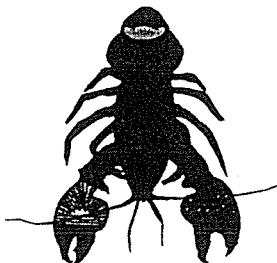


"Involve Me and I'll Understand"



1999 YOUNG PEOPLE'S RIVER HEALTH CONFERENCE

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Abstract

Children comprise twenty per cent of the population, but are one hundred percent of our future. In our thrust to be analytical, impartial and scientifically rigorous we may have lost the passion for educating future generations to ensure the protection of the natural environment. This paper takes a look at providing hands on, student-centred learning to bring about a cultural change in the way we perceive our natural environment.

Key Words: Student-centred learning, Involve, Environmental education

Introduction

Rivers are the lifeblood of any community, sustaining a good quality of life on one of the world's driest continents. Integral to the health of our rivers is the protection and enhancement of healthy floodplains.

Water is increasingly in the spotlight. Reports on Adelaide's water being undrinkable in twenty years is a clear example that environmental protection is no longer the domain of 'raving greens', but must become ingrained in our society if we are to survive.

In this paper I will discuss the importance of hands on learning to achieve a cultural change in how we manage our environment. Several initiatives, including the Young People's River Health Conference and the

Lock Island Project, will be used as case studies to examine a suggested shift in the focus of environmental education.

Floodplains in the Mallee

The Murray, for a host of social, environmental and economic reasons is the most important river of the Murray Darling Basin system. The Murray is a lowland river, with complex interactions between the river channel and the floodplain or terrestrial environment.

The Murray River and its surrounding environment is a vital and fragile ecosystem. It is important for both sustaining natural systems and for human use. It provides water for drinking, agriculture and industry. It acts as a habitat corridor for a diversity of flora and fauna. It has cultural and historic

value and has been a focus for settlement for thousands of years. It also has high tourism and recreational values.

The Murray and its associated floodplains are many things to many people.

Floodplain Management in the Mallee

The Mallee Catchment Management Authority (CMA) has responsibility along with the Department of Natural Resources and Environment to manage the Victorian Murray River floodplains.

To ensure a coordinated and integrated approach the Mallee CMA has drafted a Waterway and Floodplain Strategy for the Mallee region. The Strategy has a vision of *"healthy floodplains that are managed in an integrated and effective manner to meet the community's needs and expectations both now and in the future"*. Underpinning Strategy success is community involvement, community acceptance and most importantly community understanding.

Strategy implementation will be achieved through Frontage Action Plans developed by the community with agency input. The plans will be works-oriented, allowing the community to see a tangible outcome from a planning process. Once again, this implementation phase relies on a community understanding or ability to deal with complex environmental issues.

Education is Critical to Project Success

Lack of or poor community education has brought about the downfall of many scientifically rigorous projects and initiatives.

Any issue, problem or situation ultimately has a human focus. Natural resource management is less about the science of managing the environment and more about managing people that have the potential to bring about change in their environment.

Education is an essential tool to achieve responsible management of natural

resources. If education is carried out effectively, all decision makers through every level and field of employment will have the information needed to make environmentally conscious decisions.

Past Education Philosophy

Historically, environmental education has focussed on adults. Hermiston (1998) says "Adult education is particularly important as it is adults who have the greatest spending power, who have a major influence over their children, are the main decision makers in families and communities, are the resource managers and the voters in society".

If we are managing for the future we must also attempt to manage future generations. Educating adults, although extremely beneficial, cannot have the same dollar for dollar outcomes as arming future generations with the information to make informed natural resource management decisions.

Adults often have preconceived notions of what is important, an established values system, a resentment of change and an unwillingness to embrace new technologies. To realistically achieve a cultural change towards how we view our natural environment our best efforts should be directed to the next generation. This does not mean we forsake a successful adult education movement like Landcare. It means we direct additional resources to focus on youth, such as Junior Landcare and other student-centred environmental education programs.

