Looking to the Future

Roger Cutting and Denise Summers

This is the final chapter in a book that initially resulted from a research project carried out by a team of initial teacher educators based at Somerset College in the southwest of the UK. They used a co-operative inquiry approach to develop their knowledge, skills, values and confidence to embed Education for Sustainable Development (ESD) in the Postgraduate Certificate in Education and Certificate in Education (PGCE/Cert Ed) programmes across the Plymouth University partnership of colleges for student teachers in the further education (FE) and skills sector. As well as the chapters directly linked to this project, our colleagues across the partnership and contacts further afield have contributed chapters which convey the way in which they have developed the sustainability agenda further as they supported their students in meeting the ESD outcome in their programmes. These chapters provide examples of research carried out since the project started; case studies; practical examples of teaching sessions and reflective questions to support you in developing your understanding of ESD and how to use this understanding to change your practice.

This conclusion pulls together some of the main themes of the chapters and the questions that you were asked to consider to help you develop a better understanding of ESD and how this might become a focus in your work.

The book has been divided into sections using the metaphor of growth to provide a structure and what follows will hopefully help you reflect on the chapters in each section.

INSPIRING CHANGE IN THE BEGINNING

Chapter 2 gives the details of the context at Somerset College which inspired the original co-operative inquiry to embed ESD in our PGCE/ Cert Ed. It gives suggestions for those who may be responsible for leading ESD developments in their organisations to carry out an audit of provision, identify good practice and provide opportunities for sharing the practice and supporting each other by developing communities of practice. A variety of research approaches and methods are shared which may inspire you to carry out research alongside your curriculum development. Also shared are various sustainability topics that were identified across the college provision, as well as activities which developed the College curriculum, community, campus and culture. You may like to consider which of these may be relevant to the various subject specialisms within your organisation.

Chapter 3 suggests you review your syllabus, identify whether sustainability is mentioned in it and if so, or if not, identify where there are opportunities to include it. Having benefited from using the co-operative inquiry approach in terms of providing a structure for a group of individuals to work together to support each other in their development, you may wish to consider whether it is an appropriate approach for you and think about who you could work with and what your first steps would be.

Chapter 4 focuses on the learning from a trip to India to attend a course on Gandhi and Globalisation. You are asked to reflect on Gandhi's philosophy and his profound belief in equality, fairness and justice and consider how you might use this to develop the way in which you address equality and diversity in your practice. Concern about the potential contradiction in the concept of 'sustainable development' led us to consider 'development' as being the flourishing of individuals and communities and so you may wish to consider how community projects could be developed with your students which focus on sustainability. Learning about Gandhi's principle of non-violent communication made us think about both the professional and personal implications of this and in terms of developing as an individual and as a community, it seems a very good principle to underpin the way in which we engage with our students, our work colleagues and managers, as well as our families.

Developing Our Practice and Preparing the Ground

Chapter 5 focuses on resources and the way in which consensus is achieved and the power structures masked by such consensus. It suggests you think about examples of consensus, the interest this consensus serves and what alternatives there might be. There is an example of a session plan designed to encourage student teachers to consider the sustainability of the resources they use in teaching. This could be developed by you or, if more relevant, could be amended to consider resources in specific subject specialisms. Using an example of a particular resource, it explains how you could encourage your students to identify and explore sustainability issues with a group of students.

Chapter 6 explores sustainable assessment and the influence this can have on encourage lifelong learning. You are asked to consider how you currently prepare your students for lifelong learning. It describes a carbon footprint game developed and how we adapted this to include additional question cards to make it appropriate for student teachers. It provides details of this and shows how resources can be further developed to make the game relevant for different subject specialisms and contexts. It discusses how this can be used as an initial or formative assessment activity and then moves on to other aspects of sustainable assessment including self, peer assessment and assessment of, for and as learning approaches. Reflecting on how these approaches could be used to develop your own assessment approaches helps provide further opportunities to encourage lifelong learning.

