

Review Article

Environmental Justice in Education for Sustainable Development

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Abstract

The Brundtland Report addresses the ethical principles of environmental justice in relation to intragenerational and intergenerational equity as fundamental to sustainable development. This equity is often defined in economic terms, and the working of neoliberal market economy. Simultaneously, democratic or plural space is created in which neoliberal ideas are perpetuated and students are perceived as rational agents. There remains an ethical question as to whether the benefits of sustainable development are meant for humans only, and whether concern for environmental sustainability is limited to environment's ability to provide natural resources that accommodate social and economic equity. It will be argued here that the assumed pluralism that currently dominates education for sustainable development (ESD) is often entangled with notions of economic development prioritizing social justice over interests of non-humans. This article will argue for a bolder move in the direction of eco-representation and reinstatement of education for nature.

Keywords: Eco-Representation; Education for Sustainable Development (ESD); Neoliberalism; Pluralism

Introduction

Since sustainable development as a concept first emerged in the Brundtland Report [1] ethical principles of intergenerational equity (spatial equity within a generation) and intergenerational equity (temporal equity between generations) have been articulated as central principles of sustainable development. This equity is often defined in economic terms, largely based on the working of neoliberal market economy targeted at the fair distribution of natural resources. Simultaneously, democratic and plural perspectives are encouraged in order to engage broader participation [2]. Pluralism, in a

sense of intellectual and ethical position that ideally allows democratic exchange of ideas, is associated with the notion of active citizenship and participation necessary for sustainable development. It is assumed that sustainability can be achieved by public reason (While it is assumed that citizens have different and conflicting viewpoints on political, moral and religious matters, it is also assumed that in essence these citizens are rational and essentially ethical decision-makers. This rationality is often counted on since there is a need to find a common political conception; one that is justifiable to citizens regardless of their different viewpoints. In various neoliberal contexts, the assumption of individuals' rationality is a pivotal facet of

citizenship, and hence education. Individual rationality and morality are often counted on as a pre-condition to engage in public reasoning) and that we can rely on democratic processes to advance environmental agendas [3].

Concern for democracy and participation is quite crucial to the current practice of environmental education (EE) and education for sustainable development (ESD). Recent publications in EE and ESD journals emphasize the need to reflect on implicit normativity of education, reject the anthropocentrism vs. ecocentrism dichotomy in favor of more plural ethics approaches [4] and caution educators not to preach pre-determined values [5] (One of the prominent dilemmas discussed in journals specialized in EE (e.g. Environmental Education Research, The Journal of Environmental Education and Canadian Journal of Environmental Education) and ESD (e.g. International Journal of Sustainability in Higher Education and Journal of Education for Sustainable Development) is that between open, plural or democratic education on the one hand and goal-oriented, instrumental, education for sustainability on the other hand [6-13].

While it is argued that pluralism is in line with participatory approaches to environmental and sustainability issues and the democratic mission of an education that involves diverse interest groups, some education scholars have doubted whether support for free opinion-making will enhance students' competences to act on behalf of the environment. The idea of rationality is criticized [14] and a number of questions in relation to pluralism and education arise.

In this article, we shall address the following questions: Should we uphold democratic practices in education, allowing for a plurality of opinions on the problems and causes of unsustainability? Should we teach for sustainability, and what type of sustainability should we choose – social, economic, ecological, or all of them at the same time? Should EE/ESD courses reflect on these social and/or environmental concerns, should they actually teach – and even advocate – one course of action over the other? Are students 'rational, self-managing, self-promoting' agents able to 'make informed choices and manifest endless possibilities', and are they 'equally positioned to recognize, mobilize and consolidate productive or successful choices'? [15] Regardless of whether one is examining a particular dimension of sustainability or sustainability as a whole, these 'successful choices' become crucial in issues ranging from climate change to biodiversity loss.

Discussing two issues: climate change and extinctions

Kronlid and Öhman [4] reflect that due to climate change it is estimated that 150–200 million people will be displaced and 30% of all species run the risk of being extinct by 2050,

concluding that students and educators will inevitably face a vast number of complex moral dilemmas. In the case of climate change, aside from the fact that fossil fuels are likely to be depleted within the space of a few decades, fossil fuel extraction, refining, and use significantly disrupts social and environmental systems. Yet, few people advocate the immediate and complete cessation of fossil fuel use for a host of reasons. Dramatically and suddenly cutting fossil fuel use would disrupt modern life in the developed world given the dependency of our current transportation, computing, and heating and cooling infrastructure on fossil fuels and our use of plastics, cleaners, oils, fertilizers and other products derived from fossil fuels [16].

