

So What's Wrong with the Use of Education?

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Abstract

As a community we view our two most vital resources, water and air as our undeniable right. A right that means that low cost of provision is not questioned. Sure water costs more than air but only because we have to move it to where it is needed – it does not flow uphill like air does.

Over recent times it has become clear to more of us in this country that the challenge is how do we manage water in a sustainable way. Sustainable in the context of increasing population, increasing desire for a contemporary lifestyle and the impacts of this [for example: air conditioning]; sustainable also given the high level industry need for water [especially agriculture]. Concern about the probable reduced availability of water from rainfall due to climate change is a real factor feeding our need to be more sustainable.

In order to maintain access to sufficient potable water and also to ensure that we have enough water for agriculture, industry and recreational purposes, we need to manage our resources appropriately. At them moment public policy discussion is far in advance of community attitudes and behaviour. Many people in our community [particularly in major centres are willing to comply with restrictions about outdoor water use. But they are either antagonistic or totally ill-informed - or both - when it comes to issues of desalination, water reuse or even household grey water use

We cannot be too surprised at this. In the cities people's attitudes to water have been forged by a long history of 'just turning on the tap'. In rural areas tis has not been the case, people have been much more concerned a bout water for much longer. But the options of different water management processes are only recently on the agenda even in rural parts of the country.

It seems that we have forgotten that education can play a major role in achieving this outcome. In all the plethora of restrictions and technology discussion, we have omitted a key part of any change strategy. That is the need to bring the community with us in the process.

This paper will explore the need to establish a real in-depth context in the community where change can be considered and accepted. In doing so, it will refer to the important models that exist in the public health sector, including the Ottawa Charter on Health Promotion and the other Health Outcomes models to make a strong case for the development and delivery of education to address future water management needs and options.

Currently we are only scratching the surface in the use of education to establish a climate for successful water management into the future. In addition, we are also barely scratching the surface in changing behaviour. Our education programs need to be more extensive and better delivered in order to optimise their impact on behaviour and attitudes.

Paper

A CHALLENGING BEGINNING

Do you really believe that the Australian community is ready to face a future with less water? If people are ready, do they understand the tough choices that need to be made in the future and are they prepared to make them?

It is clear to anyone who has followed the emerging water debate over the past three to five years that people are increasingly attuned to the fact that water is a finite resource. In many parts of Australia, they have generally embraced water restrictions positively and understand that *in times of drought* we all need to do a little more. But the research is clear in pointing out that many Australians believe the problem will just go away when it rains. *“On the whole concern about water shortages is probably not sufficiently strong to galvanise greater community action than is already occurring. This conclusion is based on the findings that:*

- *Water shortages are not ‘top-of-mind’ relative to other social and environmental issues and rise in community awareness only if prompted.*
- *The measured level of community worry about water shortages is not particularly high – a mean of 6.4 out of 10. People’s perception of others’ level of worry is even lower – 5.5 out of 10.*
- *In-depth interviews revealed no sense of urgency or real worry. People accept that wasting water, just like wasting any resource, is wrong but cannot envisage a situation in which they might have to live with less water” [CRC for Water Quality and Treatment, 2006].*

In addition, this study of over 3,500 people across Australia showed that thirty-three percent of respondents trust the authorities [including scientists] to ensure future water supply. While saying this, it is notable that they don’t appear to really engage with the substantial policy, infrastructure and public health issues that many of these solutions will require. It is only when faced with absolute and local choices - for example the Toowoomba ‘vote’ - that the situation becomes more real for people. As evidenced by the Toowoomba result, it is too late to be broadly informing people about the range of options available at the same time as seeking their input into absolute and in-crisis decisions. The context setting/ information enriching debate must occur well before the point of decision about wastewater reuse or desalination or whatever.

It is essential for our future in this country that we engage our community now about our future water situation and create a climate where challenging alternatives can be understood more completely and considered more fully. This involves an educative process where alternatives are mapped out for people and where information flow and a somewhat abstract consideration of costs and benefits are valued. A process where the community are involved in the issue and made ready for difficult choices that they might face.

Currently we are only scratching the surface in the use of education to establish a climate for successful water management, where the community can accept alternative sources of water supply. This situation is exacerbated by the fact that despite a significant range of demand management activity, we are also limited in our capacity to change behaviour sufficiently to reduce water use to levels where alternative supply sources are not required.

