
After last year's impressive *Let Them Eat Data: How Computers Affect Education, Cultural Diversity, and the Prospects of Ecological Sustainability*, this new book of Bowers establishes him in my view firmly as the Noam Chomsky of Environmental Education. Just as the latter has convincingly shown that the entire spectrum of mainstream politics, from conservative to progressive, shares in fact the same basic convictions with regard to Western capitalism and the US's right to govern the world, Bowers has made clear that almost all educational theories that were elaborated in the last half a century, including those intending to be progressive and radical, ignore the cultural roots of the ecological crisis we face. However radical and critical they might be of the capitalist system and its exploitation, they still buy into the modern myths of anthropocentrism, linear progress, development and the autonomous individual as the basic social unit. By doing this and by largely ignoring the environmental degradation, these theories perpetuate the system they claim to criticise.

Against these theories of Dewey, Freire, Peter McLaren, Henry Giroux and others, Bowers sets his eco-justice-based approach. Its most fundamental element is the insight that any educational reform has to be set within the framework of sustainability. Or in Bowers' words: "Reform efforts that contribute to eco-justice must address the right of future generations to inhabit an environment that has not been diminished by the greed and materialism of the current generation." This is the *sine qua non* and whatever we endeavour as teachers has to be judged against this background: "environmental issues must have primacy in thinking about educational reform." Bowers is very clear about the fact that only a society that reduces its dependence on consumerism, technology and experts can repeal the commodification of all aspects of life and thereby stands a chance of survival.

This is a tall order, not only because we are up against the public and leaders of the developed world who practice a "culture of denial" (to quote another title of one of Bowers numerous books), but essentially because educational reformers believe in a whole range of "deep cultural schemata" which hinder the necessary transition. Even though there are a few minor things which can be criticised about Bowers approach (to which I will come back later), we really ought to be grateful to him for pointing out with such clarity some crucial areas where educational reformers seem to suffer from ideological blindness. Some of the core beliefs they share with the elites they criticise and which are incompatible with a sustainable society are:

1. **Freeing individuals from the influence of tradition is always a good thing:** This idea has sunk in so deeply that we completely lost our ability to differentiate between traditions conducive to sustainability and those which globalise an individual- and consumer-centred culture, or in Bowers' words, "between destructive traditions and those that are beneficial". We are so obsessed with the seemingly oppressive nature of any tradition that we overlook the fact that we need to re-nurture old, almost forgotten traditions of interdependence, of reverence for elder knowledge, of self-sufficiency and mutual support, if we are to survive as humankind within the limits of our life-support system earth. But Bowers also makes a second pertinent point: this modern aversion against tradition has, of course, by now become a tradition itself, the "antitradition tradition". What is important about this denial is not so much that we don't recognise it as a tradition, but the deeper insight that we would not be able to survive a normal day without traditions.
2. *Change is always a good thing*: Bowers observes that the modern obsession with change is the driving force behind the ever-accelerating consumer society, yet this call for continual change is strangely at odds with what is needed to sustain life in nature and societies. We need to find back to what Bowers calls "cultural/bio conservatism" by which he means adapted "technologies and communal patterns to live in ways that do not degrade the self-renewing capacities of the environment".

3. *The individual is the centre of the educational process*: The idea that the only focus for education should be the "emancipation of the individual" and the nurturing of individual talents is closely coupled with the antitradition tradition. The assumption is that every new generation of students can, somehow magically out of their own inner selves, understand the world and make competent subjective judgements about anything and everything. This stems from the modern infatuation with the new and change, which privileges the young over the old, the future over the past. It assumes that every new generation can survive *ignoring* the accumulated wisdom and knowledge of the generations before them. Since that is plainly absurd, education should enable the growth of individuals, but also nurture the capacity to listen to elder knowledge and crucial traditions within the context of their communities. Says Bowers: "Mentoring is an expression of mutual aid. So is the sharing of elder knowledge that helps avoid mistakes that come from a lack of experience and short-range perspective."

4. *Universal recipes for education are liberating for everybody*: Bowers is highly critical of the idea that a universal humanist approach to education is beneficial. He states: "Literature written from an indigenous perspective puts into focus the destructive consequences that often arise from imposing universal prescriptions on other cultures such as the need for a global economy, universal human rights, individual freedom, the Information Age, and a Western form of higher education." Just as elaborated with regard to traditions specific cultural practices need to be assessed whether they "lead to living within the sustaining capacity of local ecosystems or result in degrading the local environment as well as that of other cultural groups". And that, of course, is true for educational practices as well. As far as Bowers is concerned, only a local approach to learning and teaching will produce sensible local solutions.

5. *Print-based (computer) forms of abstract knowledge are the only valid ones*: Western educational practice with its emphasis on high-status knowledge which is certified with diplomas and degrees is privileging abstract, supposedly objective knowledge which is devoid of any context, tradition, history or ethics. This means at the same time that face-to-face communication and orally transmitted knowledge is devalued. Therefore skills and knowledge, which are often highly sustainable, but locally focused, are destroyed and displaced by high-status knowledge, even though it should by now be public knowledge that there is a direct correlation between higher education and higher destructive impact on earth.

Bowers elaborates these crucial elements of non-sustainable approaches to education in the five chapters of the book. The first three are devoted to discussing problematic tendencies in current educational theory, including the 'emancipatory' theories of Dewey et al., the abuse of brain research to legitimise divisive educational practices and the fundamentally flawed attempt to use computers to improve education. All of these criticised approaches to education share the problem that they are based on and reinforce cultural patterns that led to the ecological crisis in the first place. The last
two chapters then elaborate in more detail the concept of an eco-justice pedagogy, including a discussion of the classroom ecology conducive to such an approach.

As I have indicated there are a few minor areas where I would want to take issue with Bowers’ argument. Even though he explicitly warns against idealising tradition, the text often implicitly assumes that tradition is to be preferred over change. This, of course, is often justified because traditions of conservation and self-sufficiency are in urgent need of being privileged. Yet in the Western world, the dominant traditions of continual change, of consumerism, of individual-centeredness, where the majority of people have lost all access to more sustainable traditions, need to be overcome towards more sustainable, equitable ways of living. Equally, Bowers is highly critical of the modernist notions of democracy, critical inquiry and empowerment. I certainly can see the absolutist, liberal abuses of these terms, yet it is clear that Bowers himself can only write his brilliant analysis of the current state of educational theory because he is capable of applying the highest degree of critical inquiry to today's dominant traditions. Also, he uses at various points in the text the words “democratise” and “empowering” in an affirmative way. Further, there is a tendency, as with most educational theorists, to overestimate the importance of teaching for the socialisation of the young. Today, the primary socialising forces tend not to be the teachers, but the media, advertising, the shadow curriculum of the industrial infrastructure, computer games and peers. And finally, I would have wished at times that the text would incorporate concrete, positive examples of what is meant by "non-commodified relationships, face-to-face intergenerational communication, and patterns of mutual support and solidarity".

Yet, all this aside, I believe that Bowers is a unique voice in the discourse of environmental education/education for sustainability. This is due to two aspects of his work: firstly, he has the courage to question deeply held believes and fundamental convictions which others either dare not touch or are unaware of. Secondly, he has recognised that educational practice cannot continue to be a specialist discipline ignorant of the wider world around it. Only if education, just like any other (professional) activity, is framed by the limited carrying capacity of our planet, will there be any chance of it fulfilling its potential.

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