However, the issue is not just one of lifestyle choice but also of ethics [16]. Considering that large parts of the world are already fully dependent on fossil fuels and in fact link their wealth and economic development to its use, would it be morally fair to discourage developing countries from increasing their greenhouse gas emissions? [17]. Considering that fossil fuel use has devastating effects on the environment, not the least because of the green-house effect causing climate change, and concomitant destruction of previously wild habitats, would it not be morally fair to prohibit its use anyway? Should educators contribute to student learning about climate change and biodiversity loss, or present different views about these issues? Should democratic, citizenship or pluralist learning rather than instrumental learning be encouraged?

Kronlid and Öhman [4] reflect that a 'climate change ethic' does not only concern care for nature, but involves both anthropocentric and ecocentric concerns, as climate change threatens to affect biodiversity as well as human welfare. Kronlid and Öhman [4] admit that intergenerational anthropocentrism (concern about the state of the planet for the sake of future generations) is presently a common ethical position in e.g. the climate change discourse and energy policy discussions. They note that the issue is highly situated and contextual, raising ethical questions that impose new demands on the functionality of an environmental ethical framework for education. They conclude that when environmental ethics is used in EE research, the 'cross-disciplinary work should take the complexity and pluralism of environmental ethical issues and the variety of sub-positions produced above into consideration' (p. 34). Thus, rather than dwelling on anthropocentrism-ecocentrism dichotomy, they suggest that educators should embrace pluralistic perspectives and focus on the complexity of perspectives.

Let us take another example, that of mass extinctions currently effecting the earth's flora and fauna. Should we teach the students scientific facts about the rate and specific types of extinctions? Should we also teach them the factors that cause these extinctions, such as expansion of human population and

consumption? If so, should we also explore uncomfortable ethical conjunctions between the noble task of promoting human health and distribution of economic benefits to less fortunate population groups, and the consequence of this redistribution, the increase in global resource depletion? Or should we concentrate on how complex present-day democratic societies and educational practices are? Should we be worried about how democratic practices should be upheld in and through education, and forget about things like addressing mass extinctions as a subject and aim of educational practice?

Pluralism and education

The question of ethics also extends to the area of tension between democratic and plural education and education targeted to serve particular sustainability goals within EE and ESD. In regard to democratic vs. goal-oriented education we can distinguish between two generalized schools of thinkers. Pluralism is often associated with environmental pragmatism which encourages active participation and open views rather than teaching consensus [18].

This pragmatist school of thinkers has argued that support of the intrinsic value of nature has little practical value thus arguing that moral anthropocentrism is unavoidable as most people will care for the environment because of self-interest, and also because we cannot perceive the environment other than through our human perception [19-21]. Eric Katz [22] has pointed out that anthropocentrism can make a positive contribution to environment, especially in situations including situations where both humans and non-humans are negatively affected, as in the case of air pollution. This is why the notion of environmental justice has often been used to indicate social justice in relation to the environment, referring to distribution of environmental risks (such as climate change) and benefits (proceeds from ecotourism) between human groups, in present and future. This 'convergence theory' [23] tends to dominate sustainable development rhetoric, which assumes that social objectives and justice are 'served' by environmental sustainability. A sustainable society which is unjust, it is also argued, is not worth sustaining [3]. Scholars supporting pluralism are concerned that EE/ESD which is oriented towards solving environmental problems will 'use' education to promote behavioral change [24].

Another group of critics is equally critical of neoliberalism without abandoning all instrumentalism in education. This school of thinkers sees environmentalism as antithetic to indoctrinating tendencies of neoliberalism and pluralism that makes resistance to neoliberalism futile [25]. They argue that pluralism undercuts our ability to justify our moral and political views in regard to nature, leading to 'anything goes' relativism. In the words of MacIntyre [14]. How ought we to decide among the claims of rival and incompatible accounts of justice

competing for our moral, social, and political allegiance?' In the case of sustainability and ecological justice between species, a group of scholars have doubted whether such pluralism can offer any hope – and indeed protection – to those who are not included in the key objectives of sustainable development – non-humans. In critiquing neoliberalism – but not environmentalism - this school places environmental degradation as the root cause of unsustainability [12]. This calls for the more ecocentric engagement and the need for environmental advocacy in order to counter the injustices inflicted upon the natural world [26 -28]. More generally, this group of thinkers attributes anthropocentric bias to much of academic discourse [29]. Arguing that protection of nature which is limited to human welfare only is insufficient for protecting non-human species.