Through this process we may soon be able to assume a base level knowledge of the complex natural environment in every community member, whether in an urban or rural context. We should strive for this knowledge to become second nature, as is the case with mathematics or writing.

A New Education Philosophy

We place a great emphasis and extensive resources in teaching economics and commerce, but if resources are not dedicated

to learning about the environment, a place to learn about symbols of progress will no longer exist.

Malcolm (1992) recognises the importance of integrated education when he says, "...an appropriate environmental education dimension needs to be included in every area of the curriculum - areas like commerce, the arts and humanities for example have just as crucial a contribution to make to environment education as do the sciences".

At a young age children instinctively react to their environment. Put them in a patch of dirt and they will automatically start modifying their environment. Watch a young child in a sandpit and observe them placing seashells and leaves to form a pattern or design, we do really have an instinctive feel for our environment at a very young age.

Unfortunately we often see education as a process of removing children from their environment to learn about life. For example, we group children in schools for six hours a day to learn about, among other things, the environment. Is it any wonder that we learn the theory of learning rather than being immersed in the practice?

Edward Reed (1996) argues that, "...we are becoming increasingly removed from the environment in which we live and that this situation has become so dominant in our technological workplaces, schools and even our homes that first-hand experience is endangered".

Learning must be taken out of the classroom. How can a student learn about the natural environment by being removed from it?

David Attenborough (2000) recognises this in saying, "I think it is very important for human beings to be in touch with the natural world of which they are a part. If they get cut off from the natural world, then I think they are greatly impoverished".

There is now a trend toward specialist schools, which concentrate on a particular issue to teach all skills considered basic and necessary for student development. An

environmental specialist school would see maths, creative writing, English and language all attributed to an environmental focus.

The Victorian Environmental Education Council came up with a number of actions, the first of which is "Establish comprehensive programs to help environmental learning become an integral part of the experiences of all Victorians". (Malcolm, 1992) To facilitate this process the Mallee CMA linked with schools and community groups to develop an 'involve me and I'll understand' approach to environmental education. This approach resulted in the Lock Island Project and the Young People's River Health Conference.

Lock Island

The Mildura West Primary School (MWPS) and the Mallee Catchment Management Authority have a long association as partners in environmental education. In aiming to make education real and in taking teaching out into the real world, MWPS has adopted Lock Island, in the River Murray at Mildura, as a focus for its environmental education program.

MWPS has an environmental centre for propagating trees for planting on Lock Island and the school won the 1998 Ford One Planet Award for its' work on Lock Island. Students participate in public speaking through involvement with Irymple Rotary Club and they have developed a Lock Island Adventure and Environment Interpretation Trail with support from staff and the Mallee CMA. An environmental education trail marked by high quality trail signs, written and illustrated by the students, was launched in July 1999 and was the culmination of a partnership that began in late 1997.

The success of the Mildura West Primary School and Mallee CMA environmental education effort on Lock Island enabled the 'involve me and I'll understand' concept to gain the support of an extensive list of schools and other organisations in making the next step a reality. The next step was to plan and implement a national environmental youth conference.

The Young People's River Health Conference

In October 1999 the Mallee Catchment Management Authority and the Mildura West Primary School hosted a successful environmental education conference in Mildura attended by over 200 primary aged students and 60 teachers from across Australia. The planning, implementation and evaluation of the conference event is an example of excellence in environmental education.

Conference themes and messages

- 'Healthy' rivers, waterways and biodiversity are vital for the future health of communities and ecosystems
- Young people are agents for environmental change
- Empowering young people through events such as the conference has many benefits
- Mildura West Primary School environmental education program is unique, strategic and based on practical real life environmental issues
- Mallee CMA is community based, proactive and supportive of environmental education as part of its overall strategic approach.
- This conference is unique, because it is run by children. It provides an exciting learning environment for Australian students, teachers and their broader communities.
- We can change our environment for the better - be positive in the messages we convey.
- Optimism is important so that kids feel good about what they can achieve.
- Schools are often the only entry point for the wider community to actively participate in learning about the natural environment they live in.