Our education programs need to be more extensive and better delivered in order to optimise their impact on behaviour and attitudes.

SOME MAJOR COMMUNITY CHALLENGES

Essentially our educational challenges fall into two distinct, but related areas:

- Accessing sufficient water for our needs – who needs what?
- Achieving a readiness within the community to embrace, support the development of and to pay for infrastructure [and associated policy change] to the sources of our water supply; for example wastewater reuse, stormwater capture and recycling, grey water recycling and/or desalination.

With regard to the issue of Franklin D Roosevelt had it right when he said many years ago that:

‘The test of our progress is not whether we add more to the abundance of those who have much, it is whether we provide enough for those who have too little.’

Applied to water availability, this quote raises questions of who has too little and where can they access it from? Perhaps providing access to water sufficient to need means that we have to consider our basic market forces dictum - that growth is good. Economically and as part of our Australian culture we continue to see growth as the only real goal but from a water availability perspective can we really support it? Quality education about water will promote debate and action about this issue.

In a similar way, significant cultural and attitudinal change needs to occur before we can embrace a broad range of water reuse and recycling options. Australians, particularly the more than 60% of us who live in capital cities, are used to having sufficient quantity of potable water on tap [and in the toilet and the washing machine]. We have grown up with this luxury and now that it is challenged we can't really understand why. Climate change messages and uncertainty about the future of our climate also make the issue more confusing for many of us.

Changing our water culture will occur by necessity over time. Some communities just don't have other alternatives to reuse/recycling options – they either take them or perish. But can we wait this long? What will be the cost of the debate and how much community dislocation will occur while we are having it?

SOCIAL/CULTURAL CHANGE CHALLENGES AND FRAMEWORKS

Over a number of years Australians have demonstrated a capacity to deal with significant social issues in a responsible and proactive manner. For example, our national response to HIV through education and prevention approaches within the gay and injecting drug using community is heralded internationally. The distribution of clean, free injecting equipment has been occurring for over 20 years and the results have been staggering. For example, in Australia less than 2% of new HIV infections occur in injectors compared with over 35% in the USA where needles are not available. Now, almost all injectors in this country use a clean needle every time. This is major social shift over a relatively short period of time.

The range of legal, policy, educational and infrastructure/service delivery mechanisms required to implement this behaviour shift was enormous. The change did not just occur overnight - it was planned and implemented by government, the affected communities and the medical profession [and other scientists]. Due consideration was given to a range of change models and significant piloting, research and education was delivered.

The crisis of water availability requires a similar approach.

In particular, two models are of use in guiding planning about the social/cultural changes required for water management and the development of appropriate education approaches.

The **Ottawa Charter on Health Promotion** [see Wass 1994 and WHO 2001], developed at an International Conference on Health Promotion, in 1986, by the World Health Organization. This charter states that in order to be effective, Health Promotion must address five core elements in an integrated manner. The model postulates that failure to develop broad strategic programs containing all five elements will reduce the possible impact. People need to be educated and supported within a congruent policy and service orientation context. While this model has a particular orientation towards health, its general principles apply to education about water.

- *Build Healthy Public Policy.* Education will only be successful if it sits within a policy framework that supports the principles and intentions of the education efforts.
- *Create a Supportive Context for Change.* The community has to be ready to embrace the behaviour that the education program is promoting. For some significant changes context-setting education is needed to seed the readiness of the community. For example, water restrictions will be more fully and wholeheartedly accepted if the community understands the reasons for the restrictions. Context-setting education needs to occur prior to the implementation of the restriction so that the community is ready to accept the proposed behaviour. While it is relatively easy to prepare people to accept water restrictions, getting them to have an open mind to changes, such as proposing the reuse of wastewater, is much more challenging.
- *Strengthen Community Action.* Change occurs best when it is owned by the community. When community members are supported and strengthened by ongoing involvement in education and discussion, they will suggest, promote and embrace change. This principle promotes a supported “bottom up” approach, rather than the more prevalent “top down” programs.
- *Develop Personal Skills.* Achieving desired behaviour is often reliant on improving the skills and attitudes of the participants in the program. The Ottawa Charter places great emphasis on this principle and indicates that often face-to-face education is the most effective way of building personal capacity.
- *Reorient Health Services.* In a Health context, this principle relates to the fact that services need to mandate implementation of health promotion. This mandate should support the needs of individuals and communities for a healthier life, and open channels between the health sector and broader social, political, economic and physical environmental components. In water terms, this principle would mean that all relevant government agencies and water authorities reorient their business to encompass education activity. They would act as a model and impetus for industry, non-government organisations etc. In addition, they would work together to promote water related behaviour and attitudinal shift.

