
How to use peer education for sustainability

Getting a handle on a slippery fish



Prepared by T Issues Consultancy for the Sydney Metropolitan Catchment Management Authority as part of the Integrated Delivery of Environmental Education in the Sydney Basin Project, undertaken by the NSW Department of Environment and Conservation.



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About the title

“Getting a handle on a slippery fish” is a quote from one of the key informants to the applied research project that led to the development of this guide. In one sentence the quote summarises the challenges in understanding and using peer education as an approach.

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This guide is closely related to *Understanding and Using a Peer Education Approach for Sustainability – Getting a Handle on a Slippery Fish*, a report on the use of peer education in furthering learning for sustainability, also written by T Issues Consultancy.

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1. Introduction

For many of us who are working to promote 'learning for sustainability', peer education is somewhat of a mystery. It is an educational approach that we have heard about and maybe even flirted with. Without really being aware of it some of us have even developed education programs that use a peer-based approach.

But our understanding of this educational approach in the environment sector is limited. This is somewhat surprising given that the principles of learning for sustainability outlined in *Learning for Sustainability: NSW Environmental Education Plan 2002–2005* (see page 9 of the plan) include an emphasis on lifelong learning, assisting the community to move towards sustainability and promotion of social change through the initiatives of individuals. It might be expected that peer education approaches would be a more obvious and concrete part of the education that we deliver, but this is not the case.

It may be that for some educators involved in the delivery of learning for sustainability, peer education is seen as being a top-down approach, best oriented towards marginalised groups in the community: those working in AIDS education and prevention, health promotion and drug and alcohol services.

While this view represents the background and history, it does not reflect the opportunity. **Peer education as an educational approach provides a strategy with high potential for environmental educators.** Its use as a learning for sustainability tool needs to be better understood, its impact better evaluated. It is clear that we have a significant opportunity here to add another educational approach to the suite of tools available to increase knowledge, improve skills, promote positive attitudes and ultimately to influence behaviour.

2. Purpose of this guide

The purpose of this guide is to help everyone involved in learning for sustainability to understand peer education and to try it. This guide should be seen as a work in progress, to be augmented as our experience with this approach expands and our understanding of it grows.

The guide contains five case studies of peer education that promote learning for sustainability. These can be found on page 14. It should be noted that none of these projects began their life on the drawing board as peer education projects. To greater or lesser extents, however, they all contain a peer-communicating-with-peer approach and comply with the guidance outlined below. They are presented in this guide to help us understand peer education better.

How to use peer education for sustainability – Getting a handle on a slippery fish provides assistance for practitioners to more effectively plan, deliver and evaluate peer education approaches for sustainability outcomes.

You will obtain most value from this publication if you see it as a simple guide to the use of peer education approaches. It will answer some of your questions and probably raise many others.

3. About peer education in the environment sector

It is clear that peer education is a useful and effective method of education in many sectors outside learning for sustainability. There is ample evidence of the effectiveness of this approach in health promotion and in justice settings. Peer education seems to work best when used to access difficult-to-target (marginalised) populations. It would seem that this is because it can effectively gain access to the target groups in ways that more traditional education approaches cannot. Significant success has been achieved in the health promotion arena, often where the people targeted are perceived to be acting on the edge of society's norms or rules. It also works in relation to more mainstream groups, especially those in institutions, schools, prisons and other closed settings.

The extent to which its use extends to learning for sustainability (environmental education) is somewhat less clear. The *Understanding and using a peer education approach for sustainability – Getting a handle on a slippery fish* report, commissioned by the Sydney Metropolitan Catchment Management Authority (CMA) in 2005 which led to the development of this guide, details the following key findings.¹

- While peer communication is often used in learning for sustainability education programs, the principles of peer education are not necessarily the starting point for the programs' development.
- Few professionals in the learning for sustainability sector have intentionally used peer education as an approach (and many have little understanding of its principles and practice).
- It is likely that peer education could be used more within the learning for sustainability sector, although some guidance material and a training process is required to promote its use.
- It is likely that those involved in delivering learning for sustainability programs will need to be convinced of the value of peer education.

The report also indicated that:

'To be effective, peer education needs a great deal of support and an effective structure. The organisation and management of peer education is a labour-intensive exercise. It is not merely a matter of offering peer educators training for an hour or two. Rather they need in-depth training and ongoing support.'

If peer education is to be promoted as an approach within the learning for sustainability sector, it must be acknowledged that the approach is resource-intensive. Case study 5, *Ethnic Communities Sustainable Living Project*, is an example of the extent to which resources need to be provided to support peer education.

Also, peer education is an educational approach within a mix of approaches that includes social marketing, school education, community education, etc. As indicated in the *Understanding and using a peer education approach for sustainability* report:

'Peer education is not the only approach. Despite the fact that peer education can demonstrate significant reach into target populations, it is unlikely that it is a useful tool in all situations. Care and an informed approach needs to be taken in determining whether peer education is the most appropriate approach to accessing the target population and informing them so that knowledge and behaviours change. Decisions about whether to use peer education should be based on analysis of the problems or environmental issue, who is causing the problem and whether peer education is the most appropriate way of achieving knowledge, skills, attitudes and/or behaviour shift.'

¹ The report is available from the CMA on (02) 9895 7898 or by writing to PO Box 3720, Parramatta NSW 2124.

4. What is peer education?

Peer education is an educational approach that involves identifying, training and supporting members of a given group to pass on accurate information to others with similar characteristics, where the desired outcome is that peer support and the culture of the target group is utilised to effect and sustain a change of behaviour.

To understand peer education it is important to view a **peer** as someone of similar characteristics to the peer educator. The peer might be someone of the same age, interests, background, social group, class and/or professional group.

In addition, it is important to have a shared understanding of **education**. The NSW Government's *Learning for Sustainability: Environmental Education Plan 2002–2005* defines education as follows:

'Education is any process or activity that engages people in learning by sharing and developing knowledge, skills and attitudes. Education can occur through formal and non-formal processes. Non-formal education includes learning through a range of activities including community participation, information and communication (including mass media), entertainment and recreation, extension and awareness-raising programs, experiential learning programs, skills training, on-the-job training and development, and short course and personal development activities. These may be delivered by government agencies, non-government organisations, and industry at a community and individual level. Formal education can occur through the curriculums of pre-schools, primary and secondary schools, vocational education and training institutions and universities.'

Peer education has a number of dimensions, which range from influencing our peers in informal social settings through to highly structured peer teaching programs. The appendix, *Peer education models described*, summarises the spectrum of peer education approaches. One of the difficulties in understanding peer education is comprehending the range of approaches that people view as peer education. The model assists this process by describing peer education across a spectrum from **peer influence to peer participation to peer teaching**. It is acknowledged that the difference between each of these aspects is indistinct, or even cloudy. The model is of value, however, because it helps educators determine the focus of the program that they want.

