

Ecology, Critical Reflection And The Praxis Of Change

Alison Pooley – Anglia Ruskin University, United Kingdom

Peter Jones – James Cook University, Australia

Beth Tinning – James Cook University, Australia

Abstract

The scope of the environmental crisis currently facing the planet presents humanity with enormous challenges, not least of which is challenging long-held assumptions about our relationship with the non-human world. Transformative approaches to professional education, with a focus on critical reflection, provide examples of ways in which an ecological consciousness can be facilitated. Drawing on examples from educational practice in Architecture and Social Work, the potential for critical reflection to bring about attitudinal change is explored through engagement with a number of specific reflective tools which can be employed in teaching practice and which are transferable into many other disciplines.

Introduction

The nature and extent of the environmental crisis facing humanity today points clearly to the need for radical transformation across all dimensions of human existence. Social, political, economic and cultural change will all be required if we are to move towards a more just and sustainable future. Underpinning all such changes are the transformations required at the individual level. It is through the collective efforts and demands of individuals that the impetus for broader societal change will develop.

This workshop emerges from the praxis of three educators who, in their respective disciplines of architecture and social work, and on opposite sides of the globe, engage in work characterised as ‘teaching for transformation’ (Pooley, 2011; Jones, 2011). In particular, the facilitators are involved in using critical reflection as a means of supporting students to identify, re-evaluate and transform their assumptions and preconceptions about their relationships to nature, and in doing so become more environmentally responsible.

The Environmental Crisis – Alienation and Change

While the magnitude of the environmental crisis has now been well documented (IPCC, 2007), and general agreement has emerged that urgent action is required, actual progress towards any deep and meaningful transformation of humanity’s destructive attitudes and behaviours remains painfully slow. While the reasons for the glacial pace of change are complex and involve the broadest of economic and geo-political machinations, some responsibility must rest with the lack of clear demands for change arising from ordinary people in societies around the globe. Those voices that are calling for change are significant (Mohammed, 2010), but remain a minority and are too easily disregarded and marginalised by power-holders with vested interests in maintaining the status quo. Why is it that for so many of us the environmental crisis remains a distant and seemingly non-urgent problem, occupying so little of our conscious attention?

Part of the answer to this important question may lie in the ecological alienation that has come to define the experience of many people around the world and particularly those in the Global North. The concept of ecological alienation, or what Louv (2008) refers to as nature-deficit disorder, calls attention to the many ways in which human experience has become disconnected from nature, with which it is actually inextricably linked and indeed, upon which it depends. For many people living in the West, we are divorced from the sources of the very things we depend upon for our existence – clean air, water, food – as well as from the consequences of our lifestyles and consumption decisions – waste, pollution, destruction, injustice (Berry, 1999; Stone & Barlow, 2005). In the light of this alienation, one aspect of the transformation required if we are to move towards a more just and sustainable society must be to re-establish and re-value an ecological consciousness.

Critical Reflection

Critical reflection has been identified as an essential component of the process of transformative learning (Cranton, 2006; Mezirow, 2000). Essentially, critical reflection, as described by Mezirow, refers to the critical examination of existing assumptions and presuppositions. It can be thought of as a process of assessing “*how* or *why* we have perceived, thought, felt or acted” (Mezirow, 1990, p. 6). Mezirow has suggested two key types of reflection, firstly, critical reflection of assumptions, or objective reframing, which involves critically reflecting on the assumptions of others, and secondly, critical self-reflection of assumptions, or subjective

reframing, which involves critical self-reflection on one's own assumptions and in particular the ways in which one's world view may be limited and distorted (Mezirow, 2000; Taylor, 1998).

