English Summaries

Kasvatus 2017 Vol. 48 No 5
The Finnish Journal of Education

Saari, Antti – Värri, Veli-Matti. 2017. Strange strangers: The time of hyperobjects as a challenge to environmental education. The Finnish Journal of Education 48 (5), 403–414.

Many topical environmental concerns, such as climate change and nuclear waste, are hyperobjects, immense amalgams of culture, technology and nature, the spatial and temporal contours of which are impossible to trace explicitly. The article discusses, through Timothy Morton's philosophy, the temporal issues of hyperobjects and the challenges these pose to environmental education. We argue that the concept of hyperobjects can help shift attention to the hitherto less explored temporal dimensions of environmental problems and to the profound strangeness of these dimensions. We also draw on Maurice Merleau-Ponty's philosophy so as to describe prerequisites for recognising these by bodily experience in environmental education practices.

Descriptors: environmental education, phenomenology, philosophy of education, hyperobject

Willamo, Risto – Helenius, Leena – Holmström, Charlotta – Haapanen, Liisa – Huotari, Essi – Sandström, Vilma. 2017. How to understand complex phenomena? Generalism, holism and holarchism in comprehensive sustainability education. The Finnish Journal of Education 48 (5), 415–428.

Problems concerning sustainability issues are often complex, so-called wicked problems. Tools that embrace and help understand the complex nature of sustainability problems should therefore be highlighted and utilised in sustainability education. Analytical approaches, dividing entities into smaller parts and concentrating on one part at a time, have been dominant in our culture for a long time. In order to balance this domination of "dissective approaches", a stronger emphasis on comprehensive thinking is needed to understand the whole entities and the relationships between wholes and their parts, and to maintain the complex nature of the issues in question. Thus, there is a need for research that focuses on a comprehensive approach and finding tools and methods to teach and learn it. In this article we present a conceptual framework for a comprehensive approach. It is based on three main elements: *generalism*, understanding various parts and viewpoints of a broad entity; *holism*, emphasising the entity and the interactions between its parts; and *holarchism*, looking at the world as a hierarchically multilevel system. By combining these elements, we form a theoretical tool called *GHH-framework*, that benefits those learners who are interested in increasing their understanding of wicked sustainability problems and finding solutions to them.

Descriptors: complexity, sustainability science, sustainability education, wicked problems, comprehensive approach, holism, generalism, holarchism

Henriksson, Heidi. 2017. NGOs and epistemic governance in the process of mainstreaming global education. The Finnish Journal of Education 48 (5), 429–440.

In this article, NGOs are studied as an epistemic community in the process of mainstreaming global education. NGOs are regarded both as a part of the epistemic governance of global education and as influenced by this governance themselves. The study analyses how NGOs experience their role in promoting global education in relation to other societal actors. The main empirical data consists of interviews and observations, which encompass 21 NGOs working in Finland. I analyse the NGOs' views on the relation between global education and 1) the national core curriculum from 2014 and 2) the UN Agenda 2030. The central finding concerning the core curriculum is its importance as a source of epistemic capital combined with a strong feeling of involvement in developing the curriculum. The UN Agenda 2030 is also used as epistemic capital but viewpoints vary on how the agenda should be implemented in education.

Descriptors: global education, NGOs, curriculum, UN, Agenda 2030, epistemic governance, epistemic capital, mainstreaming

Laine, Marja. 2017. Educational and developmental needs of culturally sustainable education. The Finnish Journal of Education 48 (5), 441–455.

This article explores the educational and developmental needs of culturally sustainable education as emerging in the data collected through expert queries and focus group engagement. The needs are evaluated in the light of the theory of just sustainabilities. In the first phase, data were collected from experts, and in the second phase from day-care workers. Among the experts the comprehensiveness of sustainability, cross-disciplinarity and the need for co-operation, communication and teacher education were considered the most pivotal educational and developmental needs. For the day-care workers, the highlighted needs were related to problems in work organisation, work environment and attitudes, along with educational needs concerning heritage and traditions, intergenerational relationships, and multiculturalism. The findings were compared to Agyeman´s theory of just sustainabilities. The theory broadens and deepens the views on educational and developmental needs by paying attention to concepts such as human potential, recognition and cultural inclusion.

Descriptors: sustainability education, cultural sustainability, culturally sustainable education, just sustainabilities

Tolppanen, Sakari – Aarnio-Linnanvuori, Essi – Cantell, Hannele – Lehtonen, Anna. 2017. Facing a wicked problem – A holistic model for climate education. The Finnish Journal of Education 48 (5), 456–468.

This study presents a holistic climate education model, which acknowledges the multidisciplinary nature and the challenges of climate education. The bicycle model is based on the theory of transformative learning and comprises eight aspects crucial to holistic climate education. In this model holistic climate education consists of: (i) increasing and organising knowledge, (ii) developing higher-order thinking skills, (iii) acknowledging identity, values and worldview, (iv) increasing motivation and participation, (v) encouragement for action, (vi) directing towards the future, (vii) becoming aware of barriers for action, and (viii) awakening hope and other emotions. The article also discusses how these can be achieved in school practice.

Descriptors: climate education, climate change education, bicycle model, transformative learning, multidisciplinary, sustainability education, environmental education