazovanje u menadžmentu, jaka retorika, slabe perspektive. U: Jovanović, Đ. (ur.) *Tematski zbornik 1* (218–226). Naučni skup *Životna sredina i menadžment*. Sremski Karlovci: FaM – Fakultet za menadžment.
 - Beyer, A. (1998). *Nachhaltigkeit und Umweltbildung*. Hamburg: Krämer.
 - De Haan, G. (1997). *Umweltbildung als Innovation*. Heidelberg: Springer.
 - De Haan, G. (1998). Bildung für nachhaltige Entwicklung? Sustainable Development in Kontext pädagogischer Umbrüche und Werturteile. Eine Skizze. In: Beyer, A. (1998) *Nachhaltigkeit und Umweltbildung* (109–148). Hamburg: Krämer.
 - De Haan, G. (2001). Was meint „Bildung für nachhaltige Entwicklung?“ und was können eine globale Perspektive und neue Kommunikationsmöglichkeiten zur weiterentwicklung beitragen? In: Herz, O., Seybold, H., Strobl, G. (Hrsg.). *Bildung für nachhaltige Entwicklung. Globale Perspektiven und neue Kommunikationsmedien* (29–45). Opladen: Leske und Budrich.
 - Eulefeld, G. (1979). Didaktische Leitlinien zur Umwelterziehung in der BRD. In: Eulefeld, G., Kapune, T. (Hrsg.). *Empfehlungen und Arbeitsdokumente zur Umwelterziehung* (33–44). München: IPN-Arbeitsberichte 36.
 - Hasse, J. (2006). Bildung für Nachhaltigkeit statt Umweltbildung? Starke Rhetorik-Schwache Perspektiven. In: Hiller, B., Lange, M. (Hrsg.). *Bildung für nachhaltige Entwicklung. Perspektiven für die Umweltbildung* (29–43). Münster: Campus Verlag.
 - Hellberg-Rode, G. (2006). Potenziale nachhaltiger Umweltbildung für eine Veränderung der Lernkultur. In: Hiller, B., Lange, M. (Hrsg.). *Bildung für nachhaltige Entwicklung. Perspektiven für die Umweltbildung* (121–129). Münster: Campus Verlag.
 - Oakshott, M. (1990). Education – The Engagement and it's Frustration. In: Fuller, T. (ed.). *Michael Oakshott on Education* (87–122). New Hawen: Erlbaum.
 - Rončević, N., Rafajac, B. (2012). *Održivi razvoj – izazov za sveučilište*. Rijeka: Filozofski fakultet, Sveučilište u Rijeci.
 - Stoltenberg, U. (2002). *Nachhaltigkeit lernen mit Kindern. Wahrnehmung, Wissen und Erfahrungen von Grundschulkindern unter der Perspektive einer nachhaltigen Entwicklung*. Bad Heilbrunn: VS Verlag.
-