Becoming Sustainability Champions: How Embracing Education for Sustainable Development Can Help Organisations to Change

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Ten years after Jo Matthews, Somerset College's former Deputy Principal and Dean of Higher Education (HE), undertook a Master's qualification with a focus on leading Education for Sustainable Development (ESD), Somerset College had developed a culture in which many staff embraced and developed ESD in their curriculum. Inspired by the Master's, Jo undertook a major project within the College to introduce ESD, establish sustainability champions groups and co-operative inquiries (Heron and Reason 2001; Summers and Turner 2011). Her project followed on from a successful bid to build the Genesis Centre on campus, the result of an idea developed by construction students to provide a resource for the construction industry to promote new ways of thinking and building sustainably. Having joined the College in the latter stages of this development, I was interested to understand how an ESD culture had been established and to what extent ESD had been embedded in the curriculum. Also, once our charismatic ESD leader and key champions moved away from the College, how this would impact on the developments. I therefore undertook a research project funded by Plymouth University and supported by Somerset College to find out. This chapter takes you through the key findings, identifying successes and challenges, so you can learn from our experience.

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BACKGROUND AND CONTEXT

Jones, Selby and Sterling (2010, p.41) explain the difference between education *about*, *in* and *for* the environment from which different pedagogic approaches have emerged. Stibbe (2009, p.10) talks of 'sustainability literacy' which fits within the 'education for the environment' approach and explains this as a way:

to indicate the skills, attitudes, competencies, dispositions and values that are necessary for surviving and thriving in the declining conditions of the world in ways which slow down that decline as far as possible.

It is not a 'tick box' approach to skills development, but the use of active learning including 'self-reflection, self-directed enquiry, learning by doing, engagement with real life issues, and learning within communities of practice' (Stibbe 2009, p.11). As Stibbe argues, there is no single way to tackle the agenda and no way of knowing exactly which skill will help learners thrive in the future, but exploring 'systems thinking', 'values reflection and the Earth Charter' and 'social conscience' helped develop the agenda at Somerset College.

Box 2.1:

Do you have an overview of all the ESD activities happening in your organisation? If not, consider carrying out an audit to establish exactly where your organisation is and the key people involved in this agenda.

Explore the curriculum and establish which programmes are involved and how they are doing it. Consider how you can facilitate the sharing of this good practice and create a community of practice where the implications of the different approaches can be discussed?

Although my research focused on the working practices associated with 34 HE programmes at the College and the support and direction given to staff and students on those programmes in relation to ESD, similar practices were also noted in further education (FE) programmes. Indeed, specific ESD inductions were carried out for FE programmes, exploring how and why ESD was relevant to learners in their chosen fields. I decided to use action research, incorporating traditional research methods and critical reflection on practice in the cycle of action and reflection inherent in this

method of working, to help understand, evaluate and be more effective both in my own actions as the HE Quality and Development Manager and in the way in which the College supports staff to address ESD with their students. I recognised that in working within the organisation it would be impossible to be an objective observer. I triangulated responses from different sources in order to gain as authentic an insight as possible.

Box 2.2:

Reflect on the following research methods I used and consider whether they are appropriate to evaluate activities in your college:

- A review of the ESD literature
- Questionnaires for previous sustainability champions and former leaders of sustainability at the College
- Questionnaires for academic staff
- Base-line survey of all 34 HE programmes at the College to identify where and how sustainability is addressed; whether it is embedded or bolt-on; contained within the learning outcomes and assessed or not
- Co-operative Inquiry to engage a group of individuals to explore and evaluate current practice together
- Critical reflection through the use of a personal reflective log to record the action research cycle of action and reflection

List what you could incorporate in your project and who else you could draw into it.

FINDINGS

Awareness of Context

As part of my project, two workshops were held to explore the concept of ESD and the co-operative inquiry approach. This activity was carried out in the context of significant redundancies at the College and produced quite a negative response with staff expressing considerable resistance and frustration. However, despite nearly running out of nerve to distribute the questionnaires to record their engagement with ESD in their practice, I did and the results gave a completely different picture to the sentiments expressed verbally.