5. When is peer education appropriate/relevant?

A peer education approach is most relevant when:

- it is difficult to 'access' individuals or a particular group in relation to an issue or problem
- 'face-to-face' or more personalised approaches are needed
- the target individuals (the peers) are more likely to be influenced by people they perceive to be culturally or socially credible.

Hence peer education has been used most extensively in areas of health promotion where it has been difficult to reach a target population by more traditional educational means. In this regard, 'access' has two meanings.

1. Access means reaching people. For example, access might be about language level (see Case study 5, *Ethnic Communities Sustainable Living Project*), or about location (see Case study 2, *Fishcare Volunteer Program*, or Case study 4, *Footprints*).

2. Access also means ensuring that people will listen, believe and respond when you reach them. For many people in our community it is important that the message is owned and communicated by someone who is credible within the particular group. For example farmers listen best to farmers, fishers respond best to fishers, teachers to teachers, etc. (see case study 2, *Fishcare Volunteer Program*).

Peer education is based on these understandings. It uses peers to talk with peers. You can use peer education when you:

- establish a structure that recognises and maximises access as an issue
- believe that a face-to-face approach is most appropriate
- require an educative experience that ultimately aims to shift people's behaviour.

Peer education works best when you can identify and describe a specific target population. The tighter this description, the more successful your program will be. It is likely that peer education in the sustainability sector can be:

- location-based – for example, everyone who lives in a particular location (see Case study 1, *Bushcare* or Case study 3, *Sustainability Street*)
- institution-based – for example, all students in a particular school
- workplace-based – for example, everyone working in a particular industry (see Case study 2 *Fishcare Volunteer Program*)
- ethnic-, cultural- or other group-based – for example, Case study 5, *Ethnic Communities Sustainable Living Project*.

There are some circumstances, however, where peer education may not be the most appropriate approach. You should avoid peer education when one or more of the following circumstances apply:

- A substantial amount of highly technical knowledge needs to be communicated as a part of the program. Peers are not well suited to high-level knowledge-based programs. Too much training and monitoring is generally required.
- There are few obvious peers willing to engage in the program as educators. The success of the program is based upon the competence and willingness of those who are to be the educators. There are danger signs for peer education if high-quality people cannot be found.
- Access to the audience is simple and can be provided more cost-effectively and outcome-effectively by other means of education/communication.
- A single simple message needs to be communicated to people willing to take it on. In this case a much more cost-efficient and energy-efficient approach can be used.
- A very large and diverse population needs to be reached. Peer education approaches are not useful in this circumstance because it is difficult for peers to work with diverse groups.

6. The critical elements or principles of peer education

The key principles of peer education identified below have been generated and collated from the range of sources in this study and from the authors' own experiences in the delivery and management of peer education programs. At its heart, and expressed as principles, peer education involves:

- Collaborative learning – between the peer educator and the peer group members. The learning is shared and two-way.
- Commonality – there is a bond of some kind among the peers and between the peer educator and the peer group.
- Social engagement and a supportive social atmosphere – this assists or influences people in a social group or context.
- Community development – although often focused on the personal or individual, peer education has a broader community development aspect (the community is the community of peers).
- Sharing experiences – both positive and negative experiences to enhance learning about an issue. The sharing is based on respect – a partnership of equality.
- Access to accurate, credible expertise/information.
- Methods that are seen as less threatening than other forms of education.
- Face-to-face activity, communication, demonstration and human interaction supported by print or other material.
- Working one-on-one with people – individually or in small groups.
- Support, continuity and recognition – providing ongoing support and recognition of people's contributions and that of the peer educator.
- Credibility, trust and rapport – the educator is not necessarily an expert but someone the peer believes: a role or behaviour model.
- Peer ownership of the issue and acceptance of responsibility as part of the solution – the peer identifies in some way with what is discussed/proposed.
- Action – it's about 'how' to do something. Peer education leads to positive change in knowledge, skills, attitudes, beliefs and/or behaviour.

7. The mechanics of peer education

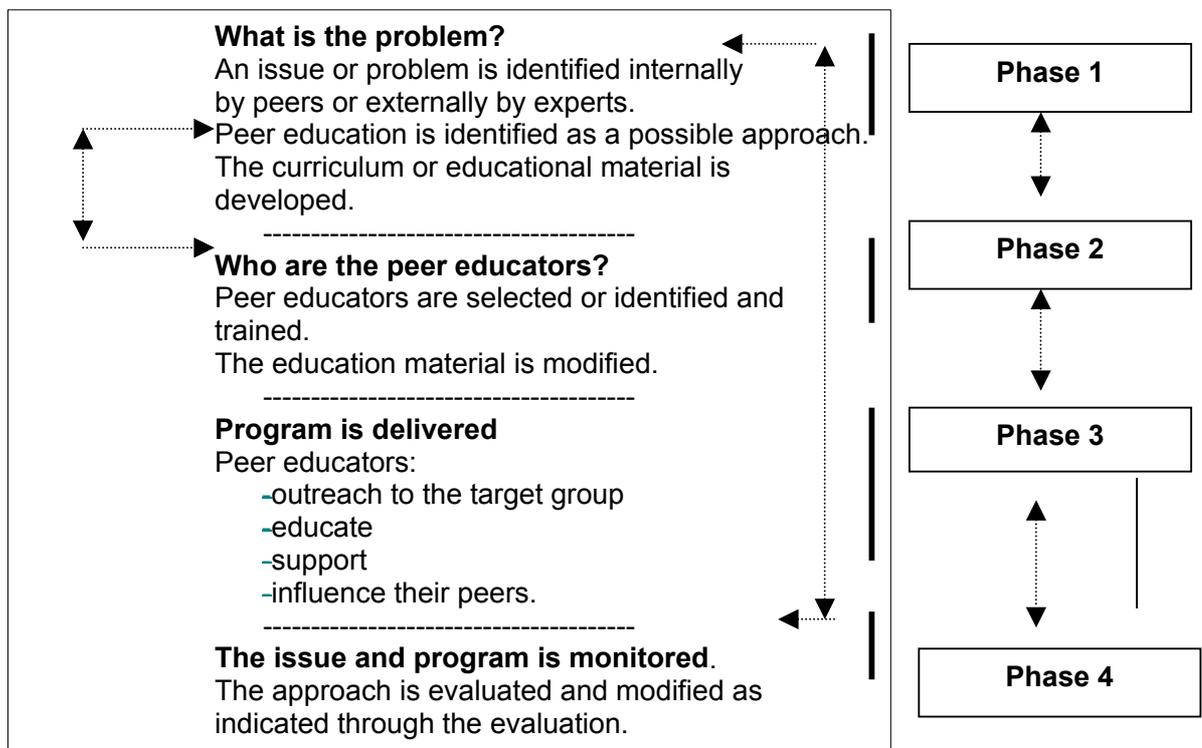
This section of this document provides specific advice to those who are planning to use a peer education approach. It assumes that you have a level of understanding about how to undertake education planning. If you need more information you might find the Department of Environment and Conservation NSW (DEC) document *What we need is ... A community education project of value* – available on the DEC website at www.environment.nsw.gov.au/for_community.htm.