While Mezirow argues that transformative learning (that is, of both meaning schemes and perspectives) can occur as a result of either of these types of reflection, it is the critical self-reflection of assumptions which is more likely to be involved in a perspective transformation:

...although the transformation of meaning schemes (specific beliefs, attitudes and emotional reactions) through reflection is an everyday occurrence, it does not necessarily involve self-reflection. We often merely correct our interpretations. On the other hand, the transformation of a meaning perspective, which occurs less frequently, is more likely to involve our sense of self and always involves critical reflection upon the distorted premises sustaining our structure of expectation (Mezirow, 1991, p. 167).

Used constructively and with intent, critical reflection can assist us in identifying and evaluating long-held assumptions and limiting beliefs about the world around us. Yet engaging in such critical reflection is not always easy, particularly for those of us for whom reflective practices have not featured as part of our personal or professional experience. In the authors' respective fields of architecture and social work, critical reflection has been understood and practiced in a variety of ways, particularly within the area of professional education.

Critical Reflection in Architecture

We understand a map best when we are able to draw it out for ourselves. The best way to understand is to do. (Kant (1966) [first published 1803])

The very nature of architectural education is founded on the principles of problem based and active learning. Critical reflection sits implicitly within the iterative design process where students are encouraged to reflect on the process as well as the design proposal. By encouraging critical reflection in design it is hoped, but not guaranteed, that a reflective practitioner, capable of complex problem solving, will emerge through the continuous process of reflection in and on action (Schön 1991). Architecture schools engage their students through field trips, site studies, making and doing. These experiences become important by encouraging students to develop responses to unique situations, learning through reflection and action how to tackle new, unique and demanding problems (Nicol and Pilling 2000). Fortunately there is no one right answer when designing; your proposal can more or less respond to the clients brief, tutors' workshop or competition rules. The key repose lies with the individuals; the direction of their moral or ethical compass, a response that belies a concern for the wider environment.

Responses to the environmental imperative from the architectural profession have been with us for several decades, yet it is only relatively recently we have see increasing legislation and tightening regulation of the construction industry, in an attempt to diminish the impact of the built environment on ecological degradation. Despite commitments from the profession a year after the Rio Earth Summit in 1992 there is still much to do to enable architects to understand and achieve this (Williamson and Radford 2000). Whilst legislation and regulation is broadly welcomed by those who have been pushing for change, compulsion will always be just that, compulsion. Forcing the tools of environmental responsibility cannot be the only driver for change. Whilst pan European programmes designed to promote improved environmental action through curriculum change and developing tools for delivery are useful (Educate 2010), how effective are these in bringing about ecological awareness? Overuse of compulsion can lead to environmental action becoming a mere response rather than a proactive ethical imperative. Exploring underlying values and ethics is crucial if there is to be understanding of how to move ecological consciousness forward within the profession (Spector 2001).

What interests us as educators is what sits behind the motivations of students to follow a certain path; how, where and when do students develop their ecological consciousness? Trying to unpick what some of those motivations and ethical dimensions might be has led to several reflective workshops with architecture students; attempting to unearth the relationships between student motivations, environmental responsibility and ecological consciousness, touching on what Fox (2006) refers to as ecological integrity based ethics. The aim of the workshops was to identify the extent of the relationship between students' experiences and their choice of study. The two-hour-long workshops were structured using three distinct yet interconnected reflective activities exploring moral and ethical values as they related to wider environmental issues.

Several students reported experiencing what Mezirow (1991) describes as a disorientating dilemma, this driving them on to their chosen academic path. One student wanting to repent for a professional life in a polluting industry, another reacting to witnessing a disaster involving many deaths. Surprisingly the majority of

students had never made any connection between their life experiences, often based on feelings as well as events (Dirkx 2000) and their choice of career, taking part in a workshop and being able to make those connections came as a revelation.

