

# Educational Policy Futures

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Miranda: "Oh brave new world that has such people in it."  
Shakespeare, *The Tempest* (ca. 1611)

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## 1. Introduction: Why Educational Policy Futures?

There is always the temptation to think that the point, which we occupy historically, is a period of transformation and unprecedented change. This prevailing ethos, since Baudelaire, at least in aesthetic terms, is a self-constituting moment of modernity. Yet there are some signs that there are some very powerful forces at work reshaping advanced liberal societies - our normative orientations, our subjectivities and our institutions. These forces have been encapsulated in handy slogans such as "postmodernity", "globalisation", "reflexive modernisation", "postindustrialisation", "postmodernisation" and the like (e.g., Touraine, 1974, Lyotard, 1984; Beck, 1992; Beck et al, 1992; Castells, 2000). Many of these developments focus on the importance of changes to the organisation of knowledge, the development of new forms of communication, and the centrality of knowledge institutions to an emerging info-capitalism. Often these epithets are conceptualised in metaphors such as the "information society", "learning society" or the "knowledge economy" and often work as official policy metanarratives to both prescribe and describe futures (Peters, 2001).

What is clear from these various theoretical descriptions of the futures we face is that "knowledge" and "learning" are central both to modes of production and social organisation. "Knowledge" and "learning" also have undergone certain technical and social transformations as advanced societies enter the networked global

knowledge economy and the same forces of change have begun to transform traditional "knowledge institutions" such as universities and schools. This paper maps the emergent field of educational policy studies. First, it discusses the futures of education in relation to the question of globalisation. Second, it comments on the discourses of the knowledge economy as an example of futurology. Third, it discusses futurology in terms of scenario planning and foresight, before, finally, examining two examples of futures research in education.

## 2. Globalisation and the Futures of Education

Fundamental to understanding the new global economy has been a rediscovery of the economic importance of education (Papadopoulos, 1994: 170). The OECD and the World Bank have stressed the significance of education and training for the development of "human resources", for upskilling and increasing the competencies of workers, and for the production of research and scientific knowledge, as keys to participation in the new global economy. Both Peter Drucker (1993) and Michael Porter (1990) emphasise the importance of knowledge - its economics and productivity - as the basis for national competition within the international marketplace. Lester Thurow (1996: 68) suggests "a technological shift to an era dominated by man-made brainpower industries" is one of five economic tectonic plates, which constitute a new game with new rules: "Today knowledge and skills now stand alone as the only

source of comparative advantage. They have become the key ingredient in the late twentieth century's location of economic activity."

Equipped with this central understanding and guided by theories of human capital, public choice, and new public management, western governments have begun the process of restructuring universities, obliterating the distinction between education and training in the development of a massified system of education designed for the twenty-first century.

Today the traditional liberal ideal of education is undergoing radical change. In short, as the knowledge functions have become even more important economically, external pressures and forces have seriously impinged upon its structural protections and traditional freedoms. Increasingly, the emphasis in reforming educational institutions has fallen upon two main issues: the resourcing of research and teaching, with a demand from central government to reduce unit costs while accommodating further expansion of the system, on the one hand; and changes in the nature of governance and enhanced accountability, on the other.

In the post-war period, and especially since the 1980s, national education systems have experienced a huge growth in both participation and demand, leading to the phenomenon of "massification". This growth is, in part, the result of demographic changes, but also of deliberate policies designed to recognise and harness the economic and social importance of "second chance" education and "lifelong" education. In a competitive global economy the accent has fallen on the development of human capital. Educational institutions have become more market-oriented and consumer-driven as a consequence of funding policies designed to encourage access at the same time as containing government expenditure. As a result, the costs of education in many countries has been transferred to the students themselves or their parents and governments have moved away from the premises of universal provision to favour targeting as a means of addressing questions of equity of access.

In some OECD countries there have been strong moves to change both the size and com-

position of governing bodies, from a fully representative stakeholders or "democratic" model to one based upon a board of directors, modelled on the private corporation. Enhanced accountability arrangements, influenced by managerialism, have followed the principles of New Public Management, designed not only to improve allocative and productive efficiency but also to create incentives to pass costs on to government and consumers.

