

## Creating Positive Views of Futures With Young People

Richard A Slaughter

### Three cameos

#### 1. The school captain

The Prime Minister and the Opposition Leader are two uninspiring heavyweights slugging away until the final bell on 24 March.

This is not the view of a world-weary voter. It is that of a young woman who would like to see some genuine idealism injected into the Australian political process. - -, 17, school captain of - - - said Mr Hawke and Mr Peacock should pursue some nobler ideals.

'The policies seem to be short term. They're not aiming for the future and they lack a grand vision of what society could be' said Ms -. 'At the moment it's all looking pretty dull. You see a dark tunnel but you need to be able to see some light at the end of that tunnel. Both leaders are biting at each other's necks. They see it as a race, a competition, and they try to make themselves look better by putting the other party down. They're covering up the problems, sweeping them under the mat. We need someone to change things'.

From: Leaders Lack Grand Vision, Says Student, *The Age*, Melbourne, February 27th, 1990

#### 2. A year 9 school dropout

'Graffiti is everything. It is the one way I can really control my parents. If I had the choice of looking at a sex magazine or graffiti photos, I would look at the graffiti all night. Graffiti is all I have. I tried legals but it is nowhere near the same buzz. I went to a pub in - and was amazed how quickly I got accepted and asked to do a panel with some major people. They are my friends...'

'I have two really good lookouts that just watch for me while I panel or piece. I am very, very, careful who I tell about what I do. My parents thought I stopped after the first raid and charges. Now (10 months later and beyond court) they found a note I scribbled on paper and hid in my socks. Mum found it in the laundry and thinks I go bombing. They don't know I panel often. They finally caught on. I sneak out at night. One time I did it and the wind caught the back screen door and Dad got up to fix it and found me missing from my room'.

'When my friend died in a recent car accident, I was very depressed (and left home for four days). This is all I have going for me. I tried to get work with a sign writer but he does not have any opening just now.'

From: Noel Buchanan, graffiti youth worker in Melbourne.

### 3. The Suicide

Teenagers in the developed world are now better off and physically healthier and can look forward to a longer lifespan than their parents...It should be the best of all possible worlds for adolescents. But the opposite appears to be true. The evidence points to a rising tide of unhappiness and serious problems among adolescents in the industrialised countries. Last week, experts from Europe and America grappled with this phenomenon at a conference... (in Switzerland).

Professor Rene Diekstra, a Dutch clinical psychologist, moved the assembly of child specialists with an account of one of his patients, a 12-year-old girl whose parents had divorced. Over the years she had written a 5,000-word diary in which she recorded a high level of emotional distress that the adult world had unconsciously conspired to ignore. She had written in a piece of schoolwork, for example, that she wanted to die; her teacher had written on the bottom: Don't be so silly'.

She had visited her father and on the balcony of his flat slipped her leg over the edge. When he asked her irritably what she was doing, she replied: 'Practicing'. One day she and her mother had a row over her intention to go out on her bike to get a snack an hour before supper.

She went to the top of a block of flats and threw herself off.

From: Teen Age of Despair, Melanie Phillips, *Sunday Age* 22nd November, 1992.

### **Dilemma of the young**

What the above examples show is that young people are growing up and maturing at a time when many of the old certainties have broken down. They have inherited difficulties from the industrial era which has few or no historical equivalents. The term 'global problematique' (or interlocking set of social, economic, political and environmental problems) was coined by the Club of Rome to draw attention to this. More recently the term 'resolutique' has been used to draw attention to possible solutions. However, it's clear that the latter are difficult to find and even more difficult to implement. In the 1990's there is a sense of things falling apart, of a radical loss of certainty and vision.

In this context it is easy to feel cynical, depressed or even fearful. Avoidance strategies are common. Many diversions are available through a range of increasingly compelling media. Yet young people continue to have fears about their own personal future. They worry about unemployment, family breakdown, personal security and overall life prospects. These fears arise in the context of wider concerns about the state of the planet and, in particular, long-term environmental deterioration. Young people are aware, for example, of living through some fairly powerful, often disturbing, historical shifts. For example, sunbathing in Australia is no longer the carefree hedonistic experience it once was. Similarly, the AIDS pandemic has introduced new anxieties into teenage relationships. Such examples are only the tip of the iceberg. At a deeper level, young people know that there is much more to come.