The mechanics or 'how to' of peer education varies depending on the different peer education approaches described in the appendix. The degree of structure or formality of the peer education approach will determine the key elements in designing your project. As a general rule programs at the peer influence end of the spectrum will require less extensive planning and ongoing resource support than those involving peer teaching.

Planning, implementing and evaluating a peer education project has many elements common to other community education or community development programs. Where peer education approaches differ, it is often on the level of emphasis and dependence that they give to the role of the peer educator. This is because peer education essentially relies on people (the peer educators and the peers) rather than materials. The priority or focus in determining 'how to' do the project must therefore be on identifying, training and supporting those people. How to identify and retain peer educators is a crucial consideration in the design and administration of the project. For many volunteers, flexibility, recognition and support will be the key.

In broad terms, a peer education project will evolve through four interrelated phases. These are described in Table 1.

Figure 1: Four phases of peer education planning



These phases or steps are related to those outlined in *What we need is ... A community education project*. They are broadly accepted steps for planning any learning for sustainability project, and have been presented here specifically to help you to plan a peer education project.

Table 1 is designed to expand these phases into a number of planning steps. It provides guidance on how to undertake each of these steps so that the program you develop is based on good practice principles and reflects the research and evaluation base that exists about peer education. If you are considering using this approach it is strongly recommended that you work through each of the steps outlined in Table 1.

Table 1: Specific guidance for planning and conducting a peer education program

Phase 1: The problem	
Peer education steps	Guidance for project planning and delivery
Identify the issue or problem.	Are there identifiable solutions to the issue? Is the problem (and the solutions) a high-priority issue for people across the community and/or in a specific sub-population?
Identify the target individuals or group associated with the issue.	What are the characteristics and needs of the target individuals or group? Consider whether peer education is a possible approach for engaging the target: <ul style="list-style-type: none"> ▪ Is it difficult to 'access' the relevant individuals or groups in relation to this issue or problem? ▪ Is a face-to-face or more personalised approach needed? ▪ Is credibility a concern?
Consult with the target individuals or group.	Discuss the nature of the group (audience) and how peers might be identified and work effectively in delivery of the program. At this stage you will start to get a sense about whether a peer education approach will be of any value.
Formulate the aim and objectives of the project.	This is an important step and frames the remainder of the project – design, delivery and evaluation. At this stage you are determining what sort of peer education approach you will develop – peer influence, peer participation and/or peer teaching. The Appendix will assist you to do this.
Develop your evaluation plan.	Consider how: <ul style="list-style-type: none"> ▪ you will measure the effect of the peer education initiatives ▪ you will collect data and analyse it ▪ you will gather information on the process and outcomes ▪ you will report and disseminate your findings ▪ your evaluation plan will be a part of your overall program plan.

Table 1 (cont.)

Phase 2: The peer educators	
Peer education steps	Guidance for project planning and delivery
Select/recruit peer educators.	Peer educators need to be credible and influential. They can have many roles including facilitator, information source, role model, support worker and advocate. The recruitment of peer educators requires the identification of selection criteria such as credibility, confidence, trustworthiness, reliability, availability, and interpersonal and communication skills. Specific criteria should be developed for each peer education project. They may vary from project to project.
Identify the strengths, capabilities and training needs of the peer educators.	Provide ample opportunity for potential peer educators to show their capabilities – do not assume that they need intensive training. Ask them what they want or need in relation to the issue. As the peer educators are often placed between the program developers and the target group, they have the opportunity to gather intelligence from the peer group that can add value to the peer education program.
Consider what methods you and the peer educators might use to engage the target peers.	Methods will depend on the issue and whether the focus is on influencing peer knowledge, skills, attitudes and/or behaviour. Peer education methods may include discussion, demonstration, games, quizzes, and creative arts activities. Again this depends on the nature of the program to be developed. Different methods will be used in peer <i>influence</i> approaches (informal discussion, etc.) than in a peer <i>teaching</i> approach.
Identify and engage trainers to train the peer educators.	A team of trainers or people with relevant information and skills may be needed to train the peer educators. The better identified the team, the more quickly the program can be established. Depending on the complexity of the issue, the training may be formal or informal. Trainers will need to consider and take into account the existing capabilities of the peer educators and that most peer educators will already have relevant knowledge and skills.
Develop or gather together the necessary support material that the peer educators may wish to use when engaging with their peers.	Peer educators should be trained to facilitate discussion about the issue and promote appropriate behaviour/attitudes, etc. Consider the use of models, visual or concrete material or demonstration approaches. Because peer education primarily takes place through people interacting in shared learning situations, peer educators may want to and should be encouraged to use educational approaches and support material that reflect their personal experiences. While there should be commonality in content (specifically related to the aim and objectives of the program), you should also encourage peer educators to adapt materials and approaches in a way that they think will engage their peers. Peer educators will come up with a fantastic array of approaches and materials, which reflect the many different ways that people share and learn. Encourage this creative diversity. (Case study 5, <i>Ethnic Communities Sustainable Living Project</i> is a good example of how peer educators have effectively designed and used different materials and approaches.)

Table 1 (cont.)

Peer education steps	Guidance for project planning and delivery
Train the peer educators.	<p>The trainers need to have an overview of the processes and reasons for peer education including:</p> <ul style="list-style-type: none">▪ need for peer education program▪ purpose of peer education program▪ roles and responsibilities of the peer educators▪ motivating factors for peer educators and an understanding of the incentives that will keep them interested in the program. <p>The training program should include:</p> <ul style="list-style-type: none">▪ content issues▪ communication skills▪ key messages▪ opportunities to practise. <p>The training program should be ongoing and provide updates for peer educators. Refreshing the skills, knowledge and motivations of the educators is an important part of the peer education process.</p>

Table 1 (cont.)

