Emerging Educational Paradigms in the Knowledge Era

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Introduction

Diversity is a central feature of the knowledge era and it provides educators with a variety of challenges. Instead of there being a single 'rule book' and 'map of culture' available upon which to base educational thinking and practice there is instead a pluralistic variety of visions, views, perspectives and paradigms all seeking support and contending for attention. Educators therefore have to be particularly diligent in selecting which sources they give credence to and incorporate in their work.

This brief overview considers the five following examples:

- environmental
- neo-humanist/multicultural/de-colonising
- spiritual
- futures, and
- integral.

Several other candidates were also considered and could be selected for further enquiry. They include:

- post-modern/post-structural
- person-centered
- feminist, and
- neo-Marxist.

Finally it should be noted that the present dominant 'techno-economic' paradigm that currently holds sway over much educational thinking and practice is not objective but, rather, includes a number of specific principles and beliefs. These include:

- a strong belief in the power of science and technology
- a continuation linear progress established by the Western enlightenment,
- the ideology of economic growth, and
- divergence of views about the roles of women, traditional cultures and nature.

It is therefore unlikely that the currently dominant paradigm will remain unchanged.

1. The environmental paradigm

The essence of this approach is (a) a critique of Western models of development and progress and (b) a set of values, ideas, principles and practices that seek to re-dress the growing imbalance between humanity and its environment. Reliable scientific knowledge documents the accelerating impacts of humanity's emergence from hunting and gathering, through agriculture and industrialism to the current era. The essence of this processes was summarised some years ago by Ehrlich and Holdren in the I-PAT

formula: impact = population x affluence x technology.

According to a number of recent perspectives (eg, Meadows 2005; Diamond 2005) [1, 2,] what may be emerging are the consequences of a 'the great forgetting', ie, repression of the knowledge of the complete dependence of humanity on natural processes for its existence and well-being. Subsequent technological developments, however, have screened us from the wellsprings of life and allowed affluent populations in particular to overlook and obscure the underlying realities. The environmental project, therefore, attempts to redress what is seen as an increasingly risky imbalance between humanity and its sustaining environment.

The relevance of this paradigm for the present project is that it draws attention to background factors that tend to be overlooked in educational and bureaucratic contexts, but which clearly require careful attention. One straightforward way of factoring in these issues is to (a) reference representative sources such as those noted above and (b) include a notion of 'the civilisational challenge' as a contextual factor in knowledge era professional development. (The 'civilisational challenge' is a constructive way of summarising key challenges and opportunities facing humankind globally.) [3]

2. Neo-humanist/multicultural/de-colonising

Neo-humanism is both a critique and an extension of the earlier ideology of humanism. In particular it questions the human-centered stance of the latter and also adds a spiritual component that had previously been under-stated or missing. Multiculturalism recognises the legitimacy and vitality of different cultures and seeks to resolve conflicts between them. Efforts to de-colonise are obviously centered in previously colonised countries, or those where colonisation had pervasive effects. They involve attempts to come to terms with social, cultural and historical inequities and to free individuals and societies from the consequences.

Critiques of colonialism derive from such classic works as Fanon's *The Wretched of the Earth*, depicting the struggle for autonomy and freedom in the Algerian context in the early-to-mid 20th century. [4] Such primary sources have been updated and greatly extended by later writers such as Sardar and Nandy, both from SE Asia. [5] Both support the notion of what they term 'the politics of dissent' that, in turn, give rise to 'dissenting futures'. The purpose of dissent in this context is seen as positive. It is to open up alternative spaces in which not only issues of conflict and legitimation can be discussed (and perhaps resolved) but also projects and proposals for alternative futures.

The concept of de-colonising has been applied to the current techno-economic regime that now dominates education. Milojevic views this as a type of colonialism with widespread consequences. Her recent book *Educational Futures: Dominant and Contesting Visions* provides a literate and in-depth overview of this perspective. [6]

Overall these three paradigms overlap and interweave in various ways. The intent behind neo-humanism, multiculturalism and de-colonisation is to open out new arenas of freedom, of human and society possibility, beyond what are seen as oppressive values and structures inherited from earlier times. The relevance for the project is that these perspective provide *an extended vocabulary of possibility* that can inform and enrich the

process of conceptualising options for professional development.