National education systems in the western world have had to face external pressures, which come with increased access, "lifelong learning", continuing reductions in the level of state resourcing (on a per capita basis), and greater competition both nationally and internationally. Both tertiary and secondary education systems in some OECD countries have been incrementally privatised: a regime of competitive neutrality has increasingly blurred the distinction between public and private ownership; the introduction user-pays policies has created a consumer-driven system; and recourse has been made to various forms of contract including "contracting out" and the institution of performance contracting. Privatisation has involved reductions in state subsidy (and a parallel move to private subsidy), reductions in state provision, and reductions in state regulation.

In addition, educational institutions like other parts of society and economy, face the challenges inherent in the new communications and information technologies (C&IT) which, effecting a shift from "knowledge" to "information" and from teaching to learning, threaten to further commercialise and commodify the university, substituting technology-based learning systems for the traditional forms of the lecture, tutorial and seminar. The introduction of technology-based learning systems is blurring the boundaries between on-site and distance learning. It is transforming the nature of scholarship and research, and brings in its wake many problems for reconceptualising academic labour. Some policy-makers see C&IT as the means by which the problem of growth and expansion in age of steadily reducing state subsidy (and unit costs) can be overcome. The virtual university, the virtual classroom and the virtual laboratory

are heralded by what I shall call the technotopians as the answer (see Peters & Roberts 1998).

Some of the main trends facing education, together with the pressures they bring to bear, are summarised in Figure 1.

## Figure 1

### Main Trends and Pressures Facing Education

#### 1. Globalisation and increasing competition

- Increased globalisation (as world economic integration).
- Increased levels of national and international competition.
- Increased power and importance of global and multinational corporations.
- Increased importance of research to global multinationals.
- Importance of regional and international trade and investment agreements.
- The growing economic and political importance of the Asian economies, including China.

#### 2. Public sector changes

- Declining socio-political priority of education as an entirely state-funded activity.
- Corporatisation and privatisation of the public sector.
- Greater interpenetration of public and private enterprises.
- Growth of managerialism (New Public Management) and new contractualism.
- Localisation and autonomy: Decentralisation, devolution and delegation of authority to local communities and government agencies.
- Demands for increased efficiency and accountability.

#### 3. Increasing importance of knowledge

- Increasing economic, social and cultural importance of knowledge.
- Commodification and mercantilisation of

knowledge.

- Increasing role and importance of telecommunications and information technologies.
- New political, legal and ethical problems of "information economy" (e.g., intellectual property, copyright, plagiarism).

#### 4. Employment

- Changing nature of advanced economies to knowledge-based industries.
- Changing structure of labour market (e.g., casualisation, feminisation of workforce).
- Demand for highly skilled technically competent workforce with an emphasis on generic and transferable "core" skills.

#### 5. Education policy

- Increasing multicultural and international nature of societies and education institutions.
- Increased demand from a highly diversified, "massified", student population.
- Need for lifelong learning and "second chance" education.
- The vocationalisation of education through partnerships with business and the promotion of entrepreneurial culture.
- Erosion of State education by non-traditional providers.
- Individualisation and customisation of programmes for learners.

These trends are, of course, very much-interrelated phenomena and each one by itself represents a significant level of political-economic complexity. Considered together, the whole is both uncertain and unpredictable. Certainly, one can say the future has not been "written upon" or determined. To briefly illustrate the level of complexity I will schematically review the way the UK review of tertiary education - the Dearing Report (1997) (named after its chairman, Lord Dearing) - elaborates the implications of globalisation for higher education.

## Figure 2

### Globalisation as World Economic Integration

#### *Main Causes*

- technological changes in telecommunications, information and transport
- the (political) promotion of free trade and the reduction in trade protection

#### *Main Elements*

- the organisation of production on a global scale
- the acquisition of inputs and services from around the world which reduces costs
- the formation of cross-border alliances and ventures, enabling companies to combine assets, share their costs and penetrate new markets
- integration of world capital markets
- availability of information on international benchmarking of commercial performance
- better consumer knowledge and more spending power, hence, more discriminating choices
- greater competition from outside the established industrial centres

#### *Consequences for the Labour Market*

- downward pressure on pay, particularly for unskilled labour
- upward pressure on the quality of labour input
- competition is increasingly based on quality rather than price
- people and ideas assume greater significance in economic success because they are less mobile than other investments such as capital, information and technology
- unemployment rates of unskilled workers relative to skilled workers have increased
- more, probably smaller, companies whose business is knowledge and ways of handling knowledge and information are needed