Phase 3: Delivering the peer education program	
Peer education steps	Guidance for project planning and delivery
Deliver the program.	<p>Ensure that the program is delivered in the way that it has been planned. Put in place systems to help you monitor and administer the program, for example:</p> <ul style="list-style-type: none"> ▪ an advisory/support committee ▪ simple forms that assist peer educators to record and keep track of groups or individuals they have engaged with ▪ a 'suggestions wall' or 'email log' to capture good ideas for discussion when the peer educators come together.
Set up regular support and feedback opportunities for the peer educators. If they are volunteers, incentives are important.	<p>Peer educators need to talk with each other to share strategies, techniques, successes and failures. Regular meetings of peer educators are vital to the success of the program. The following ideas will help you to encourage communication and a sense of teamwork among peer educators.</p> <ul style="list-style-type: none"> ▪ Provide quality support materials that encourage participation and make the peer educators' task easier, and train them in their use. ▪ Offer rewards – badges or certificates of merit for peer educators who complete a period of service. ▪ Let it be known that doing volunteer work as a peer educator is greatly appreciated. ▪ Provide peer educators with caps, t-shirts, polo-shirts, armbands, badges or other clothing which identify them as peer educators and potentially increases their status and pride in doing the job. ▪ When appropriate, provide incentives such as per diem allowances for training or subsidies for travel. ▪ Sometimes, increased status in the group or credibility in the community can be enough incentive. ▪ In some instances you may consider paying peer educators for their work. This is especially relevant in peer teaching programs (see the Appendix).

Table 1 (cont.)

Phase 4: Monitoring the program	
Peer education steps	Guidance for project planning and delivery
Set up a supervision/quality control process for the peer educators.	<p>Supervisors have a key role in ensuring and documenting the success of the program. They are essential to collecting information that will enable you to monitor and evaluate how the project is going. If the term 'supervision' seems inappropriate for your program then substitute it with 'coordinator' or 'support person'. Supervisors should be knowledgeable about the problem/issue and should be in regular contact with peer educators. Two-way communication is needed between peer educators and supervisors. Peer educators should understand that they are not being judged individually – the supervisors are there to support them – and their experience is contributing to the success of the program. In order to provide a quality program it may be necessary to:</p> <ul style="list-style-type: none"> ▪ identify a number of supervisors ▪ determine the method of supervision – individually or as a group determine the frequency of supervision ▪ prepare a checklist of tools for supervisors ▪ train the supervisors ▪ undertake regular and ongoing supervision ▪ determine how supervision is to be documented and who ensures that quality supervision happens ▪ continue to review supervision practices and the model of supervision in order to keep the program fresh and to maintain quality.
Evaluate and report on the project.	<p>Implement the evaluation process outlined above and report the results.</p> <p>Tell people about the successes of your peer education program.</p>

8. Do and don't checklist for peer education

The Do List

Do provide continuity of the peer education program.

Do be there to give support where it's needed – if the support is not there peer education programs will fall apart.

Do provide opportunities for people to learn new skills and knowledge.

Do treat people who are volunteering as special – recognise them and show them that they are valued.

Do acknowledge and value people's life experiences.

Do listen – people's knowledge and experience will surprise you.

Do research the audience.

Do remember context – a sense of place gives purpose and the feeling of 'home turf' gives confidence.

Do try to connect emotionally with peers.

Do develop an environment of trust.

Do try to find the motivator for what makes people change.

Do provide a safe environment where people feel they can open up.

Do recognise the issues that people see as important and then draw the connection with your issue.

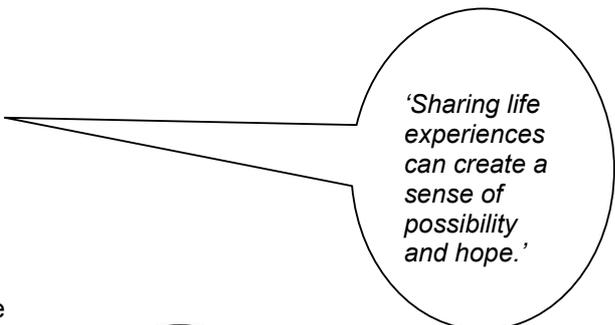
Do acknowledge that there is value in bringing people together to affirm their values – working with highly motivated grass roots communities can bring about change.

Do select, train and support peer educators professionally.

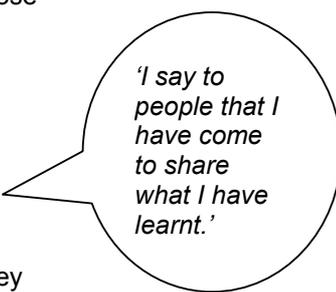
Do evaluate your peer education program.



'Someone has to be there to keep things going – to organise and encourage. It's a bit like community development.'



'Sharing life experiences can create a sense of possibility and hope.'



'I say to people that I have come to share what I have learnt.'

The Don't List

Don't take peer educators for granted.

Don't let the evaluation be a barrier to doing the peer education.

As a peer educator don't set yourself up as an expert – instead build expertise and impart enthusiasm.

Don't drop the ball, because it's just too difficult to get things going again.

Don't give up. Keep supporting your peer educators to support/educate their peers.

Don't expect it to happen overnight. Peer education programs take time.

Don't dismiss the really difficult people – they may be confronting but they can also assist others to think more critically.

Don't underestimate the value and motivation that a sense of purpose gives.

Don't forget relevance – if it's not relevant, it won't happen.

Don't underestimate the influence of a peer. Peers can be like friends – supportive confidence builders.

Don't 'educate' (i.e. talk down to peers; from the position of an expert). Peer education is about persuasion and influence. People don't like to feel that they are being talked down to.

Don't take away the fun – the social aspect. Peer education is often about getting together with other people.

Don't underestimate the strength of numbers – two is better than one.

Don't think that peer education is the only way to educate people.

'We have our Landcare meeting and sometimes hardly anybody comes. I think someone must have recognised this and decided to give me an award – and yes, it kept me going.'

'I could see that I was not alone any more – I felt ... stronger, more confident and adventurous enough to try.'

9. Peer education case studies

Case study 1 – Bushcare

Case study 2 – Fishcare Volunteer Program

Case study 3 – Sustainability Street: Focus on greenhouse

Case study 4 – Footprints

Case study 5 – DEC Ethnic Communities Sustainable Living Project

Case study 1 – Bushcare

More information:	Leanne Cusiter Sydney Metropolitan CMA
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Project objectives

- Improve biodiversity values in urban bushland
- Enhance the environmental and aesthetic values of the area
- Rehabilitate the area for future generations to enjoy
- Conserve native flora, fauna and remnant vegetation
- Foster community support and stewardship of natural areas
- Encourage active community involvement in the management of natural areas
- Create opportunities for strengthening connections and forming closer ties within a community

Target audience

People with: an interest in environmental issues; a willingness to learn, contribute and work co-operatively with others; and a good level of health and fitness (particularly for manual labour and outdoor work). The majority of people that are attracted to Bushcare are those that have already had long-term involvement in the environment, i.e. they are generally 'the converted'.