For example, there is a common tendency to view emerging information technologies simply as 'neutral tools' (whereas, in fact, they embody quite specific ideological commitments). The neo-humanist, multicultural and de-colonising approaches, therefore help penetrate this 'veil of neutrality' showing more clearly how technical arrangements are always grounded in underlying social and cultural processes. Overall, therefore, they provide those planning professional development programs with a variety of tools and concepts that help to reveal otherwise hidden, or overlooked, factors.

3. Spiritual

What might be called the spiritual paradigm clearly has ancient roots in different societies. In the West the relevant background 'story' is that the Western enlightenment, later followed by the industrial and information revolutions, progressively overturned the multi-faceted worlds of tradition and, in so doing, 'threw the baby out with the bathwater', ie, discarded and appeared to discredit the capacity for spiritual meaning and experience for several centuries. The result was a loss of cultural coherence, of deep-seated sources of value and ethical standards and, finally, of purpose and meaning in human life and culture.

Responding to this, Rudolf Steiner wrote *Knowledge of the Higher Worlds* in 1923. [7] He was the prime mover of what later became called Steiner Schools, drawing on this work, that of the Theosophists and also the Gnostic traditions that had been suppressed early on by the church. Huxley followed in 1946 with *The Perennial Philosophy* which further set the scene for a re-valuation of the human capacity for spiritual experience and expression. [8] He brought together examples of specific practices – and their results – from various different cultures and, in effect, rehabilitated many of them for contemporary use. Much later Berman's *The Re-enchantment of the World* extended this theme by critiquing 'scientific consciousness' and arguing for what he saw as the re-establishment of a more holistic, spiritually aware, world view. [9]

By the early 21st century, therefore, we are part-way though a process of recovery and renewal in this vital area. The two basic insights offered by contemporary spirituality are that:

- there are both inner and outer worlds, each equally vital, and
- spiritual practice enhances human capability and awareness across the board.

The most well-known and influential figure in this realm is undoubtedly the Delai Llama, and the most articulate current expression of the spiritual paradigm is probably Eckhart Tolle whose book *The Power of Now* is widely read and used. [10] Overall, therefore, the contemporary recovery of the possibilities of spiritual experience provides a thread of continuity that runs through many other paradigms, perspectives and fields. There are many implications for professional development in the knowledge era.

First, the re-assertion of the primacy of an inner world provides a foil to the current preoccupation with materialism and the construction of citizens merely as passive

consumers. It points to active processes of self-constitution and meaning-making that directly contradict the prevailing consumerist and marketing ethos. Second, it supports a view of human and social development that goes beyond a preoccupation with the 'nuts and bolts' of educational systems and the limited goals of behaviourist psychology. In so doing it opens up a wider set of understandings about human development and the goals that can usefully be undertaken by people and organisations. For example, concepts of 'self transcendence' and the ability to take a 'world centric' stance indicate stages of development that actively respond to the global challenges mentioned above. Finally, there is a direct connection between spirituality and wisdom. It follows that a useful way to frame some of these developments is through the notion of a 'wise culture'. The latter can be defined and explored. It can help to correct the current imbalance between technical development and human/cultural development, pointing the way to a more advanced synthesis.

4. Futures

The need and ability to think ahead arose early on in human cultural and biological evolution. But it only emerged as a specific discipline, field or paradigm in the mid 20th century. The reasons for this include both positive and negative factors. In the former case people had realised that to construct or achieve anything meant that it was necessary to think ahead and put in place the necessary means. More ominously, it was also realised that modernity had brought with it quite new threats to human well-being. These included pollution scares, atomic weapons, emerging diseases and the prospect of a series of technological revolutions that provided unlimited instrumental power with no or no corresponding increase in human wisdom. Here were the seeds of future conflicts and dystopian (anti-utopian) futures. As a result, the world picture deteriorated from the mid 20th century onward and, broadly speaking, it has not yet recovered.

Formal futures studies were taken up by organisations such as the Hudson Institute (headed by Herman Kahn, the originator of scenarios) and other large military and commercial enterprises. It also diffused into other niches in civil society and, indeed, education. The first specifically futures education courses were initiated in the USA and Canada in the late 1960s and spread to other countries.

There are two key ways to interpret the interaction of futures and education. One is preoccupied with the future *of* education. The other deals with futures *in* education. Both have their uses. The former deals with forecasts, the extrapolation of various trends (demographic, technological, work functions etc) and attempts to depict educational provision a certain number of years into the future. It appeals to administrators and bureaucrats because it fits in with (ie, does not threaten) their views about 'economic progress', 'human resource planning', 'market reform' and other such instrumental concerns. Fundamentally, the 'future *of*' approach is driven by interests in administration, power and control.