It follows that their fears and concerns should be respected. They are not illusions. On the whole, they are based on reality. However, there are many ways of helping the young move toward more positive, creative and empowering views of futures for themselves and their society. This chapter explores six specific strategies for young people.

### **The problem**

The problem, as outlined above, is that we are living through the interregnum, or gap, between two eras. Donald Schon understood very clearly what this meant. More than two decades ago he described how social systems tend not to move smoothly from one period to another. The old comes apart before the new comes together. However, those trapped in the transition are often unable to grasp the new picture, only the old one that is being lost. Hence there tends to be great anguish and uncertainty for those involved simply because it was the old system which provided the basis for identity and purpose. The era we have left is the industrial era, with its unquestioned belief in material growth, in progress, its scientific and technical optimism, materialism and careless exploitation of natural systems. This world is over - though its effects will continue to be felt for centuries. Yet the era we are moving toward is still taking shape. Many old certainties have gone but, on the whole, they have not been replaced by new ones. The result is a frightening social and spiritual vacuum that is felt, at some level, by everyone.

It's hardly surprising that many young people turn away from uncomfortable realities to a wide range of avoidance strategies. These include: sport, video, TV, drugs, music and a mostly vapid, chronically oppositional, pop culture. Within this glittering arena of media and marketing there are many compelling diversions, but little in the way of penetrating insights into the grounds of the condition experienced by young people during this time. With computer games becoming more sophisticated each year, and the explosion of the Internet, so the technological screen between young people and the world becomes more opaque, more difficult to penetrate or understand. It is a confusing time. Powerful forces are at work within the human system and the wider world, but they are often 'out of sync' and do not add up to a coherent whole. Mystification is rife and many resort to desperate solutions.

One might have expected educators to respond more effectively with this bleak outlook and, to be fair, some have tried. But, for reasons given above, they are up against powerful system imperatives that continue to work in a different direction. While I am keenly aware that many talented and dedicated teachers work hard to serve their student's best interests, they can do little to overturn basic assumptions that are structured within, or inscribed into, educational systems. The latter continue to be driven by the past, focused on the short-term present and unresponsive to the future. Such a stance would be appropriate during settled times. Yesterday's solutions would still apply today. Yesterday's structures would still fit current needs. But in *unsettled* times, when everything is at stake, short-term thinking is very dangerous indeed.

In the early 1990's futures thinking and futures methods are routinely employed in government, commercial and industrial enterprises. Yet, in most cases, educators even at the highest levels not only do not use them, they do not even know about them! While I do not want to paint the entire educational enterprise as a failure, I do believe that it has failed to understand the implications of futures as a principle that lies at its heart. This puts it in a very weak position to deal with the range of futures-related concerns that are now becoming real social crises: drugs, violence, meaninglessness, unemployment and the rest. Basically, the system is ill equipped to deal with such things

because it has metaphorically had its head in the sand for too long. Yet futures concepts, ideas, teaching methods and so on can be implemented quickly and easily once the threshold barriers (mainly of seeing the point of the exercise) are surmounted.

So, in summary, the great problem for young people is that they have been born in a time of transition. They have inherited a culture that is technically powerful but humanly weak and spiritually desolate. It is a 'thin' culture, one which has lost sight of limits, values, meanings, myths, rituals, commitments and principles, all of which are needed for a robust, healthy and wise society. *In the age of 'the fast buck', of compulsive merchandising, legalised insanity, chronic derivative fantasy and the endless fictional rehearsal of disaster, it is growing increasingly difficult to grow up sane.*

### **Six strategies for young people**

Here are six ways of beginning to respond to difficult times. They are explored in more detail below.

- Develop an understanding of the effects of young peoples' media.
- Change fears into motivations.
- Explore social innovations.
- See the future as part of the present.
- Use futures concepts, tools and ideas.
- Design your way out of the industrial era.