Reflective practice is as significant for students as for educators and those in the profession (Boud, Keogh et al. 1985; Schön 1991; Moon 1999) and in many ways is nothing new. These exercises can be viewed as a starting point in developing a reflective practitioner, encouraging architecture students to think beyond environment as mere built form, beyond issues of climate change and green house gas emissions and reducing the impact of buildings through good design. A reflective practitioner does not necessarily imply an ethical practitioner, and certainly does not imply a practitioner with fully formed ecological consciousness. Nor are we talking about addressing the mere impact of the building itself, the ethical dilemma of the built form or how it reacts with the environment; what we need is a good designer and an ethical designer (Spector 2001). Reflective practice, a curriculum based around sound knowledge of environmental issues, legislation and professional body governance cannot guarantee this alone. Serving the client is not the same as serving the community or the wider environment as a whole even when this is embedded in professional codes of practice (Till 2009). Understanding students in a way that enables us and them to make sense of their current path is very valuable; understanding where they are going and recognizing their role in the global solution to the global problem.

Humanity cannot triumph in the adventure of reducing the human footprint to a sustainable level if that adventure is not undertaken in a spirit of global partnership. Collapse cannot be avoided if people do not learn to view themselves and others as part of one integrated global society. Both will require compassion, not only with the here and now, but with the distant and future as well. Humanity must learn to love the idea of leaving future generations a living planet. (Meadows 2004:282)

Perhaps there is an interesting parallel to be drawn here between social work and architectural education; where both are concerned with human interactions with the environment; social work being concerned with responses to and architecture primarily being concerned with the production of.

Critical Reflection in Social Work

Critical reflection has usually been seen as a core component and concern of social work education and practice (see, for example, Clare, 2007; Gould and Taylor, 1996; Napier and Fook, 2000; Redmond, 2005; Sheppard, 1998; Yelloly and Henkel, 1995; Yip 2006;). D’Cruz, Gillingham and Mendez (2007) have reviewed the literature surrounding reflexivity and critical reflection in an attempt to establish greater clarity about the meaning of these terms and their use in social work education. They note that the concepts of reflexivity and reflection have emerged as critical and constructive responses to a growing recognition within social work education of practice as a rich source of knowledge and theory, and of the importance of analyses of professional power as potentially both emancipatory and oppressive. They also note the conceptual blurring in the literature between reflexivity and critical reflection. According to D’Cruz et al (2007), reflexivity tends to be used in three ways: to indicate the process of making a response to a particular context, and subsequent choices for future action; a self-critical questioning of the sources of power and knowledge; and with reference to the role of emotions in social work practice. Practices in social work education probably most closely approach the concerns of transformative learning when critical reflection “focuses on change in individuals... linked to an agenda for social change through collective action” (D’Cruz et al, 2007, p. 87).

It is in this sense that critical reflection emerges as a useful tool in attempting to promote an ecological consciousness. The arguments of ecological alienation point to the stubborn persistence of limited and distorting views of humans’ relationships with the non-human world. Increasingly, it is recognised that social work as a profession, while claiming to be primarily concerned with ‘person-in-environment’ has actually adopted a narrowly social understanding of environment, one which tends to exclude the non-human world. Facilitating transformative processes through critical reflection is an important part of the pathway towards a changed consciousness, personally and professionally, and this is a pathway that aligns neatly with the use of critical reflection more broadly within social work. As Fook and Askeland (2007) argue, when applied in a social work educational setting, critical reflection

... involves the identification of deep-seated assumptions, but with the primary purpose of bringing about some improvements in professional practice (Fook & Askeland, 2006; Fook, in press). What makes such reflection critical is the focus on power (Brookfield, 1995, p.8) which allows the reflective process to be transformative, especially when linked with the basic ideas of critical theory (Fook, 2002, pp.40–41). In this latter sense, critical reflection must incorporate an understanding of personal experiences within social, cultural and structural contexts (p. 521-522).

A wide range of specific strategies has been employed in attempts to facilitate and foster critical reflection in social work education. Osmond and Darlington (2005), for example, describe a range of techniques for promoting critical reflection, including: the use of reflective questions and prompts; the use of pictorial representations; techniques of thinking-aloud, observation and critical recall; and, knowledge mapping. Of particular interest, perhaps, is the development of reflective writing techniques. Walmsley and Birkbeck (2006) and Rai (2006), for example, discuss the use of autobiographical writing as an exercise in promoting critical reflection about students' values and life experiences. These authors argue that such an approach can be highly effective and deeply powerful, but is predicated on the existence of trust between students and educators.