Conference Success

The conference was selected to launch National Water Week by the Hon Warren Truss MP, Federal Minister for Agriculture, Fisheries and Forestry Australia.

The Working Group implemented a marketing and advertising strategy that included a direct mail out to all primary schools in Australia known to have an active Young Landcare or environmental education program. The conference attracted students and teachers from as far as Perth WA, Alice Springs NT, and throughout South Australia, Victoria and New South Wales.

The conference attracted the support of botanist and environmental campaigner, David Bellamy; chairman and founder of Clean Up Australia, Ian Kiernan; environmental physiologist and educator, Dr Peggy Rismiller; chef and presenter of ABC's 'A Gondola on the Murray', Stefano de Pieri; and Full Frontal comedian and Landcare member, John Walker, who all attended.

The three-day conference program comprised a diverse range of activities for all participants. The program included student presentations on environmental issues, student drama and music performances on environmental themes, an accompanying professional development program for teachers, a welcome dinner, an official launch, the release of 1000 yabbies into the River Murray, trade displays, a conference dinner, River Health Olympics, a conference tour and a bush dance to close the event. Conference merchandise (including backpacks, enamel drinking mugs, t-shirts, stickers) was also provided to each participant.

The entire event is recorded in both video and photographic format. Footage is being made available to the Discovery Channel in order to reach a wider audience. Media monitoring reveals that the conference achieved significant coverage, unprecedented for an event of this nature.

The conference was supported by an impressive website designed and maintained by students and teachers. The website allowed attendees to register electronically and communicate with other schools on conference topics and ideals. Its address is:

www.mildurawestps.vic.edu.au/kidsconference

Conference Evaluation

The following extracts from the teacher evaluation illustrate the successful outcomes of the conference:

"The participation of students was excellent. It is great to see students taking responsibility for their own learning. We still need to convince other staff that student's teaching other students is a worthwhile experience. (Glenys Matthews, Baramba Primary School, SA).

"The whole conference was a highlight including the complete involvement of students and teachers as well as the organisation. I loved the singers and the play, the dinner and the comedian. I appreciate all the "hands-on" stuff to take home and the opportunity to exchange ideas with other teachers from interstate. The professional development for the staff provided me with great ideas for environmental education and the conference provided me with ideas for peer teaching. (Faye Brodie, Renmark Primary School, SA).

"The whole conference was a high. So much "unwritten" learning went on. There was a terrific atmosphere. Obviously a great organising team. Well done. I will take away many of the workshop ideas and games. (Mary Mattner, Renmark West Primary School, SA).

"Highlights of the conference included the 'student run' workshops, the presentations, and the student participation; they were always on the move. I also enjoyed the Bush band and the environmental games. I was extremely impressed with work children put into workshops. You have provided us with a great deal of food for thought on how we can run our own conference next year. (Stephanie Spurrier, Kids Congress 2000/Murraylink, SA).

I was inspired & motivated by the "Involve me and I'll understand" concept. (Edwin Boyd, Ross Park PS, Alice Springs, NT).

The following extracts from the student evaluation reinforce the success of the children teaching children concept:

"I enjoyed the plays done by the schools, the workshops and the pictures on wall. I learnt how carp eat the body parts of the frog and I learnt about blue green algae. The conference idea is great because it's good to see children doing the teaching. (Baden Stone, Irymple South Primary School)

"I enjoyed seeing students from all over Australia working together, participating in the River Health Olympics and the workshops run by kids. (Georgia Baker, Penrhos College, Perth)

"I liked the Olympics and the workshop presentations. I learnt that there are lots of kids working to help the environment. I think the workshop presentations were cool because instead of learning from teachers you can learn from kids. (Jacara Egan, Mildura West Primary School).