#### 1. Understanding the effects of young peoples' media.

Young peoples' media includes books, films, comics, TV and video, computer games, arcade games, fantasy games, simulations, the internet and, before long, virtual reality (VR). While there are many fine books for the young, the decline of print-based literacy is matched only by the rise and rise of the image. We are, as J.G. Ballard has observed, 'obsessed with the image'. And with the advent of cheap TV, video and DVD we have access to a richness and variety of images that is without precedent in all of human history.

In a futures context, three major concerns arise from this media-rich environment. First, representations of futures, whether they are overtly fictional or otherwise, exhibit a familiar and stereotypical constellation of qualities. The first of these is violence. The violence may well emerge from an openly Dystopian context and is the dominating dynamic in very many films, videos, comics and games. Second, 'the future' tends to be represented externally through *the display of things*. That is, computers, mega-cities, robots, space stations etc. As noted above, one must look long and hard to find credible images of people as people (rather than servants of the machine) in these images. The clear message is that such futures are built *externally* though science and technology - rather than through human decisions. This is a spurious and unhelpful view. Third, the future is not seen as a dynamic field of potentials interpenetrating the present but, rather, as a kind of blank screen, somewhere 'out there' upon which contemporary hopes and fears are projected. The array of alternatives that arise from the study of futures and translate into present options and choices, is obscured, and the young are thereby disempowered.

The second concern can be explored through the structuring of categories in futuristic media. That is, the way that basic polarities of life such as good and evil, right and wrong, science and magic, are portrayed. In one study I did of such material, I came to

the conclusion that these important categories were irretrievably scrambled at the epistemological level. As will become clear below, I am not arguing that young people are helpless or incapable of responding. What I am suggesting is that a significant amount of popular culture in these modes is trivial, diversionary and, in the first instance, confusing. There is a *prima facie* case for considering much of this material as detracting from young people's attempts to make sense of the world and to feel at home in it. This contrasts dramatically with the more positive uses of some mainstream literature and, say, traditional fairy stories which arguably rehearsed more viable life strategies.

The point, however, is not to rail against 'the media'. Having outlined the problem we can draw attention to the need for a strategy of response. Part of the problem, perhaps, is that a very great deal of low quality material is experienced by young people with minimal filtering, thus by-passing the critical faculties and going straight into the subconscious. I doubt if anyone knows just what the consequences are - and that alone is cause for concern. Are young people being subtly, and not so subtly, molded in unknown ways? A lot more research is needed before we can be sure of the answer. Yet there may be a surprisingly simple interim solution.

If some of the more questionable material was intercepted before it passed into the subconscious, I have no doubt that most young people would be able to assess its significance, understand its uses and limitations, and begin to develop some critical insight into cultural imaging processes. In other words, parents, teachers and others working with young people should try to ensure that there are plenty of opportunities to process media experiences. This would mean that, for example, TV would stop being 'wallpaper' and be regarded far more critically as the very powerful symbolic medium that it really is (analogous in many ways to a powerful drug) and therefore used with similar attention and care. Early work in this area has shown some promising results.

## 2. Change fears into motivations using the empowerment principle

When the question of attitudes arises, many people tend to think in terms of two polar opposites: optimism and pessimism. This is fine as far as it goes. In general terms it is far better to adopt an optimistic attitude than a negative one. However, optimism and pessimism are too simple to be applied uncritically to futures problems. The fact is that *both terms are ambiguous*. An optimistic person may believe that there is no cause for alarm, when in fact there may be very good cause for it. Similarly, a pessimistic person may get so concerned about a particular problem that they will get up and do something about it. So the important thing is not a person's starting disposition but what (if anything) then follows. *The key to dealing with issues, concerns and fears about futures lies in the nature of the human response*. This is known as 'the empowerment principle', and it is an important part of futures education.

Figure 1 is a matrix that can be used to explore a variety of responses to whatever may be feared. The matrix has two main purposes. The first is to place negative associations in a wider context. The second is to focus attention upon what may be meant by 'high-quality' responses. (See below.) This approach can be used in a workshop situation, as a counseling tool or by individuals working alone. Whatever the method, it is often helpful to begin by listening to the fears or concerns and recognising that they usually have a sound basis in reality. In all but a small minority of cases they are likely to be *rational* responses to a drastically altered world.