Following discussion with some of those present after the meeting, there was considerable frustration at that time. The recent round of redundancies

and changes in employment contracts were an unfortunate context. Bringing staff together for the first time since these events provided an opportunity for frustrations to be expressed which were not in fact to do with the ESD agenda. However, the nature of tackling such an agenda over a prolonged period of time means that it is not happening in isolation or in perfect circumstances and such situations have to be managed. Had colleagues not completed the questionnaires before leaving the session, it would have seemed that very few were addressing ESD in their curriculum. The lesson to be learnt is that what is said in such circumstances is not necessarily reflective of the reality and the questionnaires provided an alternative means of reflecting this. The questionnaires and the baseline survey clearly show significant action is being taken and more are engaged than was otherwise apparent, demonstrating the importance of a range of approaches to confirm initial perceptions.

Using a Consultant

A pilot consultation was carried out extremely successfully with a member of the BA (Hons) Media Make-up team. The original list of ESD activities, identified in the baseline survey, was replaced with a much longer list of activities they were already doing without realising the links to the ESD agenda. As part of this consultation, they received assistance in making the links to explore the different pedagogic approaches highlighted by Jones, Selby and Sterling (2010). This intervention demonstrates the engagement with ESD identified in the baseline survey is probably a conservative statement of what is currently being covered in the curriculum. It also demonstrates the benefit of supporting colleagues in developing their understanding of the full extent of the sustainability agenda to assist them in developing their curriculum.

Positive Effects can be Achieved Even Though Not in Line With Your Original Plan

I never managed to facilitate a co-operative inquiry as some of those who had agreed to participate had been made redundant and others were concerned about committing themselves. However, although the same people were not always available, I was able to establish monthly meetings and there were useful outcomes. One suggestion was to use the Personal Development Planning process to challenge students to explore the ESD skills they need to develop in the sector they were studying to enter. Also, constructive discussions were held between lecturers in Early Childhood Studies and Fashion and Textiles, as they realised they were exploring different positions in relation to child labour and working practices in sweatshops with their students. Possibilities of future collaborations to bring students together to challenge perceptions were discussed. Giving colleagues the opportunity to come together to compare, discuss and challenge their working practices was very beneficial, stimulating and enjoyable. The difficulty is in managing to bring them together to achieve this.

Box 2.3:

Consider how you could stimulate discussion and mutual support and development by the use of action research/co-operative inquiry techniques.

What wider context do you need to be aware of in your institution that could derail your efforts to engage staff? How might you overcome this?

Who are the key staff you could start working with in order to grow the initiative?

As a result of the development of my thinking, through the reflective process of this research, I have concluded that it is not advisable to insist on a specific approach in order to achieve consistency. Instead, it seems better to facilitate a professional debate via the sharing of good practice to demonstrate what can be achieved and the different approaches possible. Discussions about the definition and impact of different approaches can then be explored.

Carrying Out a Baseline Survey

In order to understand the perspectives of different groups of staff, I produced and circulated questionnaires to three groups: the first was academic staff teaching on HE programmes, the second was former sustainability champions and the third was former leaders of sustainability at the College.

Forty-two questionnaires were circulated to the HE academic staff, the majority of whom also teach on FE programmes, and 20 were completed. The most successful response rate was achieved by distributing them at the end of a staff development session and asking for them to be returned before they left. Responses were very difficult to obtain thereafter from those who had not been present, despite chasing.

Eight responses were received from the 15 former champions. All of the five former leaders of sustainability responded. The results are summarised below.

Views of Sustainable Development and Education for Sustainable Development

Although the majority of staff take a broad view of sustainable development (SD), some responses indicate a particular focus. There is a range in the depth of understanding shown in the responses. There may have been different results if I had provided a list of elements to tick; however, I decided to ask colleagues to comment in their own words to see what was foremost in their minds, without prompts. Of the 33 respondents:

- 25 included a specific reference to resources or the natural environment
- 15 included a specific reference to social implications
- 16 referred to impact on future generations
- 3 made reference to economic factors
- 25 made reference to action and change.

Of the 20 responses from the HE lecturers, 5 indicated that ESD is about raising student awareness. However, if the objective is for students to acquire the necessary knowledge, skills and attitudes to achieve SD then it would follow that focused learning outcomes need to be set and completed in order to achieve this. A question that emerges is whether the College's aims and strategy in relation to sustainability are fully known and understood and it appears there is no shared understanding of the definitions, purpose and approach to tackling the subject within the curriculum. The results of my baseline survey reveal different pedagogic approaches are being used.