In the case of climate change and species extinctions, for example, while they do have some negative effects on humanity (e.g. climate change can endanger economic development as it is likely to influence agricultural crops because of draughts and other extreme weather conditions; and the loss of biodiversity can have a negative effect on the food chains or pharmaceutical industry as it derives some of its profits from rare species' properties) they have an existential influence upon non-humans. Katz [22] has argued that moral ecocentrism is possible and in fact necessary if the interests of non-humans are to be seriously taken into consideration. Ecological justice is rarely served through 'convergence theory' as intragenerational and intergenerational justice usually involve equitable distribution of natural resources, and not the intrinsic values or the rights of species or habitats that constitute these 'resources'. In education, this calls for the need to 're-politicise' EE and ESD [30] as well as engage more goal-oriented advocacy positions [25].

Advocacy, pluralism and education

To its critics, any advocacy in education can be problematic in two main ways. The first problem of any advocacy is that it can be seen as being at odds with what is assumed to be true pluralism and democracy. Saward [31] has remarked that green imperatives, with their intrinsic value, can be seen as a "strait-jacket" on democracy. Advocacy is feared to undermine student's possibilities to actively participate and take responsibility as democratic citizens [30] Wals and Jickling [24] that instrumental views of "education for sustainability" can be equated with "eco-totalitarianism".

When talking about "the pluralistic perspective" we primarily speak of it in the specific context of dominant approaches. This opens up an understanding of pluralism that does not represent variations on only one dominant (neoliberal, anthropocentric) approach - but still enables the critique of the positions that the dominant discourse espouses. Pluralism has deep roots in the enlightenment and has been defended from

many different ideological standpoints including liberalism, communitarianism, pragmatism, and deliberative democracy. Pluralism makes it difficult to defend a commitment to any particular moral or political position as there has been widespread acknowledgment that there are no uncontested universal standards by which we may evaluate competing moral views [32]. In a surprisingly self-reflective article reviewing the work of the Nobel Prize winning economist Daniel McFadden, *The Economist* [33] reported that the 'economists tend to think that more choice is good. Yet people with many options sometimes fail to make any choice at all'. This, in a nutshell, is one of the issues with neoliberal pluralism. Another issue is that the choices can only be made within the moral and ideological space allowed, but not beyond it. Significantly, while this pluralism allows for competing forms of practical rationality and their attendant ideas of justice they are in turn the result of "socially embodied traditions and dominant ideologies [6]. In practice dominant form of pluralism is often reflective of the internalized neoliberal model in which individual choices are often intertwined with free market thinking, prioritizing economic growth at the expense of ecological concerns [34].

It is the particular kind of pluralism embracing market economy, rather than pluralism as an educational approach to democratic communication in schools. Yet, it also seems to be the dominant kind of pluralism. The hegemonic ideologies of neoliberal capitalism seemed to have succeeded in propagating the illusion that humans are superior to other species, creating a one-species 'pluralism' in which, raising an issue of extinction of entire species or animal subordination in the industrial food production system seems to be a marginal position [6,35,36]. Removing the politically uncomfortable questions about expansion of human population and consumption and focusing on intergenerational justice in distribution of resources makes the whole quest for sustainability in education seem futile. In this dominant paradigm, environmental advocacy and deep ecology perspective tend to be viewed as at best either one of many pluralistic perspectives, or as a threat to the mainstream neoliberal education.

This type of 'brainwashed' pluralism stands in sharp contrast to education for sustainability [25,28,37]. Questioning anthropocentric pluralism is far more than an academic exercise of debating the dominant cultural motif of placing humans at the center of material and ethical concerns. It is a fertile way of shifting the focus of attention away from the problem-symptoms of our time (such as far-reaching as rapid climate change) to the investigation of root causes. And certainly the dominant beliefs, values, and attitudes guiding human action constitute a significant driver of the pressing problems of our day [35].