**Figure 1**  
**Matrix for Moving from Fear to Empowerment**

	Low quality responses	High quality responses
Acceptance of negative images		
Rejection of negative images		

The next step is for students to hold the images, associations, feelings or responses out before them in a relaxed and non-judgmental way. Four sets of responses are then explored by following the matrix.

1. Accept the possibility that what is feared will come to pass, and explore low-quality responses.
2. Accept the possibility and explore high-quality responses.
3. Reject the possibility with low-quality responses.
4. Reject the possibility with high-quality responses.

The acceptance/rejection distinction is not clear-cut in all cases and can generate ambiguities. In this context, however, these are not important and time should not be wasted on them. The first point is that the exercise generates up to four sets of strategies, which can be compared. Possible solutions emerge across each of the four categories. At this point, further questions arise: what appeared to be the 'best' solutions? What resources, changes, commitments and/or support would be needed to put a preferred strategy into practice?

It may be helpful here to consider some of the criteria that may be applied to decide if a response is 'high-quality' or not. To begin with, they can be seen in a wider context; there is always a wide range to choose from. Second, many fears are overstated. It may be that they can be scaled down and given a less overblown status. Third, fears which are linked to images or concerns about futures are both *provisional* and *negotiable*. They are not set in concrete, but represent opportunities for engagement, choice and purposive action. It's important to note that concerns about the future depend on human vision, perception and understanding. As such, the locus of power lies in people and not in a disembodied vision beyond human influence. Finally, note that a high-quality response is, above all, *creative*. It has the capacity to go beyond the given and break new ground.

Young people who can begin to move away from a preoccupation with optimism or pessimism, who will view their initial responses in a wider context and who will begin to consider the nature and grounds of high-quality responses, will find that they have started to fashion a fundamental and very important shift of perception. It is a shift away from having things happen to one, to a position where one takes greater control and makes things happen. In other words, this is a big step towards personal empowerment.

### 3. Explore social innovations

A social innovation is something that someone has created out of a perceived need. Human societies are made up of countless social innovations. Examples include: courts of law, bike helmets, credit cards, insurance, group therapy, franchising and institutions of foresight.

The best way to begin with young people is to consider local examples of such innovations, and, if possible, to draw on the experience of local people who, perhaps, had a hand in getting them adopted. The actual focus is less important than the principle involved which is that if enough people care about something, there is a good chance that it can be made to happen (or, if appropriate, avoided).

How is it that enough people come to care sufficiently to create a long-term change? Usually it is because one person, or a very small group, made a long-term commitment and worked hard over a period of time to convince others. The big social movements for women's rights, the environment, peace and so on, all started in small ways. But in time they stir governments and alter public perceptions in very major ways. So it is worth taking a close look at such innovations and movements and attempting to understand how they work. It may be a mistake to uncritically support such entities, but it is necessary to make sure that they are included on the significant map of knowledge.

Young people can try out an approach to social innovation easily and safely. There are basically just a few simple steps, as follows.

1. Get informed about something important (environmental scanning).
2. Investigate the topic for a period of time (research).
3. Develop some initial conclusions about it (analysis and reasoning).
4. Discuss these conclusions with advisors (check for safety and appropriateness).
5. Construct a project and present a proposal (project formulation).
6. Expect indifference, opposition etc., but don't give up (social process).
7. Evaluate the outcomes (evaluation).

By following this kind of approach, young people can learn about the ways that societies respond to attempts to change them. They will learn about barriers to change, about the uses of power and authority, the importance of clear thinking and communication skills and so on. But the main thing they will learn is that in a very positive sense, *people can be powerful*. If they decide to do something constructive, and do it carefully, there is a very good chance that their efforts will be rewarded. Such grassroots efforts have the potential to profoundly affect the present and therefore the future also.