Some would argue whether it is a realistic aim for educational establishments to bring about wholescale change in society's behaviour, which is one of the aims of sustainability literacy. Ultimately, it is up to the individual institution to decide its own objectives linked to its mission statement and strategic objectives and Somerset College's objectives include ESD. However, a clear and ideally, generally agreed notion of what that means in practice would be helpful.

Box 2.4:

Does your college have a sustainability strategy or generally agreed statement of what you are trying to achieve and by what methods?

Does this allow for a variety of approaches as well as making it clear whether you are simply raising awareness or are challenging staff and student values, skills, knowledge and attitudes?

How do you know if everyone knows and understands your college's approach?

How do you know what is happening in practice? It is really helpful to find out to enable staff to share good practice, mutual support and act as 'critical friends', to each other.

Are you aiming for some level of consistency in approach, so that for example, by the time they leave the college all students are able to explain what sustainable development means and how it relates to the employment sector they are aiming to enter?

If so, what are the core elements that you want all students to experience in relation to ESD?

From the 33 responses, only 2 are unsure what ESD means. However, many staff did not respond to the questionnaire, and based on conversations held with some of them, there are a greater number of staff who are unsure of the meaning. Lack of clarity over the meaning will have an impact on how or if the subject is addressed in the classroom.

The one negative response was *Another subject forced into a subject I have to teach.* However, others who declined to complete the question-naire also questioned the necessity for including ESD within their subject matter and others expressed lack of interest in the topic and did not return their questionnaires. This response is therefore representative of an undercurrent of feeling among some teachers that is not otherwise obvious from the questionnaire responses. Given the range of understanding and interest in the topic and the broad or specific focus of the individual lecturer, student experience of ESD across the College is likely to be variable.

The responses to a question asking 'how SD is impacting the sector you are preparing students to enter' show SD is impacting on all the sectors in which the college specialises including arts and design, computing, automotive engineering, electrical engineering, civil engineering, construction, business studies, early childhood studies and health and social care. However, the degree of impact acknowledged within particular sectors varies between lecturers who teach within the same subject area. For example, within Computing opinion ranges from: 'The computing sector is already one of the greenest ones around' to 'Very little as computer components are rarely re-used'. There was a similar divergence of opinion in the Arts. This demonstrates the acknowledgement of the impact of SD within a sector is likely to be linked to the individual lecturer's understanding and interpretation of the different elements that form part of the agenda. However, generally clear links are seen within each sector, enabling staff to highlight these to students and so integrate ESD into the curriculum.

Of the 20 lecturers who completed the questionnaire, 18 are addressing aspects of ESD in their teaching which is a higher number than expected and is encouraging. Cotton and Winter (2010, p.43) argue 'there is potential for its [ESD] inclusion in all curriculum areas—but only if lecturers can be persuaded that it is important to do so!' This comment rings true.

The list in Box 2.5, generated from the research, revealed there is much good practice to share and more than was anticipated.

Box 2.5:

The following list of topics identified may help you consider where there is potential to address ESD in your curriculum. How might you develop discussion on some of these topics?

- Challenging values and attitude
- Exploration of theories, research and current thinking in relation to ESD
- Local and global context
- Sector specific contexts
- Ethical considerations
- Animal welfare
- Transport
- Energy and low energy solutions
- Recycling
- Waste
- Use of resources (materials, equipment and natural resources)
- Life cycle analysis
- Regulations and legal aspects
- Rainwater recycling plant

Box 2.5: (continued)

- Straw bale walled structure
- Renewables costs in cost planning
- Corporate social responsibility
- Sustainable construction techniques
- Environmental impact assessments
- Sustainable procurement (sourcing sustainable products)

The responses to the question about the available support show it is better not to have ESD imposed. There was frustration evident in some of the comments, such as 'Not much really just constantly told to do it'. This contrasted with lists of sources and internally run workshops. This highlights the significant difference in experience between staff. Former sustainability leaders have been predominantly inspired by courses they have undertaken which have given them an understanding of the topic. It is this more detailed understanding that seems to be missing from the responses of the academic staff suggesting that gaining a better understanding is likely to inspire and enable others to address the topic more willingly.