In a stand-alone unit exploring the links between social and environmental issues, social work students are challenged to use reflective, autobiographical writing, amongst a number of other strategies, to explore their own relationships with the non-human world. For many students this task represents the first time that they have been actively engaged in considering this relationship and the outcome is often a profound questioning of long-held and previously unexamined assumptions about their place in the natural world. The recognition of a limited personal worldview mirrors the realization of the narrow and limited perspective traditionally promoted by the profession itself, and in both cases opens a door to considering how alternative worldviews, based on an expanded ecological consciousness, might lead to both personal and professional transformations.

The experiences of students engaged in these processes suggests that the development of reflective techniques holds great potential within social work education and more widely, to contribute to transformative processes and to expanding students' ecological consciousness.

The Workshop

In this workshop, the facilitators present a number of specific tools designed to promote critical reflection, which they have used successfully in their own teaching over many years. These include, amongst others, moral storytelling, values identification, time-lines, ecological autobiographies, genograms and eco-maps. In particular, these tools have been used to address the issue of ecological alienation and to call students' attention to their relationships with the natural world. The tools, the rationale behind their use, and their transformative potential are described, illustrated by examples drawn from the facilitators' own experience. The workshop has been designed as an experiential session, with participants given the opportunity to engage in critical reflection using a number of these different techniques.

On conclusion of the workshop, participants will have an increased awareness of the need to address issues of ecological alienation; knowledge of a number of specific tools for promoting critical reflection; an experience of using such tools themselves to prompt reflection; and some ideas about how such techniques might be adapted and employed in their own practice contexts.

References

- Berry, T. (1999). *The great work: our way into the future*. Bell Tower: New York.
- Boud, D. E., Keogh, R. E. & Walker, D. E. (1985) *Reflection: turning experience into learning*, London, Kogan Page.
- Clare, B. (2007). Promoting deep learning: A teaching, learning and assessment endeavour. *Social Work Education*, 26(5), 433-446.
- Cranton, P. (2006). *Understanding and promoting transformative learning: a guide for educators of adults*. San Francisco, CA: Jossey-Bass.
- D'Cruz, H., Gillingham, P., & Melendez, S. (2007). Reflexivity: A concept and its meanings for practitioners working with children and families. *Critical Social Work*, 8(1), 1-17.
- Dirkx, J. M., Mezirow, J. & Cranton, P. (2006) Musings and Reflections on the Meaning, Context, and Process of Transformative Learning: A Dialogue Between John M. Dirkx and Jack Mezirow. *Journal of Transformative Education*, 4, 123-139. [online]. URL: <http://jtd.sagepub.com/cgi/content/abstract/4/2/123> (accessed on 29th October 2007)
- EDUCATE (2010) State of the Art of Environmental Sustainability in Professional Practice. In: Altomonte, S. (ed.) *Environmental Design in University Curricula and Architectural Training in Europe*.
- Fook, J., & Askeland, G. (2007). Challenges of critical reflection: 'Nothing ventured, nothing gained'. *Social Work Education*, 26(5), 520-533.
- Fox, W. (2000) *Ethics and the built environment*. London. Routledge.
- Gould, N., & Taylor, I. (Eds.). (1996). *Reflective Learning for Social Work*. Aldershot: Arena.
- Intergovernmental Panel on Climate Change, (2007). *Climate Change 2007: Synthesis*