### 4. See the future as part of the present

The tenses of the English language create three distinct 'boxes' for past, present and future. They therefore create false boundaries between them and confirm the illusion that they are separate. It is true that they are different, but it is not the case that they are separate. There is a flow of relationships that cannot be separated or assigned to individual 'boxes'. The connections, however, are richer yet since the 'flow' is not all in one 'direction'. For example, hopes or fears about futures may not just affect the present, they may also cause one to reconsider aspects of the past which led in such a direction. Similarly, any projects which one may elect to undertake do not spring fully formed from the present. They arise from the historical and cultural matrix in which we exist. The most important point is that while the body may be constrained within a

fairly narrow present, the human mind and spirit are able to range at will across very broad spans of time and space.

**Figure 2**  
**Past, present and future interactions**

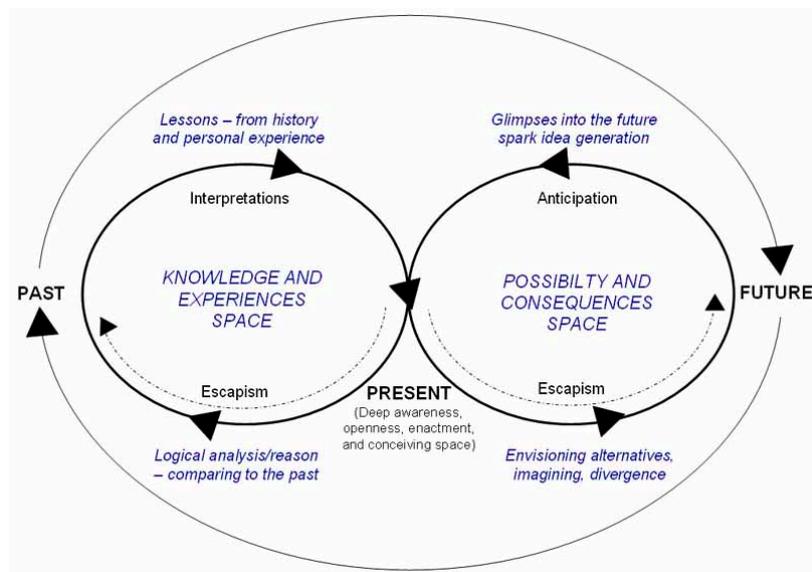


Figure 2 suggests therefore, that the boundaries between past, present and future are, in fact, fluid and open. This means that instead of being 'stranded' in a narrow and restrictive present, there are other creative and cultural choices available. In fact, normal living requires a fluid and easy movement between past, present and future. Only brain-damaged people with impaired memories lack this capacity. They are locked into a moving present that they can neither remember nor foresee. The results are confusing and deeply frustrating.

Two processes are centrally involved in constructing the present. One is the *interpretation* of past experience. The other is the *anticipation* of possible futures. The two processes are not in opposition. One cannot be considered more or less important than the other. They are mutually reinforcing, mutually necessary in supporting normal consciousness. Yet attempts to remain in the imagined past or future for any length of time risk being escapist for one key reason - they fail to re-connect with the present. In this view, futuristic fantasies and historical novels, films and costume dramas may fulfill the same basic function.

It follows that the present is not a fixed period of time: it varies according to perception and need. Yet whatever notion of it is adopted at any time, it is possible to see the present as, in some sense, 'woven' from past and future; that is from memory and prevision, from experience and goals, from identity and purpose. The 'here-and-now' may indeed represent a very restricted span of time. Yet the materials imported into this arena may come from far and wide. In other words, young people need not be, in some sense, 'locked into' a narrow and alienating present. If they will begin to journey more widely into past *and* future, they will discover many of the resources they need to survive and prosper in difficult times.

## 5. Use futures concepts, tools and ideas

To be active in politics one needs a political discourse, in economics an economic discourse, and in futures - a futures discourse. None of these are exclusive. Yet each tends to develop first in a particular context. The most useful linguistic, conceptual and symbolic resources subsequently become public property. This is what is beginning to happen with futures concepts. They may have developed in isolation, but they are now being used more widely.