Out of the 20 academic staff responses, 11 reveal it is the lack of commitment and scepticism of others that is the main challenge they face. This scepticism is from students, industry or colleagues within the College; 7 confirm they need more information; 5 consider the challenge to them in addressing ESD is that change is needed within the College; 4 state that time is the issue; 2 feel that the industry they are teaching about is resistant to the concept. So the most frequently stated challenge is scepticism and lack of commitment of others and not the issue of time which is surprising. The second key challenge is lack of knowledge or a desire for more information or expertise. It is therefore important these issues are addressed in planning the next steps within the College. Involvement of people from different industry sectors that can explore the agenda from their perspective with both staff and students could be very helpful here.

I was keen to know what would help teaching staff to develop their professional approach to ESD. Of the 20 responses, 9 state they would like help to carry out more personal research and continuing professional development activity focused on this topic; 7 feel that input from external sources would help; and 5 consider time would help. This response links to the desire to have some autonomy and professional trust to explore the topic and handle it in an appropriate manner for the students concerned.

The survey makes it clear that contrary to common opinion within the College, all but one of the HE programmes at the College are addressing aspects of ESD. Thirty of the 34 programmes have embedded ESD and a vast array of modules is being used to convey the subject matter. Many have found it can be addressed in the professional practice module, but it is certainly not exclusive to this central module. Although the majority of programmes (18 out of 34) do not have SD within their learning outcomes, the vast majority (28 out of 34) are nonetheless formally assessing it, which is very encouraging. This demonstrates it is not necessary to amend the formal programme and module learning outcomes for ESD to be addressed within the curriculum.

Picking up on the point made earlier about the need to have specific learning outcomes in order to focus on what you wish students to achieve, be it general awareness, or skills, knowledge, attitude and challenging of values. It makes sense that these are explicit learning outcomes on lesson plans so it is clear what is intended and also what is then achieved. However, my research shows that in order to achieve this, you do not have to have ESD learning outcomes at programme or module/unit level. It can be included at lesson plan level where the topic naturally fits with the existing syllabus/learning outcomes. This is quite a revelation as I have had a number of discussions with teachers who felt they would need to rewrite and revalidate their programmes before they could address this topic. As this is a time-consuming option, we explored how they might simply adjust existing assignments to reflect the ESD theme, which they did with great success. For those teaching on FE programmes where they have no possibility of rewriting the syllabus, there is therefore hope and not the barrier which might have been expected.

Box 2.6:

Review the sample of activities below that we have tried under each of these headings to see if it gives you any new ideas, or reminds you of just how much you have also done!

Culture

- Appointment of curriculum and estates ESD officers for a year to focus on curriculum development and to establish the College's carbon footprint
- Establishment of Sustainability Strategy and Champions Groups
- Enabling a group of staff to attend a Master's module on ESD, resulting in a number of additional ESD projects and cross-college discussion and debate

Box 2.6: (continued)

Curriculum

- Audits of ESD across the college to showcase the activities already happening
- CPD activities, workshops, conferences and sharing good practice sessions
- Research funding obtained to facilitate projects and co-operative inquiries
- Initial teacher education team carried out a co-operative inquiry (Summers and Turner 2011) over the course of two years in order to embed ESD (see Chap. 3).

Campus

- Analysing the carbon footprint of the College, resulting in the achievement of the sustainability kite mark ISO14001 (see http://www.iso.org/iso/home/standards/management-stan-dards/iso14000.htm)
- Setting up processes for monitoring and making savings in relation to energy consumption, water, waste and recycling
- Implementation of new waste management system (no desk bins, replaced with recycling facilities)
- Securing funding for energy efficiency improvements

Community

- Running cross-college 'World Café' sessions to engage everyone
- Establishing co-operative inquiry groups
- Setting up and developing the college sustainability champions groups (on campus, curriculum and community focused themes)
- Starting sustainability intranet space on our virtual learning environment—The Greenhouse
- Themed weeks for students, involving the whole college
- 'Say no to plastic bags' campaign
- Providing a 'free stuff' board in the staff room
- Establishing a 'don't bin it' thought process in relation to stationery
- Establishing polytunnels for growing vegetables
- New 2 You and other sales events
- Provision of sustainability sessions to schools
- Learning Resources activities: recycling old books and sending them to BetterWorld Books (http://www.betterworldbooks.co.uk/)

Box 2.6: (continued)

It is important to identify and disseminate what ESD activities are being undertaken to the whole College community to overcome the common belief that not much is being done and that a few stalwart individuals are the only ones addressing the agenda. Encouraging messages should be shared. What messages could you share about what is going on in your college?