- Report. Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Core Writing Team, Pachauri, R.K and Reisinger, A. (eds.)]. Intergovernmental Panel on Climate Change: Switzerland.
- Jones, P. (2011). Crisis? Whose Crisis? Transformative learning and the development of ecological literacy in social work education. In M. Alhadeff-Jones & A. Kokkos (Eds.), *Transformative learning in time of crisis: Individual and collective challenges: Proceedings of the 9th international conference on transformative learning, Athens, 27-30 May 2011* (pp. 141-147). Athens, Greece: Hellenic Open University.
- Louv, R. (2008). *Last child in the woods: Saving our children from nature-deficit disorder*. Chapel Hill, NC: Algonquin Books.
- Meadows, D. H., Randers, J., Meadows, D. L. & Meadows, D. H. B. T. L. (2004) *Limits to growth: the 30-year update*. London. Earthscan.
- Mezirow, J. (1990). How critical reflection triggers transformative learning. In J. Mezirow & Associates (Eds.), *Fostering Critical Reflection in Adulthood: A Guide to Transformative and Emancipatory Learning*. San Francisco: Jossey-Bass.
- Mezirow, J. (1991). *Transformative Dimensions of Adult Learning*. San Francisco: Jossey-Bass.
- Mezirow, J. (2000). Learning to think like an adult: Core concepts of transformation theory. In J. Mezirow & Associates (Eds.), *Learning as transformation: Critical perspectives on a theory in progress*. San Francisco, CA: Jossey-Bass.
- Mohammed, M, (2010). 'Climate Change – the role of NGOs in addressing the challenges', AllAfrica.com, viewed 10 September 2011, <http://allafrica.com/stories/201003230210.html>
- Moon, J. A. (2004) *A handbook of reflective and experiential learning: theory and practice*. London. RoutledgeFalmer.
- Napier, L., & Fook, J. (2000). *Breakthroughs in Practice: Theorising Critical Moments in Social Work*. London: Whiting and Birch.
- Nicol, D. E. & Pilling, S. E. (2000) *Changing architectural education: towards a new professionalism*. London. E & FN Spon.
- Osmond, J., & Darlington, Y. (2005). Reflective analysis: Techniques for facilitating reflection. *Australian Social Work*, 58(1), 3-14.
- Pooley, A. (2011). Construction In Crisis? Uncovering Relationships Between Transformative Learning, Environmental Responsibility and an Industry Ready for Change? In M. Alhadeff-Jones & A. Kokkos (Eds.), *Transformative learning in time of crisis: Individual and collective challenges: Proceedings of the 9th international conference on transformative learning, Athens, 27-30 May 2011* (pp. 237-243). Athens, Greece: Hellenic Open University.
- Rai, L. (2006). Owing (up to) reflective writing in social work education. *Social Work Education*, 25(8), 785-797.
- Redmond, B. (2005). *Reflection in Action: Developing Reflective Practice in Health and Social Services*. Aldershot: Ashgate.
- Schön, D. A. (1991) *The reflective practitioner: how professionals think in action*. Aldershot. Avebury.
- Sheppard, M. (1998). Practice validity, reflexivity and knowledge for social work. *British Journal of Social Work*, 28, 763-781
- Spector, T. (2001) *The ethical architect: the dilemma of contemporary practice*. New York. Princeton Architectural Press.
- Stone, M. & Barlow, Z. (2005). *Ecological literacy: Educating our children for a sustainable world*. San Francisco, CA: Sierra Club Books.
- Taylor, E. (1998). *The Theory and Practice of Transformative Learning: A Critical Review*. Ohio: ERIC Clearinghouse on Adult, Career, and Vocational Education.
- Till, J. (2009) *Architecture depends*. Cambridge, Mass. London. MIT.
- Walmsley, C., & Birkbeck, J. (2006). Personal narrative writing: A method of values reflection for BSW students. *Journal of Teaching in Social Work*, 26(1/2), 111-125.
- Yelloly, M., & Henkel, M. (Eds.). (1995). *Learning and Teaching in Social Work: Towards Reflective Practice*. London: Jessica Kingsley.
- Yip, K. (2006). Reflectivity in social work practice with mental-health illness: Promise and challenge in social work education. *International Social Work*, 49(2), 245-255.