"I enjoyed learning things about the environment and animals that I never knew before. I enjoyed the people and helping together to save the environment. I learnt that toads aren't native, that shingle backs are skinks and how we need the river. The student presentations are way better - the teachers take too long to get to the point. (Eliccia Evans, Mildura West Primary School).

What Worked

The capacity of kids teaching kids is grossly undervalued. Peer direction and encouragement was easily one of the greatest conference highlights. Kids from all over Australia were able to take complex environmental issues and boil them down in to simple, yet effective presentations and workshops.

The workshops included time for reflection. This reflection time enabled students to derive meaning from the workshop and discuss how each topic had affected them.

Kids designing the workshops teamed with industry mentors and environmental experts, which gave the workshop topics a definite factual basis. The topics tackled were real problems faced by today's natural resource managers.

Sponsorship of over \$100 000 meant that conference accommodation, all meals, tours of the region, three days of conference sessions and official conference merchandise was included in the registration price of \$100 for students and \$200 for teachers. The conference budget also provided for travel assistance for those schools travelling to the event. Reasonable prices ensured the conference was accessible to all schools.

The conference program incorporated a lot of very serious presentations, workshops and discussions. It was important that kids had the opportunity to get back to being kids and were not overwhelmed by the complexity and involved nature of the topics they were addressing. Activities such as the opening dinner and comedian, the River Health Olympics, the closing Bush Dance and release of the yabbies reinforced the message of optimism and team spirit. Activities such as these build on the message that no one of us is as good as all of us.

A most satisfying outcome of the conference was the many lasting friendships that were formed. Kids from all over Australia came together to tackle a common problem and went away in the knowledge that together they could achieve anything.

Lessons Learnt

I agree with Hermiston's point that "Education is a life long process of learning, action and reflection, involving and engaging people of all ages, cultural diversity, rural and urban". (Hermiston, 1998) I would, however, go further to say that although education is life long, environmental education should begin in earnest, no later than early primary, if not kindergarten.

Lack of sufficient committed funding and available expertise is holding back education

in the most important area of learning. Lack of funding "...inhibits the development of large-scale, long-term programs and comprehensive support and coordination structures needed for successful community-wide environmental education". (Malcolm, 1992)

Any form of environmental education, although a step in the right direction, must resist becoming dated. Teaching materials, and indeed teachers themselves, must continue to adapt as our environmental understanding broadens. Environmental education should be innovative and hands-on.

It is important we continue to deliver positive messages. Environmental problems are immense and solutions complex, therefore maintaining a sense of optimism is vital.

Conclusion

The Young People's River Health Conference clearly demonstrates that events like this must be used to promote hands-on environmental education in schools. We must not rest upon completing a successful event, but work to see environmental education ingrained in all school curriculum.

To ensure a meaningful contribution is being made to achieve the cultural change necessary to protect our environment there must be an increase in budget for environmental education in middle school, years 4 to 8.

The importance of leading edge educational programs means that, complimentary to additional funding there must be increased professional development in environmental education available to teachers.

Finally, the highest form of learning is to teach others. Children teaching children about the natural environment is a powerful tool and must be recognised as such.

Disclaimer: The views expressed in this paper on education are from a Floodplain Manager and not an educator.

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Author Biography



Arron Wood has worked in community education and the environment since beginning his career in the Water Industry. Arron holds a degree in Forest Science from the University of Melbourne and deals extensively with the interface between government and stakeholder objectives.

Extremely committed to bringing about a cultural change in the way we view our natural environment, Arron continues to promote floodplain management and the importance of our water resource through innovative presentations and community-based awareness events.

His current role encompasses land use planning, planning referrals, floodplain and waterway management, community education and the development of funding bids. Arron is also responsible for company communications, which he combines with the strong education network he established through the Young People's River Health Conference. He hopes to compliment his expertise by undertaking to complete a part time degree in journalism.

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