The questionnaires I gave to the former leaders of sustainability at the College provide useful insight.

Box 2.7:

Reflect on the advice provided by the former ESD leaders and consider how this may inform your plans:

- Involve everyone, as tackling the issues together as an inclusive community is refreshingly positive and engages colleagues as well as providing the widest possible avenues to explore for effective action;
- Communicate activities and successes clearly and regularly to all;
- Find those who are keen to be active and get them involved in realistic projects with a likely positive outcome that can be accomplished within reasonable time frames to keep them motivated;
- Provide development opportunities so as many as possible understand what is planned and why and what part they can play;
- Tackle ESD from a number of angles based on colleagues' areas of interest and job roles to support this;
- Link with others involved in this agenda outside your organisation to keep you fresh and motivated;
- Projects that meet the requirements of a number of different 'boxes' are most likely to succeed. For example, estates projects that save money at the same time as saving carbon; curriculum activities that enhance student experience at the same time as involving members of the local community;
- Start with the people around you and at their level of understanding.
- Don't expect people to get it quickly, it is a personal as well as a professional challenge;

(continued)

Box 2.7: (continued)

- Provide space to think and discuss;
- Allow the agenda to emerge, at their pace, you'll be surprised how much happens;
- Take on board that everyone has a different starting point on the journey to sustainability, a different vision and different values. Try to find something you have in common and start a dialogue;
- Keep going, small steps, stay enthusiastic, it's worth it, engage in mild conversations, challenge mildly and imperceptibly, give good examples of everything, make it fun, create a broad but not exclusive community, listen to all;
- Avoid 'preaching' as it turns people off the agenda;
- Allow tutors time to meet and discuss their specific area and how SD fits into their own curriculum. Support them in finding ways for SD to fit sensibly into their curriculum area as part of the normal preparation of students to enter their chosen career, rather than as an add-on.

The former ESD leaders consider certain initiatives did not work as well as they would have liked. Some staff who were very keen at the outset, lost interest. It seems this was because some felt progress was too slow and they had hoped to see more dramatic steps taken. Surprisingly, many seemed to want the Senior Management Team to be more autocratic and tell everyone what they should do. This may link to responses about lack of confidence in their own knowledge resulting in them not feeling able to pursue the topic with their students. Time pressures are a problem for most staff but for some their lack of engagement is due to disinterest in this topic. The majority seem unclear about how to tackle the topic and prioritise other matters over exploring it further.

There were difficulties in engaging students in the agenda, but it is unclear why. It was found that some do not like to feel change is being imposed and need to feel they have a choice and the knowledge to work it out for themselves. A further observation is the need to engage the enthusiasts and build from there rather than going for all at once, otherwise the detractors can put off the undecided. This was done by involving the most interested in becoming sustainability champions. However, it was also noted as important in the feedback from champions as they engaged with others.

Part of our remit in educating students is to introduce them to a range of ideas and teach them to use evidence to challenge ideas and approaches and

Box 2.8:

Consider the following barriers faced by the sustainability champions which include:

- Time to attend meetings to discuss sustainability;
- Taking too long to put ideas into practice;
- Most staff unaware of how the College is implementing its ESD strategy;
- Despair;
- Apathy;
- Sustainability is not simply about which bin to put the waste in!
- Recession doesn't mean green principles can be abandoned.

This is an interesting list which demonstrates both the strength and contrasts of feelings in relation to this agenda. However all the barriers noted are ones that can be overcome. How do you feel you could work with others to overcome these barriers?

form their own views. Raising ESD constitutes another proposition being put to students with which they can engage and hone their critical thinking skills.

It is worth noting how the former leaders specifically recommend involving everyone in the agenda and following natural interests rather than forcing the issue. This may appear to be in conflict with the idea of setting College-wide targets or measurable outcomes. However, the original sustainability leaders at the College always had aims and outcomes in mind, reflected in the sustainability strategy.