Chapter 7 considers the teaching of values recognising that many of us can find this a difficult topic to approach. You are encouraged to reflect on how you can provide a safe space to discuss issues which may result in conflict. The chapter goes on to describe and evaluate a session designed to encourage the teaching of values and provides the guidance required to try out the session. The session can be developed to address the values relevant to different subject specialisms so, as well as using it to consider ESD values, it could also be used to address the values of students engaged in a health and social care course or those doing business studies, for example.

Sowing Seeds and Nurturing Growth

Chapter 8 challenges the traditional role of the teacher and introduces Apollonian and Dionysian approaches to teaching and three-stage models which can be used to introduce ESD in a way which move from the transmissive to a problem-solving approach which encourages critical and systems thinking. You are asked to reflect on your practice and consider it in relation to the different stages of the model and whether you can incorporate aspects of the other stages to encourage ESD.

Chapter 9 explores the award-winning Innovation, Creativity and Enterprise (ICE) house project (see https://www.cornwall.ac.uk/news/

ice-house-wins-top-award_developed by The Cornwall College Group and Plymouth University and explores the links made with the project to embed innovation, creativity and enterprise, along with sustainability into the PGCE/Cert Ed curriculum. The chapter explains the ICE principles and you are asked to reflect on these and how they may be incorporated into your practice to encourage student development.

Chapter 10 considers what can be learned from complexity theory in embedding ESD and gives a practical framework for doing this. You are encouraged to reflect on aspects of the theory and whether there is room for the unplanned messiness, interactions and emergence of new ideas that may occur. Various theories and models are referenced and you are encouraged to reflect on how these link with your practice or could be used to develop your practice. The chapter also describes a student-led module we introduced in which they worked together using a co-operative inquiry approach to support their learning about ESD in more depth.

Chapter 11 is taken from a paper published in the *Journal of Education* for Sustainable Development and explores the way in which our students and colleagues conceptualised ESD, the professional and personal effect of this and how this was influenced by the changes to our programme. You are encouraged to reflect on your students, subject specialisms and local communities and how this knowledge can help you introduce ESD to your students in a way which fosters a sense of purpose and hope for the future. This research showed how the embedding of ESD had encouraged Sterling's (2011), first (conformative) and second (reformative) levels of learning with some glimmers of the third (transformative) level demonstrating the original team member's roles as agents of change. You are encouraged to consider whether you can be agents of change and identify the steps you would take.

Respecting Our Roots Whilst Developing New Branches

Chapter 12 considers the way in which the PGCE/Cert Ed curriculum has changed over the last few years and uses the metaphor of 'grand-father's axe' to show how the values have been sustained through a period of major change. You are asked to reflect on our core values, how these relate to those of your colleagues and students, how their values affect your own practice and how your values may have changed

through your years of practice. You are also asked to consider how your values have been upheld by your school/college experiences, or whether they stem from your cultural background or your family. You are also introduced to the United Nations Educational, Scientific and Cultural Organization (UNESCO) core values and asked to consider how these relate to your own core values and how they can be developed in your practice.

Chapter 13 reflects on the contemporary issue of well-being and sustainability. Health and well-being are key aspects to the UNESCO sustainable development goals and are global priorities and as such are vital aspects of ESD. However, these issues are also relevant at a smaller scale and have direct implications for the FE sector. Not only are health-related programmes and courses typically part of a College's offer, but students in the FE sector are often subject themselves to the pressures of study and of course, the pressures of everyday life. This chapter guides the reader through some of the wider definitions of health and well-being and reflects on its importance in relation to both the wider sustainability agenda and to the students in our care. It provides some reflections on the promotion of well-being and gives examples of strategies that may be employed in the sector to promote these issues.

