
Book Review: Social learning towards a sustainable world: Principles, perspectives, and praxis by Arjen E.J. Wals

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Biographical notes: Dr. Justin Dillon is Senior Lecturer in Science and Environmental Education and Head of the Science and Technology Education Group. He studied Chemistry at Birmingham University before qualifying as a science teacher at Chelsea College, University of London. He taught in London for ten years, during which time he completed an MA in Science Education at King's, before joining the College in 1989. He is Chair of the London Environmental Education Forum and an editor of the *International Journal of Science Education*. He is President of the European Science Education Research Association and Chair of the London Wildlife Trust.

I should start by pointing out that Arjen Wals and I have known each other for some years and that during that time he has stayed in my house, borrowed my flat and co-authored papers with me. We have delivered a plenary talk to the North American Association for Environmental Education in tandem and have spent countless hours in bars, restaurants and conference rooms discussing, debating and deliberating. Reviewing friends' and colleagues' work can be difficult – there is a danger of either being over-generous or over-critical – and while I will endeavour to do this edited work justice, you need to be aware of this review's potential limitations.

Wals knows his limitations, and putting together this collection of 27 chapters authored by 53 people from six continents must have been a major task and distracted him from his own research. However, the invitation from the Dutch Interdepartmental Programme on Learning for Sustainable Development to edit a volume on social learning in the context of sustainability proved too compelling to resist.

The book is organised into three sections suggested by the book's subtitle: *Principles, Perspectives and Praxis*. Wals has pulled off a coup by successfully inviting Fritjof Capra and Michael Apple to write the foreword and the afterword, respectively. Capra sets the scene by asking the key questions driving the book's genesis: "What is the place of learning in sustainable communities?" "How can such learning be organised and facilitated?" and "What are some underlying principles?" The variety of ways in which those questions can be answered justifies the scale of the book and the diversity of its contributors. Capra points out that the writers "do not all agree on the meaning of social learning or on the specific actions by which to create a more sustainable world" and concludes that the book is "designed to expand the network of conversations" in order to "apply learning to a variety of emotional and social contexts".

In opening the section on *Principles*, Harold Glaser examines the role of social learning in aligning our desires for a more sustainable world to our everyday actions and policies. Glaser expounds on his ideas of "ecocultural sustainability" and the "greening of progress" in an erudite and wide-ranging examination of the relationship between the individual and society, which is key to understanding the gap between what we say we want and what we actually do to achieve it. The chapter is one that many of the other authors might have benefited from reading before putting flesh to plastic. Glaser finishes by positing a research agenda addressed at the social learning for sustainability research community, which begins with developing a consistent and coherent working definition of 'social learning' and concludes with applying social learning to model ecoculturally sustainable behaviours and evaluating their efficacy. I am not sure which of those two is more likely to actually occur but I cannot imagine either happening and whereas the latter is probably desirable, the former may well stifle debate as much as it would create common understanding.

In the subsequent chapters, Stephen Sterling argues for a 'seismic shift' towards a "relational, ecological or participative consciousness" in order to make sense of our complex world. Sterling's work on systems thinking in the context of environmental education has matured and cohered and there is a feeling that although he can see a way forward in terms of moving towards sustainability, he is aware that we have an awfully long way to go in a very short time. Anne Loeher, Barbara van Mierlo, John Grin and Cees Leeuwis aim to conceptualise "learning in the pursuit of a sustainable development". This piece, which examines what we know about learning, is somewhat unsatisfactory in that the end of the chapter took me by surprise – I was expecting a deeper level of analysis with richer examples and more conviction. Danny Wildemeersch evaluates the theory of 'social learning' that he and his colleagues developed ten years ago. Using examples drawn from Flanders and Vietnam, the author finds that although his conceptualisation of social learning can help to make sense of social transformations, it is unclear that it will help improve those processes directly. Wildemeersch concludes by analysing similarities and differences between social learning in the North and the South. Daniella Tilbury's chapter, on "Learning-based change" is another lightweight contribution when compared with some of its predecessors. Tilbury discusses participation, change, systemic thinking and sustainability in simplistic and uncritical terms and if I were the editor I would not be very impressed with the chapter. In contrast, Richard Bawden, Irene Guijt and Jim Woodhill do take a critical approach in their chapter on the "role of civil society in fostering societal learning for a sustainable world". Drawing on Guijt's study of civil society participation, the authors link theoretical ideas

of the learning society, including those of Beck and Giddens, to practical strategies that civil society organisations can use.