#### *Implications for Higher Education*

- high quality, relevant higher education provision will be a key factor in attracting and anchoring the operations of global corporations
- institutions will need to be at the forefront in offering opportunities for lifelong learning
- institutions will need to meet the aspirations of individuals to re-equip themselves for a succession of jobs over a working lifetime
- higher education must continue to provide a steady stream of technically skilled people to meet needs of global corporations
- higher education will become a global international service and tradable commodity
- higher education institutions, organisationally, may need to emulate private sector enterprises in order to flourish in a fast-changing global economy
- the new economic order will place a premium on knowledge and institutions, therefore, will need to recognise the knowledge, skills and understanding which individuals can use as a basis to secure further knowledge and skills
- the development of a research base to provide new knowledge, understanding and ideas to attract high technology companies (Source: Developed from Dearing (1997), "The Wider Context". Available at: <http://www.leeds.ac.uk/niche/index.htm>).

Clearly, the Dearing Report recognises globalisation as a major influence upon the UK economy and the labour market with strong implications for higher education. Analysing the Dearing Report it is possible to talk of the globalisation of tertiary or higher education, according to three interrelated functions: the *knowledge* function, the *labour* function, and the *institutional* function. We can talk of the primacy of the knowledge function and its globalisation, which has a number of dimensions: knowledge, its production and transmission or acquisition, is still primary as it was with the idea of the modern

university, but now its value is legitimated increasingly in terms of its attraction to and service of, global corporations. The globalisation of the labour function is formulated in terms of both the production of technically skilled people to meet the needs of global corporations and the ideology of lifelong learning, where individuals can "re-equip themselves for a succession of jobs over a working lifetime". The institutional function is summed up in the phrase "higher education will become a global international service and tradable commodity". The competitive survival of institutions is tied to the globalisation of its organisational form (emulating private sector enterprises) and the globalisation of its "services". Clearly, with this function there are possibilities for the emergence of both a closer alliance between global corporations and universities, especially in terms of the funding of research and development, and, in some cases, the university as a global corporation. The latter is a likely development with the world integration and convergence of media, telecommunications and publishing industries.

The developments described here under the banner of globalisation which accentuate the primacy of knowledge, are further underwritten by recent advances in so-called "growth theory". Neoclassical economics does not specify how knowledge accumulation occurs. As a result there is no mention of human capital and there is no direct role for education. Further, in the neoclassical model there is no income "left over" (all output is paid to either capital or labour) to act as a reward or incentive for knowledge accumulation. Accordingly, there are no externalities to knowledge accumulation. By contrast, new growth theory has highlighted the role of education in the creation of human capital and in the production of new knowledge. On this basis it has explored the possibilities of education-related externalities. In short, while the evidence is far from conclusive at this stage there is a consensus emerging that (i) education is important for successful research activities (e.g., by producing scientists and engineers), which are, in turn, important for productivity growth, and (ii) education creates human capital, which directly affects knowledge accumulation and therefore produc-

tivity growth (see Report 8, "Externalities in Higher Education", Dearing, 1997).

### 3. The Knowledge Economy and the Discourse of Futurology

In the attempt to re-position and structurally adjust their national economies to take advantage of the main global trends, British, Australian and New Zealand governments have begun to recognise the importance of education, and especially higher education, as an "industry" of the future. There is an emerging understanding of the way in which education is now central to economic (post)modernisation and the key to competing successfully within the global economy. This understanding has emerged from the shifts that are purportedly taking place in the production and consumption of knowledge which are impacting on traditional knowledge institutions like universities.

#### Shifts in the Production and Legitimation of Knowledge

The role of the university is undergoing a transition in late modernity as a result of structural shifts in the production and legitimation of knowledge. The older goal of the democratisation of the university has now been superseded by new challenges arising from the dual processes of the globalisation and fragmentation of knowledge cultures. These arise from the following developments:

1. the separation of knowledge (research) from the post-sovereign state that no longer exclusively supports Big Science;
2. the rise of new regulatory regimes that impose an "audit society" on the previously autonomous society;
3. a separation of research from teaching (education);
4. the decoupling of knowledge from society and the replacement of the public by target constituencies;
5. the functional contradiction between science and economy in the increasing specialisation of knowledge and the decline in occupational opportunities;

6. the de-territorialisation of knowledge as a result of new communication technologies and knowledge flows;
7. the crisis of scientific rationality under conditions of the "risk society", reflexivity and the new demands for the legitimization of knowledge.