Chapter 14 argues that the current focus on student voice in the FE sector is tokenistic. It discusses the importance of transformative learning in encouraging democratic and collaborative relationships between students, teachers and managers which leads to active citizenship to meet the principles of ESD and secure a sustainable future. You are asked to reflect on various theories and models including the characteristics of transformative learning and models of citizen participation and consider whether these relate to your practice and your organisation and how you can encourage this if not.

MOVING ON AND FINDING NEW PASTURES

Chapter 15 considers the effects of ESD in FE so far having carried out some preliminary research to find out the views of students, lectures and employers. It identifies the need for more systematic research to evaluate the impact of ESD in FE and encourages initiatives between schools, FE and HE and industry in order to develop a more effective ESD curriculum FE as well as nurturing social enterprises as part of a broader entrepreneurial initiative to embed sustainability into the economy.

Chapter 16 discusses the current focus on vocational programmes and the loss of non-vocational adult education courses and asks you to consider how to include the approaches required in your practice to develop the skills that a resilient and sustainable community need for the future. Examples are provided of successful initiatives developed between local businesses, charities and colleges and, although recognising the constraints, provides strategies to overcome these.

Chapter 17, the penultimate chapter, describes some collaborative work between Plymouth University (UK) and Mekelle University (Northern Ethiopia). This chapter questions whether our slowness to respond to the environmental crisis relates to Plato's Allegory of the Cave and the sense of safety in familiar contexts in comparison to the lifestyle changes required for a sustainable future. You are asked to consider the sustainability skills your students need, whether your practice encourages these and, if not, what the obstacles are, and then to do the same with the Millennium and Sustainable Development Goals (Sachs, 2012). A case study of a collaboration carried out with Mekelle University in Ethiopia is shared and you are encouraged to consider opportunities for such collaborative work to promote global learning which seeks to achieve the Sustainable Development Goals.

In a report commissioned by the Learning and Skills Improvement Services (LSIS 2013), entitled Embedding Sustainability into Teaching, Learning and Curriculum in the FE sector, there is a call for FE colleges to ensure 'there is an institutional mandate for embedding sustainability in the curriculum', to 'work with awarding bodies to change qualifications' and provide CPD opportunities on sustainability to enable teaching staff to 'effectively train and do research'. Hopefully, this review of chapters demonstrates that this book is an attempt to provide a good starting point to provide some of the underpinning knowledge required and introduces you to the relevant definitions and debates.

Fundamentally, this book aims to empower the teacher to critically analyse ESD through their own subject specialisms, engage in the debate and learn with their students. The democratic and participative approaches introduced help to question the traditional transmissive styles of teaching and learning and move on to consider the need for radical and transformative approaches. In this book, we have focused on the need for these methods in ESD, but of course there are wider calls for profound changes to take place in all areas of teaching and learning. Interestingly, when pedagogical approaches that call for critical and creative thinking, participation and participatory learning, and the promotion of systemic thinking (Tilbury and Wortman, 2004) are interrogated, it is difficult to see why they should be uniquely associated with ESD. The new methods and outcomes called for in good and effective sustainability education are simply those required for good and effective education (Cook and Cutting, 2009; Cook et al. 2010).

Calling for profound changes in education is in some ways the easy part. Developing specific methodologies, along with their implementation and critical evaluation, is somewhat more problematic and well summed up by Sir Ken Robinson:

One of the real challenges is to innovate fundamentally in education. Innovation is hard because it means doing something that people don't find very easy, for the most part. It means challenging what we take for granted, things that we think are obvious. The great problem for reform or transformation is the tyranny of common sense; things that people think, 'Well, it can't be done any other way because that's the way it's done.