While neoliberal education prioritizes economic interests, keeping environment 'in orbit' of economic development [28]. simultaneously it seeks to create a kind of 'democratic' space

that encourages broad participation and support of neoliberalism. In this way, pluralistic approaches can be seen as being tainted by all-permeating ideology of market choices, rather than wider awareness of choices for alternative, non-neoliberal ideologies. This form of superficial pluralism leads educators to think that they give students choices, while the choices are between established models of industrialism, consumerism, and different shades of anthropocentrism instead of real alternatives. In true pluralism, human eco-advocates who 'speak for nature' [38] will represent the voices of billions of Earth's citizens who are absent from the one-species-only pluralism. Nikolopoulou et al. [37] reflect that global capitalism under the guise of distribution (in which mass consumption is encouraged) creates an ostensibly democratic space that diffuses any resistance to it. Since the neoliberal politics of globalization has identified the field of education as an important site for its contestation, it has appropriated education by luring the state into its economic vortex. This leaves environmental advocacy, as a vocal adversary of market-skeptic perspective and its unique focus on environmental integrity as a prerequisite of human development, an outsider at best. Marginalization of environmental advocacy has implications for how environmental education is being conducted. Pluralistic education approaches has at its core the conviction that it is wrong to persuade people to adopt pre- and expert-determined ways of thinking and acting, including in the case of environmental destruction [5]. This is problematic since it prevents criticism of opinions that support anthropocentrism renders deep ecology perspective [26] as – at best – one of many perspectives. In the section below, we shall discuss one specific article by Bob [39] in which the questions of environmental advocacy and education are raised.

The case of Wolves

In explicating his personal experience with teaching at the time of the ongoing debate about the shooting or preserving the wolves in the Yukon area, [39] inquires: 'How does a person work on behalf of what he or she cares about – but in an educational way? Can you? If you remove care from the equation can you really have an educational experience? Or, if you want people to care – about each other, the environment, ideas, and noble action – can education play a legitimate role?'

In reflecting upon the wolf debate, and his involvement as a schoolteacher in a local community, Jickling [39] felt that advocating the pro-wolf position would be 'neither practically viable nor educationally justifiable'. Jickling justifies this position by a number of arguments, including the fact that some of the parents of the school children he taught were themselves advocating wolf killing, but also – highlighted as the most important argument – by the need to stay neutral in order to teach students democratic and open values.

Jickling adds that despite the need for balance, taking an ethical stance is important in as far as it teaches students democratic values and skills necessary for active citizenship. Jickling reflects that the advocacy position of those who spoke on behalf of wolves has had its educational benefits. Since the aim of education, Jickling reasons, is to enable social critique and even in some cases to disrupt the status quo, than citizens who spoke on behalf of wolves have taught the students how to engage in a vigorous public debate. Thus, environmental advocacy has had its 'educational merit' [39]. But is that all that the advocacy does, we may ask, serve as an educational example in polemics of argument? What about the wolves? Is there something to be said about their position as 'the silent ones' (for they can never engage in pluralistic discussions)? What about the unique role of human advocates who could save their lives by speaking for them? To reflect Jickling's own words, what if you want people to care – about each other, the environment, ideas, and noble action – is it justifiable to use advocacy as a pedagogical or rhetoric example only, with wolves as props?

The silent ones

If we assume there is nothing about democracy in general that guarantees decisions favoring sustainability [9] this brings into question what type of 'good' does democratic or citizenship education promote? If one-species-only democracy does not guarantee environmentally benign outcomes, where does it leave education for sustainability? It might be argued that 'education for sustainability' is as biased as 'education for democracy' [13]. Pluralism seems to be intended for human voices only, or to revisit George Orwell, some animals are obviously more equal than others. Concern for environmental sustainability is limited to environment's ability to provide natural resources that accommodate intragenerational and intergenerational equity, and despite the proclaimed range of pluralist perspectives, perpetuates anthropocentric, instrumental attitude toward environment, that manifests itself as a generally shared consensus in sustainable development discourse and ESD. While it is assumed that certain central 'targets' of sustainable development are universally good (e.g. intragenerational and intergenerational equity, non-discrimination, etc.), other features, such as concern for non-humans that are negatively affected by climate change and habitat destruction, or extremely poorly treated in the industrial meat production system, seem to be forgotten. And yet, when the calls for including consideration of environment and non-humans, independent of human interests, in sustainable development concerns are heard, they are branded eco-totalitarianism [24].