Source: Delanty (1998)

Senior managers and policy analysts have begun to develop over-arching concepts or visions of the future as a method of picturing these changes. Thus, the terms "information society" (which has been around since the late 1960s) and "global information economy" abound in policy documents. More recently, the terms "knowledge" and "learning" have been moved to centre stage by those reviewing higher education. Thus, the Dearing Report uses the central concept of the "learning society" to interpret the likely impact of imminent global trends on the national economy and, accordingly, to reform higher education.

The discourses of the knowledge economy and other futurist discourses are often given a certain shape in relation to education, science and technology planning and policy through the development of futures studies.

#### 4. Futures Studies Scenario Planning and Foresight

Futures Studies is a relatively new constellation of fields and disciplines that address the impact of world trends and develop visions of the future with the idea of bridging business, science and technology and government. This new area has had a strong impact recently on policy in its two predominant forms: scenario planning and foresight. Much of the policy impetus in this area has come from business experts rather than educational futurists (e.g., Hicks & Slaughter, 1998) who, I would argue, are better informed, more critical and also more sensitive to educational issues. Slaughter's (2002) approach to Futures Studies as a discipline provides important foundations and a critical orientation based, for instance, on the understandings: that neither discourse nor technologies are neutral, that progress is a contestable term; that meaning is

negotiated; that Future Studies must adopt a reflexive posture; that narratives are "powerful explanatory devices" that require interpretation.

Scenario planning has emerged during the past forty to fifty years as a generic technique to stimulate thinking about the future in the context of strategic planning (Cowan 1998). It was initially used in military planning, and was subsequently adapted for use in business environments (Wack 1985a, 1985b; Schwartz 1991; van der Heijden 1996) and, most recently, for planning political futures in such countries as post-apartheid South Africa, Colombia, Japan, Canada, and Cyprus (Cowan 1998).

Scenarios are succinct narratives that describe possible futures and alternative paths toward the future based on plausible hypotheses and assumptions. The idea behind scenarios is to start thinking about the future now in order to be better prepared for what comes later. Proponents of scenario planning make it very clear that scenarios are not predictions. Rather, they aim to perceive futures in the present, to rehearse possible future and to ask "what if" questions. In this sense scenario planning is based on an imaginative kind of learning.

Scenario planning is very much about challenging the kinds of mindsets that underwrite certainty and assuredness and, therefore, is about re-perceiving the world and promoting more open, flexible, proactive stances toward the future. As Cowan and colleagues put it, the process and activity of scenario planning is designed to facilitate conversation about what is going on and what might occur in the world around us so that we might "make better decisions about what we ought to do or avoid doing" (1998:8). Developing scenarios that perceive possible futures in the present can help us "avoid situations in which events take us by surprise." They encourage us to question "conventional predictions of the future," help us to recognize "signs of change" when they occur, and establish standards for evaluating "continued use of different strategies under different conditions." Most important, they provide a means of organizing our knowledge and understanding of future environments within which the decisions we take today will be played out.

Within typical approaches to scenario planning a key goal is to aim for making policies and decisions now that are likely to prove sufficiently robust when they are played out across several possible futures. Rather than predicting the future, a range of possible futures are entertained and policies and decisions in the "now" are framed that will optimize options and outcomes no matter which of the anticipated futures eventually pans out (most approximately).

Hence, scenarios must narrate particular and credible worlds given forces and influences currently evident and known to us that are likely to steer the future in one direction or another. A popular way of doing this is to bring together participants to the present policymaking or decision-making exercise and have them frame a focusing question or theme within the area they are concerned with. If, for instance, our concern is with designing current courses in literacy education and technology for in-service teachers in training, we might frame the question of what learning and teaching of literacy and technology might look like in educational settings for elementary school-age children fifteen years hence.

Once the question is framed, participants try to identify driving forces they see as operating and as being important in terms of their question or theme. When these have been thought through participants identify those forces or influences that seem more or less predetermined: that will play out in more or less known ways. Participants then identify less predictable influences, or uncertainties: key variables in shaping the future that could play out in quite different ways, but ones for which we genuinely can't be confident one way or another about how they will play out. From this latter set, one or two are selected as "critical uncertainties" (Rowan and Bigum 1997, 81). These are forces or influences that seem especially important in terms of the focusing question or theme but that are genuinely up for grabs and unpredictable. The critical uncertainties are then dimensionalized by plotting credible poles: between possibilities that, at one pole are not too bland and, at the other, not too off the wall. These become raw materials for building scenarios: accessible, catchy, but punchy and fruitful stories about

which we can think in ways that suggest decisions and policy directions now.

