

## **FUTURES THINKING**

*the ability to envision scenarios for a more desirable future*

Sue Wayman, University College Plymouth, St Mark and St John

---

The future can't be predicted, but it can be envisioned and brought lovingly into being. Systems can't be controlled, but they can be designed and redesigned. We can't surge forward with certainty into a world of no surprises, but we can expect surprises and learn from them and even profit from them. We can't impose our will upon a system. We can listen to what the system tells us, and discover how its properties and our values can work together to bring forth something much better than could ever be produced by our will alone. (Meadows 2001)

This chapter provides a brief conceptual introduction to Futures Thinking, and offers an insight into the practical implications and applications of this approach for engaging learners in the critical understanding, personal reflection, dialogue and collaborative action required to put futures thinking into practice. Sustainability literacy involves both social and environmental aspects, taking account of the economic, social and environmental power our actions exert through space and time, the historically, socially and culturally diverse ways in which we construct ourselves in relation to natural systems, and how we might learn to live in greater harmony within these systems.

It has been noted that the future is generally a missing dimension in education (Hicks, 2002), to the detriment of individual aspiration and empowerment as well as positive social and environmental change. As Hicks and Holden (1995:24) note:

The images we hold of the future motivate and influence what we choose to do in the present..... Having faith in our abilities may persuade us to reach for greater heights in the future. If life today is not to our satisfaction, for ourselves or others, we may strive to create a better a fairer world in the future.

Educators, while often feeling constrained in their own practice, are politically envisaged as 'best placed to change society, by changing the habits and instilling the ideas of future citizens' (Tripp,1992:22). Educators and learners need to gain space for intuitive and emotional expression, creativity and imagination, vision and action to shape the future on behalf of the rights of current and future generations (Meadows et al 1992; Dator 2002). In some ways, this stance alludes to a 'Futures Movement' (Dator 2002), with an explicit purpose of contributing to social and ecological sustainability, rather than engaging in more technical 'Futures Research' which is often aligned with prediction of social actions in markets. It involves Futures Thinking, drawing on the works of, for example, Jungk, Ziegler, Boulding, Pike and Selby, Slaughter, Dator, and Inayatollah who have developed the field over the past 40 years. It engages learners in 'Futures Studies' that deconstruct and

reconstruct images of the future, helping them to gain skills in working towards scenarios they see as possible and preferable. For Hicks, the crucial pedagogical question educators should ask themselves is how they can engage learners in a process that is both liberating and empowering. He suggests using case studies that embody the visions and actions of sustainability, and processes of 'envisioning' that learners can act on themselves. The idea here is not to be prescriptive but to facilitate learners' choices by directing them to wider philosophical and practical resources.

Futures Thinking for Sustainability is not, however, an easy task for learners to undertake, particularly when, for example, current global environmental predictions paint such a gloomy picture. Couching sustainability in terms of global systems and survival, abstract theories, and persistent structural inequality can overwhelm learners, leading to denial (Tilbury and Wortman 2004) or psychic numbing which disables learners cognitively, affectively and actively. However, we cannot ignore the issues nor indeed afford a 'wait and see' approach. Rather than avoiding this potential disempowerment of learners, it is useful to present a little humility and holism in the learning process, at some point, by offering scenarios that might usefully capture feared and favoured alternatives. Dator (2002) provides the scenarios of 'continuation, collapse, disciplinary society, transformational society – high technology or high spiritual'. These provide a way of facilitating learner's abilities to name and frame their own ideas and concerns, and their positionality and potential for change within such debates. Robertson (1983) uses similar categories - 'business as usual, disaster, authoritarianism, hyper expansionist and humane ecological'. Hicks (1994) offers scenarios entitled 'more of the same, technological fix, edge of disaster and sustainable development'. Learners can use scenarios such as these as starting points, filling in examples of each and debating their desirability before generating and naming their own sets of scenarios.

While change is often discussed as the natural state of affairs for the twenty first century, stability of certain ideas and practices is also the norm, and we need therefore to be critical and look beneath the surface of current orthodoxies, how we internalise and act on them, and which we believe are worth sustaining (see *Values Reflection and the Earth Charter*, this volume). This lies at the heart of critical thinking, which seeks to identify and challenge assumptions, recognise the importance of the social, political and historical contexts of events, interpretations and behaviour, and to imagine and explore alternatives (Brookfield, 1987). The marriage of critical thinking with interpreting images of the future can be a powerful tool for informed purposive action.

Pike and Selby (1999:241) offer an exercise called 'Futurescapes' which provides a way of prompting learners to engage with Futures Thinking for Sustainability. This exercise provides ten scenarios covering a range of topics, for which learners need to decide the probability/improbability, possibility/impossibility and desired/undesired nature of the scenario within their lifetime.