This testifies to a clear case of double standards. Education often engages in social advocacy for racial, gender, and economic equality. Of course, speaking up for the slaves at the time when slavery was morally acceptable would entail not just the threat to be fired from a teaching position, but a possibility of being

torn apart by the angry mob who saw established order as the most normative and morally indisputable reality. Times do change. Fast forwarding to here and now, we cannot imagine how an educator can propose a different perspective – namely, the one in support of slavery, without being fired (or declared insane). We may wonder how educational practitioners will react to the proposition that members of some ethnic minorities or women are less deserving of ethical consideration than members of dominant ethnic groups or men? It is not hard to imagine that doubting established canons of equality would be considered to be politically incorrect at best.

Racism, sexism fascism, pro-slavery, eugenics and other positions challenging conventional morality are simply unacceptable and unimaginable in supposedly 'open-minded' 'pluralistic' academic society. Those educators who have spoken against slavery at the time would be probably seen as heroes. Slavery is a terrible thing and without courage of – among others –educators – it might still be around today. The same is true for wolves and for those species whose habitats are being destroyed while we, as educators, are busy typing these articles.

The hidden assumptions and explicit alternatives

Focusing on justice as a means of ensuring equity takes us straight into issues of power and agency. While from the plural perspective we can arrive at relativistic assumption that there is no universal justice or rationality (this point is poignantly argued in MacIntyre's *Whose Justice? Which Rationality?* 1988) [13]. As it realistically stands, however, social and economic justice, at least in a way it is presented through sustainable development discourse [1,2] by far overrides concerns with ecological justice. Simultaneously, environmental justice is entangled with notions of economic development and achieving more equitable access to resources. As Veronica Strang [40] has reflected in her plea for an inclusive environmental justice, in a world where the most powerful groups live in wholly unsustainable affluence, it is very difficult to suggest that anyone should be prevented from enjoying the immediate material benefits that these practices allow. However, there remains a thorny question as to whether anyone, advantaged or disadvantaged, has the right to priorities their own interests to the extent that those of the non-human are deemed expendable.

While pluralism does not equal relativism and indifference [24] without distinguishing rights from wrongs pluralism might be too weak to overcome the domination of neoliberal industrialist ideology. While pluralism can be essential in the development of critical thinking and educating students to be pro-active citizens, without critical reflection on the anthropocentric bias in pluralism, significance of animal rights and deep ecology in education is easily subverted. This anthropocentric pluralism leaves the economically-centered hegemony intact, preventing lecturers from distinguishing between more

or less viable, realistic and effective sustainability knowledge and skills.

Yet, pluralism in its ideal form can indeed literally allow all flowers to bloom. Such pluralism representing 'earth democracy' has the potential to place the extinction of the species and destruction of habitats on the par with objectives of achieving social equality at the forefront of ESD. Examples of educational practice that have attempted to integrate inclusive pluralism in which non-human agents are recognized as potential contributors to diversity perspectives include conservation education, education for deep ecology and post-humanist education [41]. Yet another hopeful direction is provided by critical pedagogy. Kahn [25] explores the idea of confrontation with radical ideas of environmental groups such as the Earth Liberation Front as one of the means to move education toward a more passionate – and compassionate – involvement with planetary ecological crises. In the face of expanding zoöcide, Kahn reflects, that to think that incorporation of non-human interests in educational practice or into wider democratic systems could occur without widespread rebellion and, ultimately, revolution, seems naïve [25].

Moving on: reflection on strategy

Conclusions

In this article it was argued that the assumed pluralism that currently dominates ESD is often entangled with notions of economic development prioritizing social justice over interests of non-humans. This self-contained economic 'rationality' and taken for granted ethical assumption of the primacy of human welfare over ecological concerns undermine the idea that without goal-oriented education for sustainability. In this sense, pluralistic education is not aim-free, as it allows for advocacy of the primacy of social and economic equity. Advocacy for social and economic agendas finds its way into teaching, either explicitly or implicitly, while simultaneously rejecting environmental advocacy as a form of indoctrination. It was argued that if environmental advocacy is seen as a threat to the taken for granted moral and rational assumptions, perhaps these assumptions should be critically examined in the first place.