From a water perspective, there is a significant need to build the context – to create a supportive community- so that a culture is created that is more ready for change. This remains a significant challenge for the immediate future.

The Stages of Change model put forward by Prochaska [1992 and more extensively in 2005] proposes that people progress through a number of stages in making change. This model urges the education program developer to determine the stage at which their audience is with regards to the desired behaviour, and to develop a program that moves them to the next stage. The five stages in this model are:

- *Pre-contemplation*. People are not intending to take action on the particular issue in the foreseeable future. They may be uninformed, under-informed, demoralised because they have tried to change previously with a negative outcome or just plain apathetic.
- *Contemplation*. People are interested in the issue, open to changing behaviour and intend to take action in the next six months.
- *Preparation*. People are intending to take action in the immediate future. They have often taken related actions in the immediate past and need prompting and support to take the next steps.
- *Action*. The new behaviour is taken at this stage.
- *Maintenance*. The new behaviour continues over time. It is often [and best] supported by others also behaving in that way – normative behaviour.

Prochaska argues that if the audience is at pre-contemplation stage, then there is no point in pitching the program at the action stage. People just won't get it. There is some congruence between this view and the 'creating a supportive environment' principle in the Ottawa Charter. People have to be ready to embrace the change [or the action being promoted].

The issue for water education program deliverers is to progress people through the pre-contemplation, contemplation and preparation stages so that action can occur appropriately and responsibly. It might be argued that most Australians are at pre-contemplation or contemplation stages with regard to their readiness to accept alternative water sources - reused, recycled or desalinated water. For a number of reasons this is a major challenge for those designing water education because:

- Often all members of a particular group are not at the same stage and a multi-focused strategy is required.
- The tools available for moving from pre-contemplation to contemplation tend to be imprecise and often need to be purpose built. They include mass communication approaches that raise the issue or problem and try to engage people in considering it as an issue. Education aimed at reducing water demand is a case in point.
- Behaviour change education is complex, needs to be well planned and fully evaluated.

WHAT DO WE NEED TO DO?

It is vital that we get serious about the community water culture challenges that are facing us. In all the plethora of restrictions and technology discussion, we have omitted a key part of any change strategy. That is the need to bring the community with us in the process; the need to establish a context for change.

Education is essential to this approach and we need to get serious about it. Education that is aimed at all Australians; that explains why change is necessary and what options we have available to us. In the first instance education needs to continue to be delivered at the local level and to build upon current reduced water use behaviour by:

- Seeking commitment from all Australians to continue to do more to reduce water use at home and at work.
- Prompting appropriate behaviour continuously. Mass media advertising, signage face-to-face education and other behaviour prompts are important for the promotion of appropriate water reduction behaviour.

- Building acceptable water practices into normative behaviour. The more people who practice a behaviour more often, the more it becomes a social norm and the more fully it is sustained [and possibly extended] by peer example.
- Seeing adults in the community as the primary audience for water education. School education is important but we have a water crisis now and young people have a limited capacity to solve it.
- Evaluating what has been achieved and reporting the water reduction results to the community.

But we must go further than this! There is a real need for a national education program that raises issues about the sources of potable water and the challenging choices that face us. A program that establishes a supportive context for change.

The key elements of this program would include:

- Activity through public debate and discussion that leads to a more supportive water conscious Australian community.
- The piloting of a number of education approaches that aim to bring about cultural/attitudinal change.
- Public communication about the need for all Australians to understand that there are difficult choices that will need to be made into the future about the sources of water.
- Written and other communication approaches about the range of water management options available.
- Local level education activity, events and related public policy that promote informed discussion about water management options.
- Case studies of Australian communities that have taken innovative actions about how to source water differently and how to bring the community along with this process.

There is much to do before we have secured a more sustainable water future. Education has a lead role in this process and its capacity to influence change must be harnessed and supported.

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