Foresight planning is often conceived as a future-oriented public discussion designed to encourage a consensus among various sector groups concerning a "desirable future". The exercise is based on a notion of foresight, which is neither a form of prediction or planning but rather an analysis of global trends, how they will affect us and how (given our resources) we might take advantage of them.

Foresight planning, typically, tends to link government investment with the rise of the knowledge economy. Typically, the path by which this will be achieved is seen as an active process that recognises four key imperatives. I draw an example from New Zealand's Foresight Project merely to illustrate the approach, although its success has been questioned:

- The focus on the future must not be constrained by what we have been doing in the past.
- Technology (in its broadest sense) is a key driver for the knowledge revolution. It will have wide-ranging implications for the structure of society and the way in which we deal with environmental issues.
- A globalised economy requires us to be internationally competitive.
- The Government's strategic investment in public good science and technology must be used effectively to underpin development as a knowledge society

(The Foresight Project, <http://www.morst.govt.nz/foresight/front.html>)

Foresight planning is used to underpin the comprehensive review of the priorities for public good science and technology. It is claimed that while the future is not entirely predictable, there are trends, which are presently unfolding that, must be taken into the foresight process. The Foresight Project in New Zealand specifies seven such trends, including: The Knowledge Revolution; Globalisation; Global Science and Technology Trends; Changing Consumer Behaviours and Preferences; Industry Convergence; Environmental Issues; and, Social Organisation. We are informed that the "knowledge revolution" constitutes a significant global

paradigm shift, which is changing the structure of New Zealand's economy and society. Knowledge is the key to the future because it, rather than capital or labour, drives productivity and economic growth and, unlike either capital or labour, it cannot lose its value, which may even increase with future applications. Knowledge, we are informed, "includes information in any form, but also includes know-how and know-why, and involves the way we interact as individuals and as a community" (MoRST, 1998: 8).

The New Zealand programme is has not really gone anywhere and it has been substantially critiqued (see Peters & Roberts, 1999: 66-73). A better example of the foresight process, although it is not a national commission, is the Australian Foresight Institute (AFI), located at Swinburne University of Technology, Melbourne, Australia. Established in 1999 AFI offers postgraduate programs and research in the area of applied foresight. Its main stated aims are:

- provide a global resource centre for strategic foresight
- create and deliver world class professional programs
- carry out original research into the nature and uses of foresight
- focus on the implementation of foresight in organisations
- work toward the emergence of social foresight in Australia

(<http://www.swin.edu.au/afi/>)

The UK Foresight program was launched in 1994 (<http://www.foresight.gov.uk/>). It states:

The UK's Government-led Foresight programme brings people, knowledge and ideas together to look ahead and prepare for the future. Business, the science base, Government, the voluntary sector and others work through thirteen Foresight panels to think about what might happen in the future and what we can do about it now to increase prosperity and enhance the quality of life for all.

Education, Training and Skills is one of two underpinning themes which all the Panels have been asked to consider. It is vital that people are given every chance through education, training and work to realise their full potential and thus

build an inclusive and fair society and a competitive economy.

The Foresight Education and Training Strategy Group (FETS) is the primary interface between Foresight Panels and the DfEE and their counterparts in Scotland, Wales and Northern Ireland. Its terms of reference are:

- Establish a network of education, skills and training experts on Foresight Panels;
- Co-ordinate briefing for Government and Foresights participants on areas of common interest, both to assist the induction of Panels and on a continuing basis as the Foresight Programme evolve;
- Establish and co-ordinate education, skills and training activities across Foresight panels so that they build on, are informed by, and inform, developments in Government policy;
- Periodically convene a Forum of education and training experts from the Foresights programme to discuss progress and maintain a common agenda;
- Contribute to the development of Foresight findings in education, skills and training and promote their implementation, and;
- Monitor and evaluate the impact of Foresights on education, skills and training.