Keith Tidball and Marianne Krasny write perceptively about the value of urban community greening and its potential for building diverse, adaptable and resilient groups. The authors report on work carried out in diverse parts of the world and their message is one based on experience and reflection. David Selby, like Stephen Sterling in his chapter, refers to the work of the late David Bohm, a quantum physicist who was a skilful critic of the all-too-common mechanistic view of the world. Selby argues for “quantum learning for sustainability”. It is impossible to capture the complexity of the author’s argument, but he makes a convincing case for a re-examination of what we take to be discussion and dialogue. Finally in this section, Robert Dyball, Valerie Brown and Meg Keen examine five strands of social learning: reflection; system orientation; integration; negotiation and participation. One might have thought by now that there would not be much left to say about some of these concepts and, indeed, there is some overlap with previous chapters that borders on repetition. The challenge for an editor of collected works such as this one is to ask of ones-self “Would it matter if this chapter wasn’t here?” and this chapter serves more as a ‘jobbing’ conclusion to the section rather than a revitalisation and a critical reflection.

Part II Perspectives, opens with John Vandenaabeele and Lieve Goorden’s exploration of the social science contribution to participatory planning in protected areas. Drawing on their work on Directive Nature Plans in Flanders, the authors look at some of the tensions facing policy-makers highlighted in the first part of the book. This chapter marks the first appearance of Bruno Latour’s ideas in the book, which might seem rather late given that the first part of the book is meant to be predominantly theory-driven. Perhaps unsurprisingly, given their backgrounds, the authors argue that natural science cannot be the referee in public debates about biodiversity. Rhiannon Pyburn describes “social learning amongst social and environmental standard-setting organisations” using an analysis of a smallholder certification process, which allowed small farmers to access organic markets in the USA, Europe and Japan. Drawing on her study of the two-year piloting of nine audits in eight countries, the author uses theories of cognition to draw out the complexity of the learning that took place during the project. Pyburn shows how ‘Project learning’ was evident in audit and workshop reports; actions within the organisations involved in the project; bilateral or multi-lateral actions between project partners; and collective action at the level of the whole project partnership. This is a useful way of examining project working and one, which I shall, no doubt, return to in my own work.

Stephan Rist, Freddy Delgado and Urs Wiesmann draw on their work in the Bolivian Andes to examine the “emergence and transformation of an indigenous land use system”. The authors describe four dimensions of an interdisciplinary framework for understanding social learning processes: cognitive competencies; social competences; emotional competencies; and social capital. The chapter shows how empirical research can generate new ideas that inform practices that might lead to a more sustainable future. Zinaida Fadeeva shifts us from empirical research to a policy context and the UN Decade of Education for Sustainable Development first mentioned by Daniella Tilbury earlier in the book. At first, Fadeeva’s chapter appears to suffer from the same lack of criticality as does Tilbury’s. The author sets out the thinking behind United Nations University’s Regional Centres of Expertise (RCE) for ESD and describes how they were set up and where they are located. However, Fadeeva then takes a critical look at the RCEs and at

how they work. Though broadly sympathetic to the RCE cause, the author points out some key issues if the RCEs are going to be seen as successful by all the stakeholders. Jacqueline Cramer and Anne Loeber describe learning about corporate social responsibility (CSR) from a sustainable development perspective. For some, CSR is the tool that will really make an impact on the way that society develops. To others, CSR is a way of companies pretending to care about sustainability issues without changing what they do in any meaningful manner. As with Rhiannon Pyburn's chapter on a smallholder certification process, this chapter looks at different levels of learning exhibited during a five-year project set up by the Dutch National Initiative for Sustainable Development. Again, the chapter shows the value of longitudinal, multi-level studies of real organisations trying to work together to become more sustainable. Sadly, the chapter is too short to do justice to all that the authors learned and it is not clear what new theoretical understandings emerged from the process.