Description

Bushcare is about community-based volunteers, assisted by government and non-government organisations, working to rehabilitate and preserve bushland. Most of the work is done on land in public ownership and in urban areas, with some work also carried out on private land and in the urban-rural fringe.

Bushcare began in the 1980s when Ku-ring-gai Council on Sydney's North Shore invited volunteers to join groups and shortly afterwards adopted the name 'bushcare' to describe their community program. Subsequently other Sydney councils began their own bushcare programs and the term has stuck, despite some later confusion with the Bushcare program of the Natural Heritage Trust (NHT).

How/why is this project an example of peer education?

Each Bushcare volunteer is an example to others in their community of how to become actively involved in the environment. Through their enthusiasm for what they do, Bushcare volunteers become environmental ambassadors, spreading their concerns throughout different localities and bringing about changes in social attitudes.

Another aspect of peer education in the Bushcare program is the level of skill development that volunteers gain through their involvement. Often, new volunteers gain their knowledge from more experienced volunteers while working 'on the job'. In addition, formal training is provided by the organisation, and a strong emphasis is placed on training volunteers in the practical application of bush regeneration.

Equality and valuing are important peer aspects of Bushcare. In the majority of Bushcare activities, each of the volunteers and the coordinator work on an equal basis. The volunteers become skilled and knowledgeable through their participation. For many volunteers the

motivating factors are the social aspect, working together on a project, the group satisfaction of achievement, and the sense of ownership about something they value. But there are others who get involved because they like plants and animals – they are quiet, focused achievers, perhaps socially isolated, who are involved not for the company but for the environment.

There are different opportunities for learning and sharing knowledge in Bushcare groups. A lot of learning comes from informal interactions between people (peers) chatting and showing what they've discovered or done. People's local knowledge and historical stories are important. Some people want to learn in a more structured way from a supervisor or through formal training.

Other peer issues?

Although Bushcare volunteers can be a powerful lobbying force for change within the community, this type of peer education is currently under-acknowledged and under-utilised. To be more effective ambassadors for change, Bushcare volunteers need further support and training in this area.

The Bushcare program also requires each organisation to provide much ongoing support and recognition to the volunteers involved. Often, a skilled team leader is also needed to provide technical assistance and to help maintain group cohesion.

Due to the nature of the Bushcare program, each volunteer needs to have a reasonable level of fitness and a willingness to learn a large amount of technical and scientific information. This can be off-putting for some people.

It's essential that Bushcare volunteers never feel alone in their participation. They must have support and recognition. While most volunteers are self-motivated, the majority want and need to be acknowledged. They cannot be taken for granted and this means that the council, government, or the coordinator can't just sit in the office at a distance and expect volunteer groups to keep going without personal contact and maintenance.

Placement on the peer education spectrum



Case study 2 – Fishcare Volunteer Program

More information:	Dee McElligott Recreational Fishing Trust State Coordinator, Community Programs NSW Department of Primary Industries
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Project objectives

- Foster community stewardship of the aquatic environment
- Inform recreational fishers, through face-to-face contact, of the rules and regulations regarding recreational fishing in NSW
- Educate young fishers, their parents and others in how to fish sustainably by imparting fishing skills at fishing clinics and other community events
- Assist NSW Fisheries staff disseminate advice and information about recreational fishing at community events, shows and trade shows
- Support education programs devised by NSW Fisheries in schools and the community
- Conduct guided tours in selected aquatic reserves
- Assist NSW Fisheries staff to conduct research

Target audience

Anglers – recreational fishers

Volunteers come from a range of cultures, social demographics and interest groups. This ensures the volunteer program reflects the community/anglers it aims to educate/involve.

Age demographics

The general demographic is between 42 and 64 years of age. However, this varies within regions, for example, the southern region's age range is 28–44 years.

Interests/reason for being involved

The majority (69%) of volunteers had a keen involvement in recreational fishing prior to volunteering, although of these only 42% had prior involvement in environmental awareness work. Other reasons for volunteer involvement include keeping active, increasing their skills base and helping others in the community.

Cultural background

Volunteers are recruited from a variety of cultural backgrounds. Volunteers with English as a second language are actively targeted and encouraged to be involved. In particular these include Aboriginal, Arabic, Chinese and Italian speakers.

Skill level

There are different skill bases, which reflect the different volunteer activities available/undertaken within the program. Thirty-three per cent of volunteers have a degree or higher – these volunteers generally assist with (but are not limited to) community awareness presentations and research data collection. Fifty-two per cent have a trade qualification; these volunteers assist with restoration work, school education, advisory days and maintenance of equipment, etc.

Description

The program commenced in October 1999, in conjunction with the World Fly Fishing Competition. Over the past five years the program has expanded from the modest seven original freshwater volunteers to over 350 statewide in 22 regions of NSW. The program is fully funded by the NSW Recreational Fishing Trust, which oversees revenue raised by the NSW fishing fee. The Trust pays for the program's operational costs and all staff salaries. NSW DPI manages and accommodates the program staff and ensures all outcomes are achieved as per the funding application submitted yearly.

While the program focuses on involving community members in the face-to-face education of the recreational fishing community, it also facilitates community partnerships in environmental restoration programs, education of children over eight years of age and how we all can play a part in sustainable resource management.

Volunteer roles are divided into seven activity types including:

1. research assistance activities (i.e. tournament, creel surveys, etc.)
2. fishing workshops (targeted at children aged 8–16)
3. angler contacts (i.e. surveys, meeting points, club talks, etc.)
4. events (targeted at anglers and communities, etc.)
5. school visits and aquatic tours
6. habitat restoration (i.e. pest removal, clean-ups, etc.)
7. EO administration assistance.

Training

The volunteer's role is to educate only – they have no powers of enforcement. Skills such as listening, patience and compassion are essential. All potential volunteers must pass a NSW police security check, child protection assessment and undergo interviews, both written and verbal, before being offered a place in induction training.

Induction training is done in cooperation with TAFE NSW, and involves two days theory and one day field work. Volunteers are then issued with a uniform and Fishcare ID. The induction training provides volunteers with the basic skills to undertake guided activities alongside more qualified volunteers or staff. Induction training is undertaken within regions and biannually. Leader volunteers and long-term volunteers play a pivotal part in training new recruits. This also facilitates strong inter-volunteer social networks and the program's team approach to forming strong community partnerships.

Enhancement training is offered to volunteers who have committed over 80 hours of service, and want to broaden their skill base enabling them to be involved in specialised activities, and/or refine their existing skills. As with the induction training, leader and long-term volunteers play a pivotal part in the enhancement training. Enhancement training includes:

- fish kill training workshop (in-house)
- tournament data collection workshops (in-house)
- angler field event and fishing clinic training, including event risks

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- fish handling workshop (in-house)
- first aid (for leader volunteers only)
- communication techniques workshop (in-house).