Futures concepts have been widely overlooked. But they are important because *they provide part of the means by which to consider futures*. Like the language and symbols of any area, they give substance to what may otherwise seem vague and unreal. They provide clarity and definition so that hitherto obscured ideas and possibilities spring into sharper focus. In other words, *they augment the natural capacity of the human brain/mind system and raise its power to engage in futures work to new levels*. (Some examples of futures concepts are given below.) Futures concepts and methods are the most important tools for teaching futures. They are not used merely to forecast or predict 'what will happen' (a self-contradictory enterprise which rules out the active role of humans in creating their history) but, rather, *to elaborate our understanding of futures in the present*. This is a more interesting and educationally productive task. Here are a number of futures concepts and methods in wide use.

### The futures field

It's useful to begin with some kind of 'map' to provide an overview of the field. Using these as starting points, one can begin to locate some of the methodologies, processes and, most importantly, the *people* who work in the field. The work of outstanding individuals represents a legitimate way of introducing futures to students. Clearly this is a multi-disciplinary area so it can take a little time to feel 'at home'. Yet this broad structure gives access to a very wide range of conceptual, intellectual, practical and human resources.

### Alternatives and Choices

These are two key concepts of the field. They suggest that there is no single, deterministic future, but rather a range of options and possibilities that invite a range of human responses. How can one conceptualise alternatives? They emerge from engaging with the subject matter over a period of time, from looking beyond the obvious, from examining assumptions and, perhaps, using some of the major futures techniques, EG, environmental scanning, the cross-impact matrix, cultural critique and the analysis of cycles of change. Since each can be approached at a range of levels, they can all be adapted for educational use. Understanding alternatives creates *a decision context* for considering choices.

### Creating futures

The central point of teaching about futures is to show that we are all involved, all capable of pursuing ends and purposes which lead away from some outcomes and toward others. It is to help individuals feel able to contribute to ends that matter and not to feel intimidated by the vast collectivities of power, prestige and profit that may sometimes seem (but are not) overwhelming.

Futures are scanned routinely and informally by everyone. Futures are scanned routinely and systematically by forecasters and strategic planners. Futures are created or avoided by the sum total of formal and informal processes by which important social decisions are made and acted upon. All these processes can be clarified, studied, subjected to careful and informed analysis. Moreover, *individuals are free to participate in them*. A careful review of the work of citizen action movements shows that governments are often the last to know when a major shift is underway. Many such shifts developed, grew and gained legitimacy because people cared enough to get on with the necessary work. Hence, *there is a notion of active and responsible citizenship at the centre of futures teaching*. It is realised, in part, through simple teaching methodologies, several of which are outlined below.

#### Environmental scanning

One of the keys to implementing foresight is to be sure that one is receiving the right messages from the environment. This means being alert to information about relevant matters. Students can be assigned the task of monitoring specific areas over a period and begin to develop the necessary skills. Clearly there is a tie-up here with other curriculum areas: philosophy, English, media studies and so on. Environmental scanning is an activity that need not remain the province of large organisations. Individuals too can learn some of the skills involved: being alert for precursors (or early signals); sorting information from propaganda; discerning trends; summarising data and keeping it organised in an accessible and usable form. These skills can all be taught and learned in schools and other contexts.

#### Futures wheels

Futures wheels are one of the most flexible and useful tools available. Students begin with a large sheet of blank paper. They ask a 'what if' question: 'What if cars were banned? What if the human lifespan doubled? What if wars ended?' etc. This possible future event is placed at the centre of the paper. The next question is 'If this happens, what would happen next?' In this way, a ring of immediate consequences is placed around the original event. The ring can be extended by considering secondary consequences. And so on. The result is *a pattern of judgements*. The pattern is not 'right' and it is not 'wrong'. It incorporates assumptions, both positive and negative that dictate how the pattern could develop. The futures wheel can be 're-run' according to different assumptions. It can be regarded as an end in its own right, or as a starting point for further work. Often the outer edges of the pattern throw up fresh ideas. They can be created with students of any age and level of sophistication. With very young children teachers can write responses on a wall board. With older people the exercise can be developed and extended in various ways.