Hilary Bradbury describes the history and philosophy of The Natural Step in Sweden, which was founded in 1988 as a non-profit educational network. Eight years later the network was made up of approximately 10,000 members. The network's methods are based on a set of normative beliefs that include consensus-building and dialogue. Bradbury has studied the network over many years and concludes with a set of "Principles for change in complex human systems". The chapter looks out of place in this section and yet it is clear why it is here. Its conclusion that "social learning for sustainability requires an integration of different ways of knowing [...] that is essentially interdisciplinary and multi-actor" will not come as a surprise to anyone who has read the preceding 14 chapters. It is not clear to me what this chapter offers that is new, though a book on social learning towards sustainability without mentioning The Natural Step would seem perverse. Peter Lund-Thomsen returns us to CSR with a look at the business management literature on the topic. I am not clear why the chapter does not precede Jacqueline Cramer and Anne Loeber's chapter although the focus on the need for a new social dialogue on the advantages and disadvantages of CSR ties in with Bradbury's discussion of the relationship between lifeworld and institutional structures.

Paul Hart's chapter moves us into different areas, that of education for sustainability. Hart's chapter is as rigorous as Harold Glasser's opener, although it is less intellectually flamboyant. Hart questions how educational responses to social and environmental challenges can be conceptualised and implemented and then goes on to examine the utility of action research as a social process facilitating learning. Hart's chapter, while focusing on a reflection on the Environmental and School Initiatives (ENSI) programme is really an opportunity for the reader to learn more about learning theories. One could argue that this should have been Chapter 2, given its coverage and salience to the rest of the book. Appearing where it does, the chapter seems almost peripheral to what has gone before it. This is especially ironic because it focuses on a group of people for whom learning is the core of their daily lives. Continuing the focus on teachers, Marcia McKenzie's contribution, on the relationship between social learning and resistance proposes "several modes of resistance" demonstrated by young people in Canada. Based on an empirical study of three educational contexts, the chapter, which first appeared in the *Canadian Journal of Education* is a curious juxtaposition of everyday speech such as this quote from a 17-year-old boy, "Uh, I'm just going to get a job and then, after I work here for a bit I want to go to the oil rigs", and the author's uncompromising academic discourse, "The 'contingent agency' articulated by students [...] suggests a reflexive response to the interdiscursivity manifest in the shifting between cultural narratives ..."

Readers unfamiliar with this particular discourse might flounder and some editorial guidance might have increased the accessibility of McKenzie's insightful study.

Sue McGregor returns us to the UNESCO Decade of ESD with a study of vicarious learning. Starting with a description of Social Learning Theory (SLT), which in essence says that we can learn vicariously by observing one another as well as by taking part in the action itself (*pace* Chinese proverb writers), the author moves on to reframe consumer education through the interface between SLT and ESD. I found this chapter one of the least convincing of the entire collection. It smacks of the certainty that much writing on ESD exhibits and never takes a critical look at the notion of sustainability or at the tensions inherent in ESD (many of which have been written about by a number of people). Finally in this Part, Kris van Koppen takes a look at social learning "in a consumerist society". The writer examines ESD, public participation, child development and consumer lifestyles and practices from a Dutch perspective. The chapter draws together a range of ideas well and the chapter makes a fitting conclusion to the *Perspectives* part of the book.

Opening Part III, *Praxis*, Yoko Mochizuki, describes partnerships between environmentalists and farmers in Northern Japan. The chapter provides more examples of the overlap between research, indigenous knowledge, environment and society. Given the predominantly European flavour of the majority of Parts I and II, the chapter is both eye-opening and yet familiar. The case study highlights the tensions between farmers trying to make a living and environmentalists trying to protect wild geese. Michael Stone and Zenobia Barlow take us to the west coast of the USA, to California. The Students and Teachers Restoring a Watershed project involves 3000 students working annually on habitat restoration in the San Francisco Bay Area. Written in a very accessible style, this is one of those increasingly common stories of young children making a real contribution to their society through conservation work. There are very few references to the literature (three of the four are to the work of Fritjof Capra) and a whole book of such case studies would become repetitive, but in this context it works perfectly. More water-related work is reported by Janice Higgins, Niels Röling and Erik van Slobbe, drawing on research funded by the European Commission which involved the authors working on 14 case studies in a range of Western European countries. The contrast between this chapter and the preceding one is stark and highlights the gap in discourse between academic and 'practitioners'.