Futures *in* education is a very different matter. It sees 'futures' as *an active principle* within education now and, as such, is driven by progressive interests in 'futures literacy', 'social innovation' and 'alternative futures'. It draws on the body of knowledge and practice that has been generated by 'futures educators' over more than four

decades. The approach is succinctly summarised by an AFI monograph *Futures in Education: Principles, Practice and Potential*. [11] While these two approaches may productively interact they are seldom treated equally. Futures *of* education is the usual focus of formal government-funded projects. Futures *in* education derives from the work of innovators, progressive educators, teachers who are not so much responding to future economic needs as the present needs of young people. The ideal, of course, is to combine the necessary extrapolative work of the first approach with the educationally progressive and well-grounded work of the second.

The significance for the professional development project is at least two-fold. First, the futures in education literature contains many useful elements that could be assessed in relation to the current project. For example, what futures tools, methods, concepts and approaches have specific value and could be incorporated? Second, the futures of/ futures in distinction helps to clarify a central issue. That is, what is the optimum balance between administrative (system oriented) imperatives and those that support and value the human life-worlds of people?

Futures education was described by one Australian observer as 'the most important rising paradigm in education'. The reason given for this view was that 'it addresses much of the ambivalence of post-modernism and focuses on pro-active strategies that attend to the imperatives facing our world.' [12] Yet when conceived of merely as curriculum content, futures education runs into an immediate and well-known problem: how to find room in a crowded curriculum? The way around this is to see the approach as, indeed, a paradigmatic influence that acts as *a dynamic principle within education at all levels*. In this way the wider implications open up for professional development and systemic innovation in areas like environmental scanning, strategic intelligence and social foresight. [13]

In those cases when futures in education is seen as a concern, it may be marginalised by education systems that are driven, at base, by the imperatives of short-term political thinking and mainstream economics. On the other hand, equipped with an appreciation of the viability of well-grounded futures work, the project can be better equipped to resist the sometimes powerful pressures to conform.

The most productive approaches allow for *futures work across multiple domains*. This includes the administrative heartland of educational systems where the clear perception of an underlying contradiction can open up new options. If it is true that all education is 'for the future' then it follows that the systems created to administer that social responsibility need to learn how to deal with the present implications of emerging futures (ie, phenomena clearly disclosed to adequate forward views). At present, however, business and commerce tend to take the lead by making their own (highly selective) use of futures capabilities and methods. Education systems currently lack the capability to evaluate the relevance of forward looking capabilities that would, in time, allow them to become more proactive and futures-responsive.

A project based on the notion of a 'knowledge era' therefore can decide to what degree it will challenge conventional thinking and practice. One option is to make the case for the development of 'strategic foresight' in the context of vocational education. [14]

5. Integral

The paradigms outlined thus far are each limited in various ways to certain domains, knowledge interests, methods and so on. By contrast, the integral paradigm covers much more territory in breadth and depth. It is a highly significant development in the structure of knowledge and disciplinary development generally. Why is this?

In earlier times questions of inter-, and trans-disciplinarity were complex, contested and, in many cases, irresolvable. How one saw, acted, proceeded, depended largely upon where in the web of knowledge one stood. One's 'map of reality' was largely based on one's discipline. Yet a number of writers detected similarities in the basic structures of various fields of knowledge. One of these was EF Schumacher; another was Arthur Koestler. The latter coined the term 'holons'. (A holon is an entity which is both a whole and a part of something else.) For several years these perceptions languished until they were re-worked and extended by Ken Wilber. [15] The latter has developed a useful way of recognising a variety of paradigmatic types of, and approaches to, knowledge.

Wilber proposed the use of a four quadrant device, each of which provides a 'window' into a different world of reference. The quadrants are constructed through simple distinctions between, on the one hand, inner and outer perspectives and, on the other, individual and collective ones. This generates four clearly defined areas, each with its own sequence of development leading from simple to more complex structures. Koestler's insights are up-graded and re-applied on a much larger scale. From here Wilber has developed what he has termed an 'integral operating system' (covering: states, stages, lines, levels and perspectives). This is clearly not the place to go into these terms in any depth. The point is that the integral approach developed in a rapidly growing knowledge community, makes it possible to:

- associate different ways of knowing with different phenomena and fields;
- show where each of these 'fits' in a wider pattern;
- pay due respect to the achievements of people in many different fields; and
- provide a way of understanding and resolving paradigm conflicts.