#### Critique

The dominant Western/industrial worldview has at least two kinds of major systemic defects of concern to futures educators. One is that underlying assumptions (about technology, growth, progress, the environment etc.) are proving to be wide of the mark. The other is that a number of core meanings and commitments are breaking down. This suggests that attention be paid to major shifts in areas such as: work, leisure, health, defence and, indeed, education. Careful futures work in each of these areas reveals both a loss of coherence and a number of alternative interpretations. Careful attention to what is happening here reveals the grounds of informed optimism via the outlines of a renewed worldview. As this becomes clearer and better understood, so it will be

realised that *no teacher or pupil need ever feel helpless*. In other words, *critical worldview analysis and positive critique leads directly toward empowerment*.

### Acting

One of the commonest responses to futures work is a feeling that the problems of the world are too great to be addressed by individuals. Pupils may see the point of something but they will often respond by saying something like 'OK, but what can *I* do?' That is a legitimate question and every teacher should be able to answer it.

**Figure 3**  
**What can I do?**

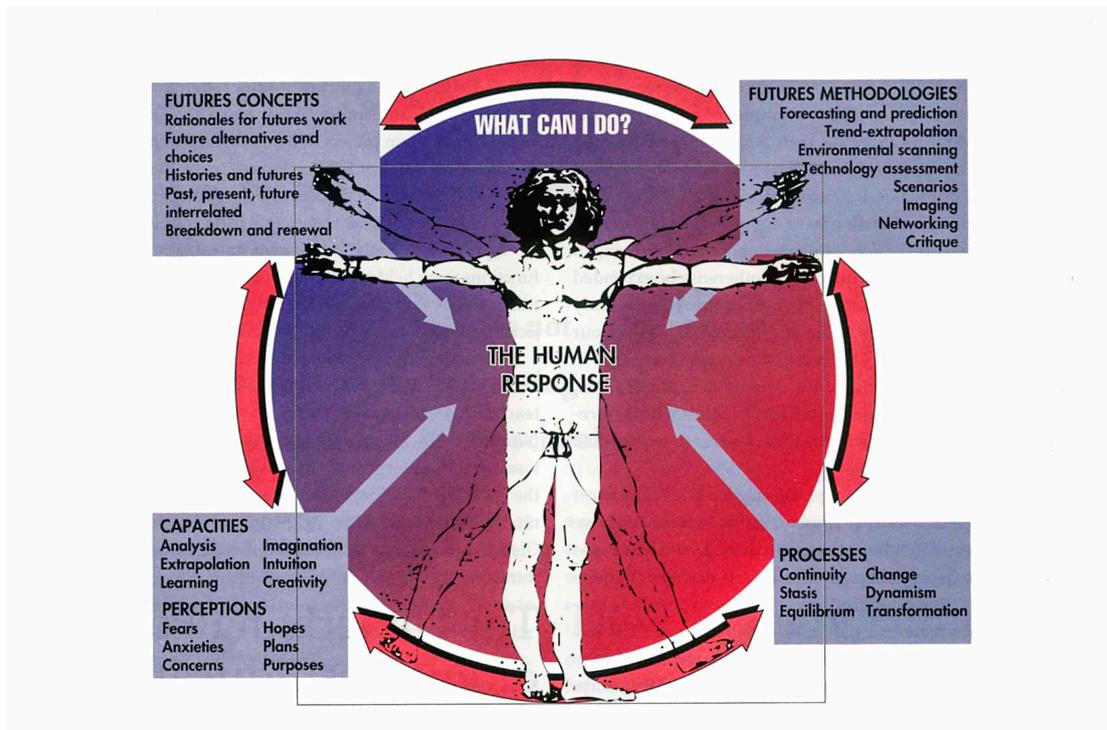


Figure 3 provides a way of beginning to deal with this question. It suggests that when the question is asked there is a wide range of resources to be drawn upon. In a futures context, there is first and foremost an individual's own capacities and perceptions. Both can be looked at and consciously developed. Next are futures concepts and methodologies that articulate futures concerns and provide ways of approaching them. Finally there is the study of real-world processes. The latter describes things that are happening in the world and thus provide starting points for an infinite variety of projects.