Rob O'Donoghue, Heila Lotz-Sisitka, Robert Asafo-Adjei, Lutho Kota and Nospho Hanisi shift the context to Africa. Drawing on three case studies of school-based interactions focusing on indigenous knowledge, each discussed in terms of "Socio-historical context", "Risk and the moral imperative", "Educative deliberations amongst learners, community and teacher" and "Resulting steering choices and change". This chapter takes previous writings on indigenous knowledge forward in noting the higher than expected correspondence and complementarity between local cultural know-how and scientific propositions. The following chapter, by Paul Kibwika, looks at how small-scale vanilla farmers in Uganda learned how to grow for the export market. Small-scale agriculture employs over 80% of the population in Uganda, which gives some idea of the susceptibility of the country to fluctuations in world markets for produce. The author posits that conflict can produce social learning and cites two examples. The first was the conflict between farmers and brokers: the second was between the farmers and the Ministry of Agriculture, Animal Industry and Fisheries. Kibwika shows how linear models of innovation fail to capture or explain the complex

patterns of learning that emerged during the two conflicts and concludes that “a sustainable livelihood is not something that can be offered to people” it all depends on people’s adaptive capacity to respond creatively to challenges.

Marleen Willemsen, Julio Beingolea Ochoa and Conny Almekinders also examine social learning in the South, but shift our gaze to the Andean Ecuador. The authors examine a project aimed at improving farmers’ knowledge of the importance of seeds – a typical example of the many directed-participation projects that occur across the less-economically developed world every year. Drawing on Kolb’s learning cycle (as do several other authors), Willemsen *et al.* identify four learning levels which emerged during the project’s lifetime and which involve the project team, farmers, NGO staff, the community and the evaluation team. Finally, Michael Slaby, Brandon Hollingshead and Peter Blaze Corcoran describe the Earth Charter Youth Initiative (ECYI), founded in 2000 and which now includes hundreds of young people in around 40 countries working to turn the Earth Charter into real action and change. Drawing on case studies from the Philippines and Sierra Leone as well as some reflections on social learning in cyberspace, the authors provide an upbeat and uncritical look at the ECYI initiative concluding that “Youth who are learning and living with the Earth Charter can use the tool of social learning to reflect critically upon their work”.

The editor’s contributions to collections such as this usually involve identifying and inviting authors, chivvying them for their chapter and then encouraging them to go the extra mile to deliver a coherent piece that contributes to the whole as well as being internally consistent. In the most useful collections, the editor book-ends the contributions drawing out the key themes and adding value to the individual chapters. This latter function is one that Wals does well being both thoughtful and inventive. In his Epilogue, for example, Wals draws out the connectivity between the contributing authors schematically, so for example, Slaby *et al.* draws on Tidball and Krasny who, in turn, draw on Dyball *et al.* Wals also identifies the key theorists that the authors draw on: Argyris, Schön, Giddens, Habermas, Leeuwis, Röling, Wenger, Senge and Keen, Dyball and Brown. It is clear that many of the authors may well be unaware of each other’s writings. One hopes that the book provides an opportunity for some virtual social networking amongst the contributors.

Wals identifies a series of activities that he thinks might be useful to anyone involved in setting up and evaluating social learning. Wals’ list includes orientation and exploration, deframing or deconstructing and applying/experimenting. Wals acknowledges that before setting off on the enterprise, people must ask themselves critical questions such as “Is there sufficient political and organisational space available for engaging people in a participatory process characterised by high levels of self-determination and autonomy?” Wals notes that his suggested list of activities resembles the constructivist-based conceptual change process described by Rosalind Driver and Valerie Oldham in their work on children’s learning in science published more than 20 years ago. In a way, that is not surprising, we have reasonable ideas about the processes that facilitate learning in classrooms and it would be strange if they differed to the rest of our existence. And yet we do not really know a great deal about learning, our theories are all rather vague and in need of much more evidence. Part of the problem is that we rely on proxy measures of what is in people’s heads – speech, writing and gesture, for example. In the same way, although many of the authors in this work know something about social learning, the end product still leaves us a long way from understanding what goes on in people’s individual and collective minds during the

process. So, returning to the Capra's initial questions – which I suspect are Wals' questions really: “What is the place of learning in sustainable communities?” “How can such learning be organised and facilitated?” and “What are some underlying principles?” – this book provides a wide range of answers, but still leaves us with at least as many questions and paradoxes.

So where does that leave us? This elegant book with its beautiful cover is a weighty tome. It captures a diversity of authors' thoughts at the beginning of a new century in which society must and will change radically. Whether the term social learning will mean much to people in 10 or 100 years is unclear – I would not bet on it myself. If it is to become a useful term and contribute towards a sustainable world then it needs researchers and thinkers who are more widely read and more aware of learning theories as well as sociological and philosophical ideas than the authors represented in this volume. This book provides a starting point for a long and challenging journey.