Various national commissions on the future have been convened with wide ranging briefs (see e.g., Tiihonen, 2000) with varying degrees of success. They tend to identify global trends and challenges that impact locally, and often also help to suggest policy options for best coping with these impacts in terms of local resources.<sup>1</sup>

## 5. Futures Research in Education: Two Examples

In this section I discuss two recent examples of futures research in education. The first comes from the National Educational Research Forum (NERF) and springs from its recent "A Research and Development Strategy for Education: Developing Quality and Diversity" and second, comes from the think-tank, Scottish Council Foundation.

The NERF document describes the steps required to implement its strategy and the first aspect mentioned is a foresight exercise dedicated to education. The Office of Science and Technology current foresight programme includes education as an underlying theme to other panels but NERF's proposed foresight is the first dedicated to education. The document, then describes three components of foresight as (i) extrapolation from existing trends; (ii) speculation; and (iii) 'envisioning'. The report goes on to suggest;

There are two main implications of a dedicated foresight exercise in education for a research and development strategy. First, research will be called upon to inform the foresight process by accurately identifying current trends and by systematically exploring the implications of hypothetical courses of action. Second, we expect that the outcomes of a foresight process will begin to map out a context within which important themes for future research can be identified (pp. 8-9).

The strategy document suggests that such an exercise must be wide-ranging, able to reflect the changing context of education, and that it will require specialists' skills but also must include the broader involvement of different stakeholders. The "Proposal for Foresight in Education" which appears as Annex 2 (pp. 17-19) states the aims of the exercise in the following terms:

- Identify areas for action by different sectors to increase national wealth and quality of life, opportunities and reduce barriers to participation;
- Identify emerging capacity to meet future needs;
- Highlight areas where government and others' action would deliver widespread benefits (p. 17)

The stated aims appear to be an overly technicist and managerialist conception of foresight which is related to the government's priorities, rather than a wider and more critical foresight process able to canvas "blue sky" research, encourage creative and original thinking, and, above all, the need to experiment. The rest of the proposal set out the composition of membership of a panel (of ten) to guide the exercise,

methods of consultation, outputs and timescale.

The Scottish Council Foundation was launched in 1997, on the eve of the establishment of the Scottish Parliament, as an independent non-profit organisation to promote original thinking in public policy, focusing on the themes of health, learning, economy and governance. The foundation states the aim of its project in the following terms:

At a time of great change in the world, Scotland is perhaps uniquely blessed. Scotland is of a size - 5 million people - that experience suggests is ideally suited to making the most of the digital revolution and the new economy. It has a history of invention and creativity second to none. It has a strong sense of identity and a wealth of networks around the world that can be mobilised to get things done. And, since May 1999, it has a set of new political institutions - the Scottish Parliament and Executive - free from the legacy of the past that so many other government machines around the world are struggling to shake off.

It is the project of the Scottish Council Foundation to help make the most of these advantages, to make sure that as the world changes Scotland changes with it -leading rather than following, and to instil in all those we touch a greater sense of what is possible in Scotland. (<http://www.scottishpolicynet.org.uk/scf/about/frameset.shtml>).

The Foundation has produced a bevy of reports on new governance (e.g., e-governance, devolution, building better communities), public health (e.g., social inclusion, food policy), skills and employability (e.g., welfare-to-work), children, families and learning (e.g., family learning), and the economy (digital Scotland, the intelligent economy).

I want to briefly focus on two reports that are related to education. The first is called *Changing Schools: Education in a Knowledge Economy* by Keir Bloomer (2000), followed by an online discussion and a follow-up report by Bloomer (2001), entitled *Learning to Change: Scottish Education in the Early 21<sup>st</sup> Century*. The rise of the knowledge economy looms large in both publications. Something of the tenor of the discussion can be gauged by the core strategic

questions, which, if answered, were deemed to make a difference to the quality of education in Scotland. The questions are:

### Purpose and Values

Can we have a system without a purpose?  
 How do we decide the purpose of the system.  
 And create agreement about values?  
 Can we share a picture of the nature of the human being?

### Responsible Support

Who in society is responsible for education?  
 How to devise a system for 5m learners deciding and getting what they need?  
 Learning Direct  
 What is the appropriate balance between content and processes?  
 What needs disintermediating and why? What needs to change?  
 Education in Continuous Change  
 Who are the drivers of change?  
 How to develop an education system for uncertainty and risk?