Program staff run several regional events to both celebrate the work of the volunteers and encourage increased social networks within the volunteer groups (and other community groups). The events range from small social gatherings to large-scale campaign weekends, which invite the community and family members to share in the volunteers' knowledge, spirit and passion.

How/why is this project an example of peer education?

- Through volunteer training and involvement in the agency's charter it promotes increased peer understanding of the issues associated with aquatic management.
- It provides tools for managing and reducing the environmental impact of the individual and the community.
- The volunteer demographic replicates the characteristics of the wider angling interest group that is interested in protecting the aquatic environment.
- Volunteers play a pivotal role in training new recruits (peers).
- Social interaction which is activity encouraged within the program facilitates an unstructured form of peer education – more commonly referred to as 'the ripple effect'.
- Volunteers assist the agency in reviewing the program's effectiveness and training needs. Leader volunteers review training manuals. Volunteers then have a direct role in how and on what we train new recruits.
- Advertising for volunteers is minimal as volunteers form an unofficial recruitment voice. Interest for the program is at an all-time high. This is a direct reflection of the community's acceptance/acknowledgment of volunteer work.
- Community requests for volunteer involvement in educating juniors and other interest groups is overwhelming. A multitude of letters of thanks continue to be received by the agency. An example being:

Letter from Mrs Theresa le Roux

I am a teacher at Cooranbong Public School and recently we had the privilege of having four Fishcare volunteers visit our school and tell us about "fishing and safety". My year 2/3R class really enjoyed their presentation. We all wished we had more time to listen to them and ask more questions.

We are looking forward to them coming back to visit again to share their knowledge and experiences with us. They had such a nice way of working with my class.

Other peer issues?

Threats – Fishcare volunteers have provided the agency with unprecedented assistance in educating and involving the community in new and existing partnerships. However the volunteers are still underutilised and undervalued by some divisions of the agency and or management. The barriers to areas are generally through fear of volunteer duties overtaking that of paid duties. The role of the program's manager is to foster strong solid mentor roles within these groups and through understanding, policy formulation and outcomes, show that volunteer involvement is not a threat but a valued part of the division's way of achieving community outcomes, that were not previously achieved.

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Losses – Volunteers form a strong social network and when a loss (i.e. death or exit due to illness) is experienced it can form a break in a bond that in some cases is hard to repair. This is especially evident in groups whose average age is higher than 62. To address this, staff are trying to ensure volunteer groups have a varied age demographic and mentor relationships have an age spread of greater than 10 years.

Placement on the peer education spectrum



Case study 3 – Sustainability Street: Focus on greenhouse

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Project objectives

- Encourage behaviour change to reduce household emissions and achieve emission reductions.
- Build on existing residential emission reduction programs, including the Energy Home Rating Tool pilot.

Target audience

Penrith City residents

Description

The program involved 40 residents from 22 homes in two streets. Nominations were called through media advertising, editorial and community displays. Participants completed an energy survey at an initial meeting and authorised the release of data from their energy provider for ongoing monitoring. The Department of Energy Utilities and Sustainability 'Energy Smart Home Rating Tool' was used to give a Star Rating for each home. The NABERS software was used to assess emissions from vehicles.

The two participating streets were Banool Avenue, South Penrith, consisting of 30-year old, single-storey homes, and Sir John Jamison Circuit, Glenmore Park, consisting of newer, two-storey homes. The data showed average base emissions of 10 tonnes per household in Banool Avenue and 15 tonnes per household in Sir John Jamison Circuit.

Three workshops were held in the homes of participants in each of the streets and activities were reported in the Penrith media.

- | | |
|------------|---|
| Workshop 1 | Introduction, big picture, data collection |
| Workshop 2 | Energy audits on the two host homes, a home energy efficiency talk by John Moffat (Community Services Manager, Integral Energy), smart meters installed in 13 homes |
| Workshop 3 | Greenhouse science, emissions from cars and waste, offsetting emissions, a 23456 raffle. |

How/why is this project an example of peer education?

A key component of the program is peer education, which was integrated into the program at all stages. An example is the 23456 raffle, which involved one participant in each street taking up a challenge to spend \$234.56 on energy efficiencies in their home and leading the group on a tour showing what they bought, why and where. Purchases included compact bulbs, weather stripping, tap aerators, insulation batts, ugg boots, a personal heater, egg timer and draught excluders. Every participant agreed to take up an offer from Neco, spotted by one of the 23456 challengers, to buy five compact bulbs and a Triple A showerhead for \$5, which has the potential for 55 tonnes of CO₂ abatement.

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A 30-hour staff 'train the trainer' course was held to build staff capacity for ongoing program delivery. It was developed and delivered by Vox Bandicoot. Eight council educators successfully completed the course and are now accredited *Sustainability Street* mentors.

Other peer issues?

Each session with the streets followed a 'purposefully informal' structure detailed in the *Sustainability Street* manual, which included a section called 'Stories from the real World', in which participants shared some of the actions they had taken to be more sustainable over the past few weeks. These things were reported in the street newsletters and included: installing bulbs; getting a water retro fit (and explaining what it was all about); collecting cold water in bottles in the kitchen (one participant came up with the idea of 'phantom water' – the water wasted while waiting for the hot); planting a native garden; and walking to the shop. These stories were inspiring to the educator and the participants. They had a powerful role in promoting behavioural change among others.

Shortcuts – Each session included a learning shortcut for water, waste and energy, in which participants were asked for their tips on how to save these resources. This proved really effective in demonstrating that the knowledge is out there – you don't need to have a PhD in sustainability to do these things, just a mindset for it.

One participant is going to visit a local school to talk about the project with Year 9 students.

Participants will be invited to come along to address the information session when the program is expanded for four more streets. It is hoped someone will come along to our Open Day display on *Sustainability Street* to talk about their experience in the program.

A staff *Sustainability Street* has been formed for council staff, including the real world stories. Valuable shared information about use of photocopiers at work, toners, paper use and other issues were shared among participants providing really valuable knowledge. At the next session, one staff member will be talking about grey water – something we're all keen to know more about.

Placement on the peer education spectrum



Case study 4 – Footprints

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Project objectives

To target an age group that is not normally reached by traditional council environmental education activities and encourage them to reduce their ecological footprint through involvement, participation, capacity building, community building, social networking, events and activities, building knowledge and skills, providing tools, focusing on quality of life and choice, to adopt changes that fit in with individual lifestyles (in other words ... fun!).