The two key principles of integral thinking are:

1. 'everyone is right', and
2. 'transcend and include'.

The first means that different knowledge claims and methods can each be recognised and valued for what they, and they in particular, disclose and contribute to the overall sum of human knowledge. The second suggests that, in any field, the move from one level to the next involves a structurally similar process: the earlier stage is transcended but not left behind because it is 'included', part of, the subsequent stage.

The integral paradigm is still in process of development. Yet at this early stage several things are evident. First, we have access to a method for adjudicating different knowledge claims that is fair to each. Second, different fields of knowledge are now being viewed, approached and worked in from an integral viewpoint. Therefore many of the earlier problems of achieving comparisons between different fields are being

resolved. Third, the suggestion that 'interior' approaches are co-equivalent with 'exterior' ones serves to re-balance maps of knowledge that had constructed exteriors (eg, science and technology) as authoritative and interiors (eg, spirituality and human/social development) as inferior and less worthy of attention.

An implication of the integral paradigm is that it helps us to see how different types of knowledge disclose different aspects of the world. In so doing it has recovered the possibility of a 'grand narrative', or over-arching meta-perspective where different types of knowledge can be seen to fit into a larger pattern. That is why integral thinking and methods are now being taken up in various fields, including futures and education.

The integral paradigm has a number of implications for professional development in the knowledge era. For example, it offers the project a number of powerful tools for (a) understanding or reviewing its central priorities and tasks and (b) using the four-quadrant matrix as a checking device. In summary, the perspective offers assistance in the process of:

- mapping domains of knowledge and action involved in professional development;
- viewing professional development itself from an integral perspective;
- structuring the enquiry in a balanced way (eg, interiors and exteriors); and
- developing a more systematic framework of enquiry and action.

References

1. Meadows, D., Meadows, D. & Randers, J. *Limits to Growth – the 30 Year Update*, London, Earthscan, 2005. Diamond, J. *Collapse – How Societies Choose to Fail or Survive*, London, Penguin, 2005. In the view of these writers the combined impacts of humanity upon the global environment have sparked a crisis in the relations between them. Such sources provide intelligent overviews of the issues involved and clearly demonstrate why this paradigm has such power with significant sections of the population (but not business and government).
2. Lowe, I. *A Big Fix – Radical Solutions for Australia's Environmental Crisis*, Melbourne, Black Inc, 2005. NB. This is possibly the most succinct and useful recent Australian source on this subject.
3. Slaughter, R. *Futures Beyond Dystopia – Creating Social Foresight*, London, Routledge, 2004. See especially the Introduction and Preface at http://www.foresightinternational.com.au
4. Fanon, F. *The Wretched of the Earth*, London, Macgibbon & Kee, 1965.
5. Sardar, Z. (ed) *Rescuing All Our Futures*, London, Adamantine, 1999. Nandy, A. Traditions, Tyranny and Utopias, New Delhi, OUP, 1992.
6. Milojevic, I. *Educational Futures – Dominant and Contesting Visions*, London, Routledge, 2005.
7. Steiner, R. *Knowledge of the Higher Worlds and its Attainment*, London, Anthroposophic Press, 1923.
8. Huxley, A. *The Perennial Philosophy*, London, Chatto & Windus, 1946.
9. Berman, M. *The Re-enchantment of the World*, New York, Cornell Univ Press, 1981.
10. Tolle, E. *The Power of Now*, Sydney, Hodder, 2001. Also *A New Earth*, Melbourne, Penguin, 2005.

11. Hampson, G & Gidley, J. The Evolution of Futures in School Education, *Futures* 37, 4, 2005 pp 255-270. Also Gidley, J. (et al) *Futures in Education – Principles, Practice and Potential*, Melbourne, AFI Monograph 5, 2004.
12. Inglis, P. QUT, 1999.
13. Slaughter, R., 2004, op cit.
14. See Masters of Management Strategic Foresight, Faculty of Business and Enterprise, Swinburne University of Technology. http://www.swin.edu.au/agse/courses/foresight/index.htm
15. Wilber, K. A *Theory of Everything*, Boston, Shambhala, 2000.

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