### Moving On from Now

How much longer can the status quo remain an option?  
 How do we devise first steps to move on from the current system?

*Learning to Change*, which is available online<sup>2</sup> follows through on the main line of argument based on an analysis of the rise of the knowledge economy. It identifies the main forces for change (Scottish Executive's aims and objective for education, impact of educational technology, brain compatible learning, social inclusion etc.) and changes that are necessary to the curriculum (citizenship, work experience, the school as a brokerage, etc.).

The second report, *Children, Families and Learning: A New Agenda for Education* (Jones, 1999), emphasises shifting the focus in schools policy towards a more holistic concept of learning based on a consideration of when and where we learn, the role of parents and the family, family learning initiatives, new community schools, the impact of technology, and children's participation.

Both reports are innovative and attempt to think outside the traditional circle. They are laudable in their attempt to prepare Scotland for the future and to engage in a consciousness-raising public discussion about the future of education. Yet along with NERF's foresight exercise, the reports suffer many of the difficulties of much literature in this newly emerging field. They lack methodological refinement and sophistication. They are mainstream, narrowly technicist, managerialist or economic, i.e., driven by perceived needs of a changing economy (see Peters, 2001). They are not properly scoped or identified in terms of a medium or long-range horizon. Perhaps, most importantly, they foreclose on the future rather than opening up the possibilities.

In a collection entitled *Global Futures* Jan Pieterse (2000) distinguishes among the mainstream managerial approach to futures based on forecasting and risk analysis contrasting it with critical approaches to futures that are critical of dominant futures reflecting institutional vested interests, and with alternative futures, which seeks to be inclusive without being alarmist. He asserts that there have been many critiques but few constructive proposals, which reflects the political and ideological malaise that has existed since the 1980s. He states:

It would be exciting to see an ensemble of forward-looking and affirmative programmes for futures of social policy, gender, culture, human rights, cities, in a context of proposals for transformation of the world economy, global politics, development politics, international financial institutions and ecological economics (p. xvii).

I agree with Pieterse, yet it is strange to see no mention of education and knowledge in the various proposals and approaches in his collection. Arguably, transformations to education and the organisation of knowledge are at the centre of global futures for many of the reasons mentioned above.<sup>3</sup> Hicks and Slaughter (1998), Hicks (2002) and Inayatullah (2002) adopt critical approaches to educational futures that proceed with a clear awareness of Pieterse's political and philosophical agenda.

## 6. Postscript

The challenge for futures theorists of education is to develop their own theoretical and methodological sophistication. To anchor their views in what I call "the prophets of postmodernity" - that group of philosophers, including Nietzsche, Wittgenstein, Heidegger, Marcuse, Foucault, Lyotard, Arendt, Rorty, among others - who sought to establish new value in what they saw as an impending age of nihilism. In future studies there are a number of scholars who have devoted themselves to educational questions emphasising postmodernity including, Richard Slaughter (1992, 1996), and Sohail Inayatullah (2002). Slaughter (2002), for instance, much to my delight, addresses futures studies in critical terms, drawing on a range of related fields in critical theory, sociology of science and technology, semiotics, environmental planning and the like. Inayatullah (2002) has recently focused on pedagogy and multiculturalism in future studies. In addition, David Hicks (1998, 2002), along with a number of others, has focused on post-modern education in terms of a futures perspective.

In a range of books published over the last decade and drawing principally on the works of Nietzsche, Wittgenstein, Heidegger and the French poststructuralist thinkers I have attempted to provide an introduction in philosophy for what might be called "educational postmodernity".<sup>4</sup> In postmodernity, and in the age of the knowledge economy - one of the aspects of globalisation - education becomes re-profiled in the technical-managerialist discourse, as Heidegger warned us, as a "resource" to be used as part of the standing reserve in the game of national economic competition. In this discourse advances in educational technology and, indeed, in learning and teaching, are advances in the efficiency of resource use. It is against this instrumentalist and technical mainstream vision that critical futures of education in postmodernity must be defined.<sup>5</sup>

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## Appendix

### Appendix: Possible Research Themes

#### 1. *Why Educational Futures? Studying and Preparing for Educational Futures*

- The different purposes of Futures -- to predict, to foresee, to manage, to create.
- Different approaches: Foresight, Forecasting, Futures Research, Futures Studies, Futurology, Futurism, Future Generations, Futuribles, La Prospective.
- Theoretical perspectives on the future: systems theory, chaos, theory, catastrophe theory, complexity theory; globalisation, postmodernity, postmodernism.
- Major Futures thinkers, e.g. Wells, Kahn, Godet, Capra, Henderson, Meadows, Clarke, Boulding, Toffler, Macini, Marien, Bell, Handy, Slaughter.
- Different cultural perspectives on the future and education; cultural attitudes to the future; non-western approaches.
- Concepts of time (linear, cyclical, relative) and history; the nature of change; determinants of change (social, cultural, environmental, social, technological).
- Ethics of educational futures; responsibility for future generations.