Target audience

Twenty-five to 40-year-olds in the lower north shore (Generation X) – North Sydney, Willoughby and Lane Cove councils

Description

A literature review and focus group were conducted. Participants were recruited through flyers, an environment expo, and council contacts. Thirty-five participants, the 'footprinters', joined the program. They began by filling in a survey that measured their ecological footprint. The program design placed sustainability issues within a lifestyle context through the introduction of monthly themes.

Event	What we did
Views from the couch October 2004, Oaks Hotel, Neutral Bay	This initial event helped to enthuse volunteers to join the program. Participants were grouped into council teams and did a lifestyle quiz, discussed sustainability issues and challenges in trading lightly in their daily life, through round-table discussion and games. Networking and social opportunities were paramount to making the program attractive to participants in terms of long-term engagement.

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<p>Ecologic after dark November 2004, Powerhouse Museum</p>	<p>We visited the <i>Ecologic</i> exhibition after hours at the Powerhouse Museum to learn about broader sustainability issues. Participants' recorded their current lifestyle and measured their ecological footprint. A speaker from the museum shared simple ideas with participants and encouraged them to 'think global' about their ecological impact and its future consequences.</p>
<p>Eco ho ho December 2004, Balls Head Reserve, Waverton</p>	<p>We invited participants to involve their friends and family in this event. Footprinters had an interactive worm farm demonstration and were provided with a complete worm farm or compost bin. The event also introduced sustainability options for the festive season when consumption increases environmental impact for many of us.</p>
<p>Feeding frenzy February 2005, Macro Wholefoods, Crows Nest; Woolworths, Crows Nest; and Crows Nest Hotel</p>	<p>Feeding Frenzy gave participants a chance to explore the impact of production, distribution and consumption of food and grocery items. We began with an information session and organic feast at Macro Wholefoods in Crows Nest. Our participants then teamed up to take a council shopping challenge at Woolworths. Finally we met back at the Crows Nest Hotel to compare how different groups interpreted and scored on the same list of items.</p>
<p>Eco-trivia April 2005, Monkey Bar, Chatswood</p>	<p>Following the familiar format, our group once again teamed in council groups to pool their knowledge. Questions challenged the groups to discuss environmental issues in a fun and relaxed environment. Linking with an Energy Smart Home promotion, participants were also offered a free home energy audit and took home energy saving light bulbs.</p>
<p>Bangers in the bush brunch May 2005, Blackman Park, Lane Cove River</p>	<p>Drawing on the connection the group feels with the local area, this event was a guided bushwalk along mangroves followed by brunch. The delicious food was all organic and a coffee van provided real coffee. Participants brainstormed ideas for the future of the project. Local walks brochures and Bushcare activities from each council were on display as well as information about reducing chemicals in the home.</p>
<p>Step forward and celebrate June 2005, World Environment Day, Lane Cove Sailing Club, Longueville</p>	<p>This is not the end! This event celebrated our success and recognised the behaviour changes that have been made. Some participants started by getting active and taking part in local bush regeneration. We then moved to the Lane Cove Sailing Club for afternoon tea and a facilitated session to plan how we move forward in the areas of interest that participants had previously identified. To complete the evening, council dignitaries presented awards to recognise the progress so far and we celebrated with drinks and delicious organic finger food.</p>

As a result of the monthly events, a Yahoo group started. It has 56 members (not all the footprinters joined). On-line discussions are held on everyday environmental issues, local activities, household sustainability and global events. The group also includes locals and friends of footprinters.

How/why is this project an example of peer education?

The project targets a specific age group, providing information that is relevant to the group members' lifestyles in a format that they are familiar with (in a social atmosphere – in the pub!).

The group members support each other by sharing challenges and successes at events, and via the Yahoo group. Friends and family of group members are encouraged to be involved in the group's activities.

In feedback, participants report that they influence between three and 10 people in their own networks.

About five participants are now interested in joining local Bushcare groups and setting up a younger group which may encourage other young people to join. The group also shares information about more sustainable jobs that may appeal to other group members.

Four projects coordinated by subgroups will see the program continue:

- taking the program to the broader community (acting as ambassadors)
- social change lobby group
- ongoing local activities organised with council support
- continue the email network and look at how it can expand and keep member email addresses secure.

In these projects participants will have a greater influence on the program outcomes.

Other peer issues?

The project led to the formation of friendships. In social events initiated by participants there is evidence of discussions about sustainability. Participants and council staff are proud to be part of the project.

Here are some quotes from feedback:

'I was offered the opportunity to go to a meeting in LA recently which would have been great personally but decided not to go because of the emissions – that was a difficult decision.'

'I've been astonished at the negative reaction to changing shower heads, however I have been able to give the positive angle on this and assure them that my new shower is better than the old one.'

'Our major change has been in starting to grow our own food and letting friends taste our yummy fresh vegies!'

'We've influenced friends to use cloth or biodegradable nappies, adopt lower impact gift giving and use reusable wrapping, handed out postcards at work (many visited the website), colleagues are bringing reusable mugs to the coffee shop and reusing plastic food containers, using recycled office paper and printing on two sides (considerably reduced paper use at the office), also recycling printer cartridges.'

'We are using the car less where possible and are really careful with our energy consumption since the audit.'

Placement on the peer education spectrum



Case study 5 – DEC Ethnic Communities Sustainable Living Project

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Project objectives

- To promote awareness, knowledge and understanding among specific ethnic communities about ways to live more sustainably at home, play and work.
- To facilitate behaviour change by promoting simple practical ways for people from ethnic communities to live sustainably by conducting education sessions in community languages.
- To encourage deeper involvement in sustainability issues through promoting community development activities about living sustainably with interested ethnic groups.
- To develop a greater understanding of motivations and knowledge, skills, attitudes and practices of ethnic communities in relation to their environments.
- To build the capacity of councils to develop and deliver environmental education to ethnic communities in their local government areas.

Target audience

The largest eight communities of people from culturally and linguistically diverse (CALD) backgrounds in Sydney and the Illawarra region: that is the Arabic, Chinese, Greek, Italian, Korean, Macedonian, Spanish and Vietnamese communities.

Description

The aim of the Ethnic Communities Sustainable Living project (ECSLP) is to encourage people from culturally diverse backgrounds to learn about, and take care of, their local environments at home, work and play, with a particular focus on leading sustainable lifestyles.

It is based at the Ethnic Communities Council of NSW enabling the Department of Environment and Conservation (DEC) to:

- work effectively with a range of non-government stakeholders
- form close relationships with peak ethnic organisations
- facilitate ownership of the project by the CALD communities.

The ECSLP team of experienced bilingual environmental educators are the core of the project. They work with the Arabic, Chinese, Greek, Italian, Korean, Macedonian, Spanish and Vietnamese communities in NSW encouraging them to adopt simple practical ways to live more sustainably. They advise DEC on what are the most effective environmental education methods for their communities.