Some example scenarios adapted from 'Futurescapes' (Pike and Selby 1999:241) are given below. In the original, each scenario was followed by the following options for learners to circle: *During my lifetime: possible, probable, improbable, impossible, desired, undesired.*

- Up to half the world's energy will be created through solar, wind and water power, with desert solar panels and offshore wind farms connected to a new international grid.
- There will be a major breakthrough in genetic engineering so that we will have farm animals, looking quite different from those we now know, which will produce a higher yield of meat for less food intake in a shorter space of time.
- In a worldwide attempt to end famine in Africa, all surplus food grown on other continents will be shipped to various African ports and then taken by UN trucks to the towns and villages where the food is needed.
- For sustainability, health and to avoid cruelty to animals, diets around the world will be increasingly based on fresh fruit and vegetables, with only small quantities of high quality, sustainably farmed meat consumed.
- The cost of a new car will be four times higher than today because laws will require manufacturers to pay for the environmental damage caused by making cars.

Envisioning desirable as well as undesirable scenarios is important because, as Hicks (2005) points out, we need to know what we are fighting for rather than just what we are fighting against, and the judgement of scenarios can stimulate learners to articulate their individual, social and environmental concerns and ideals. Timelines (Pike and Selby 1999; Hicks 2002) can facilitate this. The object is to get learners – usually working in pairs to begin with – to draw a timeline (say 2009 to 2050) on one side of which they note the local/global events, trends and issues that they *expect* to unfold, while on the other side they note the future that they *hope* for. Once completed, they are prompted to focus further on their hopes and ideals through an envisioning process. They have to imagine and articulate what proof they would accept that their preferred futures have come into being, what evidence of individual and social change they could see. The images and metaphors they use to represent their ideals can become a useful source for discussion, and a valuable resource for future sessions.

However, while this exercise may stimulate thinking and dialogue, it does not necessarily prompt action for sustainability. Holden (cited in Pike and Selby 1988) suggests the need to incorporate questions about what actions would be required for these ideals to be realised. She cites her work with younger learners where she asked them to compile ten questions they might ask about the future, and ten things they could give up to make the future better. Of course, associating sustainability with the need for altruism could be problematic, particularly when working with learners from disadvantaged groups. Hicks and Holden (1995) note that those with little sense of control over their lives, or those who are in fear of the future tend to adopt an understandable 'live for today' mentality, and therefore security of self identity and self-esteem in education, and empowerment for sustainable living should be the measure by which we evaluate our work. Learners could therefore be asked to imagine ten personally life enhancing ways to fulfil their higher needs in the future without relying on debt and

consumerism (see *Emotional Wellbeing*, this volume). This could help empower learners to align their goals for a brighter personal future with efforts to create a generally more sustainable future.

While exercises such as Futurescapes are quite general in nature, more localised envisioning could help generate concrete and immediate action. One way of facilitating this is to begin with groups of learners describing a utopian vision of a more sustainable school, university, or local community, and giving a fixed date in the future for when this vision becomes a reality, say 2020. They can then use the technique of ‘backcasting’ to describe the policies and programmes that led up to this desirable future along a timeline stretching back to the present. For example, ‘In 2015, the university reached the target of growing 80% of the food consumed in the canteens in community-based permaculture gardens’. In this way, visions are grounded in the local personal and shared experience of the group, and learners gain skills in planning for the future and articulating concrete courses of action.

At heart, Futures Thinking for Sustainability needs, as Pike and Selby (1999) maintain, to be ‘person centred and planet conscious’, promoting learning that is affirmative of self and others, participatory, co-operative and experiential. Only by imagining the future is it possible for learners to extend the realms of possibility for what that future holds. The history of the future is not yet written and, as Inayatullah (2002:110) notes, there are no limits to the growth of our imaginations in all their diversity.

- 
- Brookfield, S. (1987) *Developing critical thinkers*. Milton Keynes: OUP
- Dator, J. (ed) (2002) *Advancing futures: futures studies in higher education*. Westport: Praeger Publishers.
- Hicks, D. (2002) *Lessons for the future: the missing dimension in education*. Oxford: Trafford Publishing
- Hicks, D. and C. Holden (1995) *Visions of the future: why we need to learn for tomorrow*. Stoke-on-Trent: Trentham Books
- Inayatullah, S. (2002) Pedagogy, culture and futures studies. In J. Dator (ed) *Advancing futures: futures studies in higher education*. Westport: Praeger Publishers. pp109-125
- Levitas, R. (1993) The future of thinking about the future. In J. Bird et al. *Mapping the futures: local cultures, global change*. London: Routledge. pp257-266
- Meadows, D. (2001) Dancing with Systems. *Whole Earth*.  
[www.wholeearthmag.com/ArticleBin/447.html](http://www.wholeearthmag.com/ArticleBin/447.html)
- Meadows, D., D. Meadows and J. Randers (1992) *Beyond the Limits to Growth: Global collapse or a sustainable future*. London: Earthscan Publications.
- Orr, D. (1992) *Ecological Literacy: Education and the Transition to a Postmodern World*. Albany: State University of New York Press
- Pike, G. and D. Selby (1988) *Global teacher, global learner*. London: Hodder and Stoughton
- Pike, G. and D. Selby (1999) *In the global classroom*. Toronto: Pippin.
- Tilbury, D. and Wortman, D. (2004) *Engaging people in sustainability*. IUCN  
[www.unece.org/env/esd/information/Publications%20IUCN/engaging%20people.pdf](http://www.unece.org/env/esd/information/Publications%20IUCN/engaging%20people.pdf)
- Tripp, D. (1992) Critical theory and educational research. *Issues in Educational Research*, 2:1:98-112