#### 2. *Pedagogy, Curriculum Futures and the Organisation of Knowledge*

- Curriculum models; construction of national curricula; curricula and programme experiments.
- New pedagogies; critical pedagogies; alternative pedagogies.
- The changing structure and organisation of knowledge; epistemes; the legitimisation of knowledge.
- Formation of disciplines; emergence of cultural studies, media studies, development studies, etc.
- The concepts of disciplinarity & interdisciplinarity.

#### 3. *Aesthetics and Educational Futures*

- Educational futures in history, literature and the media.
- Images and metaphors of educational futures.

- Educational utopias and dystopias.
- Education and science fiction.
- Futurisms.

4. *Education Futures, the Future of Work and the Knowledge Economy*

- Models of educational modernisation and postmodernisation; "change" and "progress" in history;
- The role of education in modernization theory; human capital theory; education and new growth theory; education as an investment in the self; self-entrepreneurship.
- The changing notion of work; education as preparation for work; skills and key competencies; work and employment; changing patterns of employment, sectorally, internationally. Scenarios for the future of work.
- Work-based learning. Home-learning.
- Restructuring the economy; the knowledge economy; internationalisation and globalisation; national education policies.
- The history of education rights; education and the value of emancipation in Enlightenment thought.

5. *The Future of Educational Governance and Administration*

- International comparisons of experiments in educational administration and governance;
- Decentralisation, devolution and delegation of educational administration;
- charter schools;
- ways of increasing school democracy; increasing parental participation and involvement;
- New Public Management; school vouchers;
- New partnerships with business; competition from non-traditional providers;
- Abolition of local authorities.

6. *Globalisation and the Future of Education*

- The impact of globalisation on education;
- citizenship education;
- education programmes in the EU;
- Competition from non-traditional providers; the future of private schooling

- Education and cultures of consumption; development of post-war youth cultures; sex education; drug education;
- International schools

7. *Educational Futures and the Environment*

- Environmental education;
- The global futures debate, limits to growth versus the resourceful earth, environmental issues, global warming, ozone depletion and pollution, resource shortages and conflicts, energy, water, population,
- Education for sustainability; sustainable development, the gaia hypothesis;
- Education and the built environment;
- Educational architectures.

8. *Educational Futures and the New Information Technologies*

- On-line learning and education;
- Difference between "knowledge" and "information" - the shift from knowledge to information; performative epistemologies;
- Education in a digital age;
- Media philosophy and education;
- Promises of access and inclusion; feminist webzines;
- Electronic texts and libraries; electronic writing; web publishing; electronic pedagogies;
- Virtual technologies and academic labour; the political economy of the virtual university; virtual knowledge institutions;
- The politics of cyberspace; scholarly life in virtual universities; digital multimedia; electronic networks;
- New geographies of learning; distributed learning.

Notes

- 1 For a full list of governmental sites concerned with futures and national commissions see the OECD futures website which also contains think tanks, academic research, associations and journals, at: (<http://www.oecd.org/EN/document/0,,EN-document-779-11-no-23-37760-0,00.html>).
- 2 ([http://www.scottishpolicynet.org.uk/scf/publications/paper18/frameset\\_wide.shtml](http://www.scottishpolicynet.org.uk/scf/publications/paper18/frameset_wide.shtml)).

- 3 See the Appendix to this paper which lists possible research themes in futures research for education.
- 4 See e.g., Peters, 1995; Peters, 1996; Peters & Roberts, 1998, 1999; Peters & Marshall, 1999; Peters, 2001; Peters et al, 2001; Peters & Ghirdelli, 2001; Peters, 2002.
- 5 See the new international online-only journal *Policy Futures in Education* that I established with this in mind: (<http://www.triangle.co.uk/PFIE>).

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