Returning to the questions posed in the Introduction, we suggest here that we should continue to uphold democratic practices in education, allowing for a plurality of opinions on unsustainability, but we should also continue to our best ability to instruct students how to care about and repair environmental damage. We should teach for sustainability, choosing for a true integration of economic and ecological interests, without subordinating the latter to the former. EE/ESD courses should reflect on social and/or environmental concerns, and teach – and even advocate – ecological justice for all species. The call

for non-human representation and inclusive pluralism reflects on the sense of despair in thinking about predicament of environment, both at present, and for the future. Yet, educators can cope with the pessimism and sense of futility by becoming political, getting activist, and above all, trying to connect to those who are equally engaged. Without claiming an authoritative analysis, I would hypothesize that social movements in support of any discriminated social groups have succeeded because they were successful in recruiting the membership of different and often opposed factions to the cause. Movements to improve the condition of the human species, on indeed of other species, must, almost by definition, be extremely diverse. These transformative social movements must be also powered by passion – and above all – compassion – of those who support the cause that drives change. This includes pluralism – but the most inclusive type of pluralism which goes beyond of what educational scholars currently argue for.

If the goal of a pluralistic education is to develop students' ability to become actively involved in the decision-making processes ultimately capable of better responding to emerging environmental issues [24] is certainly a worthy aim. If this pluralistic education can also involve inclusive democracy and represent – at least through human eco-representatives – the 'voice' of the oppressed non-humans [38] pluralism in education can be truly celebrated. Yet, pluralism for the sake of pluralism, and pluralism that is 'brainwashed' in neoliberal ideology or the dominant rhetoric of sustainable development that prioritizes social and economic justice above ecological justice, is likely to condemn all but one species to perpetual global injustice. EE and ESD researchers and practitioners can take a stand in education to counter this global ecological injustice and lead the way to sustainable development for all citizens of this planet.

References

1. WCED. Our Common Future: Report of the World Commission on Environment and Development. 1987.
2. UNESCO. Communication for sustainable development. 2015.
3. Koukouvelis K. Sustainable Development, Liberty, and Global Social Justice. *Public Reason*. 2012, 4 (1-2): 165-181.
4. Kronlid DO and Öhman J. An environmental ethical conceptual framework for research on sustainability and environmental education. *Environmental Education Research*. 2013, 19(1): 21-44.
5. Wals AEJ. Between knowing what is right and knowing that is it wrong to tell others what is right: on relativism, uncertainty and democracy in environmental and sustainability education.

Environmental Education Research. 2010, 16 (1): 143-151.

6. Kopnina H. Schooling the World: Exploring the critical course on sustainable development through an anthropological lens. *International Journal of Educational Research*. 2013a, 62: 220–228.

7. Kopnina H. Forsaking Nature? Contesting ‘biodiversity’ through competing discourses of sustainability. *Journal of Education for Sustainable Development*. 2013b, 7(1): 51-63.

8. Kopnina H. Evaluating Education for Sustainable Development (ESD): Using Ecocentric and Anthropocentric Attitudes toward the Sustainable Development (EAATSD) scale. *Environment, Development and Sustainability*. 2013c, 15(3): 607-623.

9. Kopnina H. ‘Metaphors of Nature and Economic Development: Critical education for sustainable business.’ *Sustainability*. 2014a, 6(11): 7496-7513.

10. Kopnina H. Contesting ‘Environment’ through the lens of sustainability: Examining Implications for Environmental Education (EE) and Education for Sustainable Development (ESD). *Culture Unbound: Journal of Current Cultural Research*. 2014b, 6: 931–947.

11. Kopnina H. Education for Sustainable Development (ESD) as if environment really mattered. *Environmental Development*. 2014c, 12 : 37-46.

12. Kopnina H. Future Scenarios and Environmental Education. *The Journal of Environmental Education*. 2014d , 45(4): 217–231.

13. Kopnina H. and Meijers F. Education for sustainable development (ESD): exploring theoretical and practical challenges. *International Journal of Sustainability in Higher Education*. 2014, 15(2): 188-207.

14. MacIntyre A. *Whose Justice? Which Rationality?* Notre Dame: University of Notre Dame Press. 1988.

15. Bansel P. Subjects of choice and lifelong learning, *International Journal of Qualitative Studies in Education*. 2007, 20(3): 283-300.