If there is a single answer to dealing with the problems of a world in transition then it is this - learning to act effectively and to persist until constructive changes are achieved. So one answer to the question 'What can I do?' is to reply 'the answer is a journey.' This short summary statement is useful because it points people in the most promising direction of all: the development of their own capabilities. It is a journey of inner discovery as individuals come to know their own capacities and purposes. It is also a journey of exploration, research and action in the wider world. This twin journey identifies a central purpose of education at any level. But futures education gives it both substance and direction.

## 6. Design your way out of the industrial era

After opening out a new range of alternatives in terms of ideas, visions and options, the next step is to look at other possible changes in the ways things are understood or done. To some extent this is already happening in areas such as energy conservation and recycling. However, there are many other ways of exploring the notion of 'design' in relation to aspects of the cultural environment. In this way the idea of social innovations can be extended, challenging us to find new ways of applying creative imagination.

Design is routinely applied to the technical system and, indeed, there are many uses for it there. As we move into the 21st Century it will be necessary to re-think and replace many technical and infrastructural systems that were founded on old assumptions (rapid growth, unlimited fossil energy, high environmental impacts). In their place we will need to adapt, re-fit and create new systems based on different assumptions (steady-state, or qualitative growth, energy conservation, low impact). There is scope here for a great deal of innovative design work, some of which can be carried out by young people. Yet as the Figure suggests, the notion of design can also be applied to other domains including: the language system, the spatial system, the regulatory system, the temporal system and the ethical/moral system. There follow some key questions that may be asked in relation to each of them.

### The language system

What ideas, images and metaphors from the past are no longer helpful? How can language accurately represent the interconnected global system and the major defects that impair its operation? How can language (and imagery) be used to explore a wide range of future options and alternatives? What types of humanistic and artistic productions are suggested by the above?

### The spatial system

What assumptions about space have been inherited from the past? How has land-use been conditioned by cheap petroleum and city layouts by the private car? What changes might be foreshadowed by using different assumptions and considering different drivers of change? Similarly, how do patterns of housing, transport, industry and mining reflect industrial priorities? What kinds of spatial design solutions will be needed in an information -, and image-rich, society attempting to move toward sustainability?

### The regulatory system

How can a regulatory system based on precedent and past practice begin to deal systematically with new problems and dilemmas? How can it be modified to give a voice to the disenfranchised, and to future generations? Is there a role for an ombudsman for future generations? How can one mediate between a productive system hooked on growth and the need to preserve the integrity of the environment? How can regulation actively encourage closed-loop processing and ecological restoration?

### The temporal system

Western cultures seem to pay much more time to space than time. Yet time is culture-bound and powerfully conditions the social order. How can time be studied? What models are useful for understanding it? How do linear and cyclic models affect social

processes? What is future discounting and how does it operate to 'make the future vanish'? What are time frames, and how are they used? How might we use time frames more consciously, matching them with particular activities?

#### The ethical system

Our ethics are badly in need of an overhaul. The diminished 'ethic' of marketing and consumerism have become system imperatives, yet they are patently destructive. How can they be changed or replaced? What other sources of value and meaning are available to us? How can they be accessed? What are the grounds of a stewardship ethic? Could they play a more central role in a society of the future? How might we begin to activate the notion of a wise society? What might a wise culture be like, and how would its operating assumptions differ from our present ones?

Such questions can stimulate young people to look beyond the obvious for insights and materials that lead away from the abyss to new and renewed ways of life.

#### Limitations of the strategies

The above provide a number of starting points that can be used successfully to deal with many fears and concerns. But we should not pretend that they exhaust the field or that all problems have solutions. *Many problems do not, in fact, have solutions on the level at which they are first understood or experienced.* A qualitatively different approach is needed for dealing with systemic difficulties and deep-seated worldview assumptions or commitments. This is where the twin themes of cultural reconstruction and the notion of a wise culture begin to emerge.

#### Notes

For such deeper approaches see *Cultural Reconstruction in the Post-Modern Age* (1995) and *Future Vision in the Nuclear Age* (1986).

This paper was originally published as Chapter 8 of *The Foresight Principle: Cultural Recovery in the 21st Century*, Adamantine, London, 1995. The latter is available with three other 'classic texts' on *Towards a Wise Culture* (CD-ROM).