Sir Ken Robinson. TED 2010 Ken Robinson: Bring on the learning revolution! (2010)

In Ken Robinson's talk, he argues that there is little point in trying to improve education for it is a model that is fundamentally broken and that we need little less than a revolution in the way we approach education. Perhaps nowhere more than within the field of education for sustainability (EfS) is this ever-increasing call for such a revolution in teaching methods more keenly heard, particularly if we are to produce a generation capable and hopeful of meeting the problems that are presented to us in the twenty-first century (Orr 2004). However, in some ways, for those of us involved in teacher education, particularly in ESD, calling for a revolution is an irresistible sentiment, and of course it has been said before (Apple 2000; DeLeon 2006; Freire 1970; Giroux 1988, 2001) The intellectual predication and the academic predilection may be appealing; however, the difficulty lies in the expediency and reality of its implementation.

If we are as a profession and a sector to rise to this challenge of a new and appropriate praxis of pedagogy, teachers and lecturers will themselves need to be freethinking, adaptable and independent learners who are empowered to direct their own learning and practice.

At a time when there is a recognised need for innovation and creativity in both ESD and in education generally, our ability to produce innovative and imaginative teachers who have the capacity to inspire and engage students of any age in the forms of learning that the future will require could be hindered by the implementation of educational structures and systems that in turn discourage experimentation and innovation particularly in the FE sector.

However, this book shows that this is actually not the case and that despite the difficulties that so-called 'forgotten sector' of FE faces, there are innovative projects, creative approaches and critical discussions taking place. The case examples, the reviews and the essays presented here are a testament to those educators who can be considered to have been agents of change in attempting to do things differently and responding positively to the recognised need for change.

Of course trying new things sometimes fails and when things go wrong, it can be difficult to accept, both professionally and personally. However, as educators, we need to remember that only through the dynamism of change so evident in the examples in this book, can we hope to provide teachers and students of the future with the assuredness that will be required to face the future. Our legacy must not be the problems that they will face, but rather the provision of skills and approaches that provide solutions.

References

- Apple, M. W. (2000). Official knowledge: Democratic education in a conservative age (2nd ed.). New York: Routledge.
- Cook, R., & Cutting, R. L. (2009). The World Environmental Education Congress 2007: A critical appraisal. *Environmental Education Research*, 15(2), 177–187.
- Cook, R., Cutting, R., & Summers, D. (2010). If sustainability needs new values, whose values? Initial teacher training and the transition to sustainability. In P. Jones, D. Selby, & S. Sterling (Eds.), *Sustainability education: Perspectives and practice across higher education* (pp. 313–327). London: Earthscan.
- DeLeon, A. (2006). The time for action is now! Anarchist theory, critical pedagogy, and radical possibilities. *The Journal of Critical Education Policy Studies*, 4. Retrieved from http://www.jceps.com/?pageID=article&articleID=67
- Freire, P. (1970). Pedagogy of the Oppressed. New York: Continuum.
- Giroux, H. A. (1988). Teachers as intellectuals: Toward a critical Pedagogy of learning. Westport: Bergin and Garvey.
- Giroux, H. A. (2001). Theory and Resistance in Education: Towards a Pedagogy for the Opposition. Bergin and Garvey. Westport, Mass.

- Learning and Skills Improvement Service (2013). *Embedding sustainability into teaching, learning and curriculum in the learning and skills sector.* Coventry: LSIS.
- Orr, D. (2004) Earth in mind: On education, environment, and the human prospect. (10th Anniversary Edition). Washington: Island Press.
- Robinson, K. (2010) Bring on the learning revolution! [video]. Retrieved November 17, 2015, from http://www.ted.com/talks/sir_ken_robinson_bring_on_the_revolution
- Sachs, J. D. (2012). From Millennium development goals to sustainable development goals. *The Lancet*, 379, 2206–2211.
- Sterling, S. (2011) Transformative Learning and Sustainability: Sketching the conceptual ground. *Learning and Teaching in Higher Education*, Issue 5, Retrieved October 30, 2015, from www2.glos.ac.uk/offload/tli/lets/lathe/issue5/ Lathe_5_S%20Sterling.pdf
- Tilbury, D., & Wortman, D. (2004). *Engaging people in sustainability*. Gland, Switzerland: International Union for Nature and Natural Resources.