16. Fredericks SE. Ethics in sustainability indexes. In Kopnina, H. and Shoreman-Ouimet, E. (eds) *Sustainability: Key issues*. Routledge Earthscan, New York. 2015.

17. Lidskog R and Elander I. Addressing climate change democratically. Multi-level governance, transnational networks and governmental structures. *Sustainable Development*. 2010, 18(1): 32–41.

18. Peters S and Wals AEJ. Learning and knowing in pursuit of sustainability: concepts and tools for trans-disciplinary environmental research. In: Krasny, M. Dillon, J. (Eds.), *Trans-disciplinary Environmental Education Research*. Taylor and Francis, London. 2013.

19. Norton BG. *Why preserve natural variety?* Princeton, NJ: Princeton University Press. 1987.

20. Light A. Compatibilism in political ecology. In *Environmental Pragmatism*, ed. A. Light and E. Katz. 1996, 161–84.

21. Hui K. Moral Anthropocentrism Is Unavoidable. *American Journal of Bioethics*. 2014, 14 (2): 25-25.

22. Katz E A. Pragmatic Reconsideration of Anthropocentrism. *Environmental Ethics*. 1999, 21(4): 377-390.

23. Norton B G. Environmental Ethics and Weak Anthropocentrism, *Environmental Ethics*. 1984, 6(2).

24. Wals AEJ. and Jickling B. “Sustainability” in higher education: From doublethink and newspeak to critical thinking and meaningful learning, *International Journal of Sustainability in Higher Education*. 2002, 3(3): 221 – 232.

25. Kahn R. *Critical Pedagogy, Ecopedagogy and Planetary Crisis: The Ecopedagogy Movement*. New York: Peter Lang. 2010.

26. Naess A. The shallow and the deep: long-range ecology movement. *Inquiry*. 1973, 16(1-4): 95–99.

27. Callicott JB. “Moral Monism in Environmental Ethics Defended,” in *Beyond the Land Ethic: More Essays in Environmental Philosophy*. Albany: State University of New York Press. 1999, 171-83.

28. Rolston H. III. Environmental Ethics for Tomorrow: Sustaining the Biosphere. In Kopnina, H. and Shoreman-Ouimet, E. (eds) *Sustainability: Key issues*. Routledge Earthscan. 2015, New York.

29. Catton W and Dunlap R. Environmental Sociology: A New Paradigm. *The American Sociologist*. 1978, 13: 41-49.

30. Sund L and Öhman J. On the need to repoliticise environmental and sustainability education: rethinking the post-political consensus. *Environmental Education Research*. 2014, 20(5): 639-659.

31. Saward M. Green state/democratic state. *Contemporary Politics*. 1998, 4(4): 345-356.

32. Rawls J. *Political Liberalism*. New York: Columbia University Press. 1993.

ty Press, 2005.

33. The Economist. Free Exchange: The debt to pleasure. 2013.

34. Davies B and Bansel P. Neoliberalism and education, *International Journal of Qualitative Studies in Education*, 2007. 20(3): 247-259.

35. Kopnina H Crist. Education for Sustainable Development (ESD): The turn away from 'environment' in environmental education? *Environmental Education Research*, 18 (5): 699-717.

36. Wyckoff. Linking Sexism and Speciesism. *Hypathia: A Journal of Feminist Philosophy*, 2014.

37. Nikolopoulou A, Abraham T and Mirbagheri F. (eds.) *Education for Sustainable Development: Challenges, Strategies, and Practices in a Globalizing World*. London, Los Angeles: Sage, 2010.

38. O'Neill J. Who Speaks for Nature? In: Haila, Y. & Dyke, C. (eds.) *How nature speaks: the dynamics of the human ecological condition*. Duke University Press Books, 2006.

39. Jickling B. Education and advocacy: A Troubling Relationship. In E. A. Johnson & M. Mappin (Eds.) *Education and advocacy: Changing Perspectives of Ecology and Education*, (pp.91-113). Cambridge, UK: Cambridge University Press, 2005.

40. Strang V. Notes for plenary debate. World Anthropology Congress. ASA-IUAES conference, Manchester, 5-10TH August 2013. Motion: 'Justice for people must come before justice for the environment' 2013.

41. Bonnett M. Retrieving nature: Education for a post-humanist age. *Journal of Philosophy of Education*, 2003, 37 (4): 551-730.