As many of the ESD leaders and champions have left the College, it has become increasingly clear that it is important to share knowledge amongst the College community so the loss of individual members of staff does not result in a loss of vital knowledge within the institution. Finding a way forward that does not rely on one or two individuals, but which is jointly shared across the institution is a less risky solution for the future.

Discussion and agreement with College-wide achievable minimum outcomes in relation to ESD might provide a measure for success and focus everyone's attention on what could then become a natural part of everyday life at the College. These commonly agreed outcomes would need to be both achievable and embedded, not 'bolt-on' optional additions to usual activities. They would also need to allow for flexible interpretation and contextualisation. This would build on the activities already undertaken and could be discussed as part of the general sharing of good practice.

Recommendations resulting from my research project which may well be useful for you in developing ESD in your own institution are as follows:

- 1. Share and celebrate the multitude of examples of good practice to combat the belief frequently voiced that not much is happening in relation to ESD.
- 2. Stimulate discussion and debate concerning sustainability literacy and a joint understanding and definition of the purpose of ESD. Decide on the extent to which agreed minimum standards/consistent outcomes could be set and if so, what these should be.
- 3. Monitor Service Area and Curriculum Area sustainability actions through standard annual reporting documents such as development plans and Self-assessment/Evaluation Reports. This ensures activities become mainstream and embedded into the culture of the College.
- 4. Support staff in bidding for funding to enable them to carry out research in this area, to deepen their understanding and to impact on their approach to ESD within their curriculum. This is in line with the College's focus on effective teaching and learning, research informed teaching and in response to the academics' plea for further research opportunities.
- 5. Invite an external consultant to undertake a focused discussion with a Curriculum Area Team to assist in exploring the meaning of sustainability, in the context of the programme they teach and where further opportunities naturally occur for sustainability literacy to be embedded. Carry out the same exercise with Service Area Teams. To reduce costs they could work with a core team who could then disseminate to others in the college.
- 6. Invite speakers from industry to support discussion, debate and understanding with staff and students.
- 7. Induct all new staff into the College's ESD work and sustainability literacy so knowledge is maintained and developed even when key knowledge holders leave.
- 8. Consider following the Environment Association of Universities and College's (2015) advice by establishing a sustainability group that includes students, teaching staff and non-teaching staff, with clear lines of accountability into the management structure of the organisation. This group could promote new ideas and initiatives as well as reporting on established initiatives.

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- 9. Review involvement in sustainability groups and whether the most is being made of these opportunities, both in disseminating good practice and in feeding back good practice into the College.
- 10. Disseminate challenges and activities that have been less successful to a wider audience, as well as those that are successful, to assist with the realistic development of this agenda across the sector.

CONCLUSION

Schön (1991, p.42) described educational professionals working in the 'swampy lowland' of everyday life rather than inhabiting the 'high ground' of professional certainty. I have found myself in these 'swampy lowland' but through the use of critical reflection on practice, exploration of current thinking and a variety of research techniques have fought to gain the 'high ground' of professional certainty in relation to ESD in the context of the HE curriculum within an FE College. I hope that by sharing the successes and pitfalls that we have experienced at Somerset College it will assist you in developing ESD successfully in your college.

References

- Cotton, D., & Winter, J. (2010). It's not just bits of paper and light bulbs. A review of sustainability pedagogies and their potential use in higher education. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education*. London: Earthscan.
- Environmental Association of Universities and Colleges. (2015). *Starting the Journey*. Retrieved July 13, 2015, from http://www.eauc.org.uk/sorted/quick_start
- Jones, P., Selby, D., & Sterling, S. (Eds.) (2010). Sustainability education: Perspectives and practice across higher education. London: Earthscan.
- Heron, J., & Reason, P. (2001). The practice of co-operative inquiry: Research 'with' rather than 'on' people. In P. Reason & H. Bradbury (Eds.), *Handbook of action research* (pp. 179–188). London: Sage.
- Schön, D. A. (1991). The reflective practitioner: How professionals think in action. Aldershot: Avebury.
- Stibbe, A. (Ed.) (2009). *The handbook of sustainability literacy. Skills for a changing world*. Dartington: Green Books.
- Summers, D., & Turner, R. (2011). Outside the green box—embedding education for sustainable development through the use of co-operative inquiry. *Educational Action Research*, 19(4), 453–468.