The bilingual educators offer face-to-face learning opportunities to their own communities in health and community centres, churches, mosques and temples, wherever communities meet. These sessions are run in a participatory way to acknowledge the knowledge, skills and/or practices the participants may have brought with them from their home countries or have gained in Australia and to engage them through discussion and critical thinking.

The topics and content of the workshops include:

Sustainable living – participants learn about living sustainably, preventing pollution and helping to protect their local environment for future generations.

Water conservation – participants learn to save money on their water bill by saving water around the house and garden. They also find out about current water restrictions.

Composting and worm farming – participants learn about ways to nourish the garden by learning to compost or build a worm farm, reducing organic household waste at the same time.

Recycling and reducing waste – participants learn all about waste and what can be done to avoid, reduce, reuse and recycle it.

Stormwater – participants learn how to keep our waterways clean for our future by stopping stormwater pollution and protecting our rivers and oceans.

'Green cleaning' – participants learn to clean the home without toxic chemicals using non-toxic alternatives and how to dispose of unwanted chemical products.

Protecting biodiversity – participants learn about native plants and animals, how to attract birds and butterflies to the garden and discuss tips for more sustainable gardening.

Saving energy – participants learn how to save money on electricity bills and reduce greenhouse gases with simple energy-saving tips.

Workshops are 1–2 hours long depending on the group's requirements. The bilingual educators design a workshop to suit the needs of the group, for example, focusing on just one issue or a couple of issues (depending on the time).

Field trips

Experiential learning is regarded as an effective way to encourage understanding about environmental issues and the educators regularly take groups on field trips to eco-gardens, landfills and local rivers. This has helped to increase the participants' understanding of their own impact on their local environment and to see environmental systems at work and how these compare with systems from their own cultural backgrounds.

Field trips include visits to recycling centres and landfills, national or district parks to observe biodiversity and stormwater gross pollutant traps to see what enters the stormwater and ends up in waterways.

'The participants really enjoyed the outing. They got a full picture of the processes and links to what we had discussed during the sessions.' Gladys Pineda, Spanish-speaking educator

Festivals and cultural events

The educators also coordinate stalls at cultural festivals and other community events. Their presence at these events enables the educators to talk with large numbers of people from their communities and distribute printed materials in their language.

Arts projects

Some community groups express an interest in environmental arts projects. The results of these activities are visual representations of the sustainable living message for other members of the community. Some of the artworks have been placed in halls or foyers of community meeting places to attract the attention of the wider community to the environmental message. Another effective use of artwork is to design and print a message on a calico bag. The educators work

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with CALD groups to develop a design with a culturally appropriate environmental message in the community language.

The process of involving specific language groups in the design and development of these artworks is to ensure that the community has ownership of the culturally specific product with an important environmental message that resonates within that community.

Media

The bilingual educators conduct interviews in community languages on ethnic community, commercial and SBS radio on a variety of environmental topics.

How/why is this project an example of peer education?

This project involves identifying, training and supporting members of specific cultural groups to pass on accurate information to others with a similar non-English speaking background in the language spoken at home by the group members.

As cultural peers the bilingual educators can provide support and culturally appropriate learning to the target group to effect and sustain the change of behaviour required for the specific CALD communities to live more sustainably.

Other peer issues?

The bilingual educators are trained in all the aspects of sustainable living, sometimes by experts and sometimes by peers, that is, those more experienced bilingual educators from the same cultural group. The project has elements of the peer teaching approach and the peer participation model within it. Because this project has been successfully implemented over a long period, it demonstrates that peer education can have a long life and continue to deliver high-quality education into a community in an ongoing manner.

Placement on the peer education spectrum



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Appendix: Peer education models described

Factor	Peer Influence Model	Peer Participation Model	Peer Teaching Model
Description	Diffusion of innovation approach based on the idea that everyday informal interactions are the most effective form of education	Recognises knowledge and expertise already exists in the group Uses existing networks to circulate information and skills The target group is involved in the decision-making process	Peer educator prepares and conducts an education session much like a teacher in a classroom There is usually a 'hierarchy of power' Content is generally from outside the peer group. Peer educators: <ul style="list-style-type: none"> ▪ disseminate basic facts ▪ facilitate informal/formal discussions ▪ run training activities for peers ▪ participate in broader project activities ▪ collect data and evaluate activity.
Appropriate for ...	More appropriate for influencing cultural change and peer group norms	More appropriate for developing a sense of ownership and empowerment within a group	More appropriate if the aim is to increase individual's knowledge and understanding
Structured	Little structure: informal	Somewhat structured, tends to be informal in approach	Structured and formal
Approach	Interactive in approach	Collaborative in approach	Tends to be more didactic in approach
Planning	Tends to be casual, unplanned	Somewhat planned	Planned
Measuring impact	Can be difficult to measure	Can be difficult to measure – measurement tends to focus on the process rather than the outcome	Measurable by using pre/post surveys, etc.

Factor	Peer Influence Model	Peer Participation Model	Peer Teaching Model
Method of education	<p>Characterised by casual, conversations between people with one or a number of common characteristics or interests</p> <p>Limited or no curriculum/ content</p>	<p>Characterised by participatory action learning and some outreach by participants</p> <p>The group identifies the content/the issue</p>	<p>Characterised by an organised program with peer educators who conduct education sessions with peer groups or individuals</p> <p>A curriculum or educational modules around an externally identified issue or problem</p>
The peer educator?	<p>Often no identified peer educator. No perceived expert but someone worthy of being listened to and/or believed due to trustworthy connection with the peer</p>	<p>No peer educator but a facilitator to guide the shared learning process</p> <p>May have expertise but does not wear 'the expert hat'. Able to access expertise as needed and identified by the group.</p>	<p>Identified peer educator who has been selected and trained</p> <p>An identified expert because of training and experience – has information and skills worthy of note</p>
Credibility issues	<p>Messenger-based credibility and message-based credibility</p> <p>Messenger is trustworthy and socially credible</p> <p>Because of an existing connection there is a strong power of influence including willingness or desire to copy behaviour or attributes</p> <p>Information/skills passed on may be inaccurate or accurate</p>		<p>Messenger-based credibility and message-based credibility</p> <p>Educator's credibility is knowledge or expert-based</p> <p>Information/skills are up-to-date, accurate and based on fact or available research</p>
Training of peer educators	<p>May or may not involve some kind of training – but person's life experiences are valued by peers</p>	<p>Trained in facilitation and communication</p>	<p>Formally trained in facilitation/ communication, and knowledgeable in the content of the curriculum or modules of learning</p>
Examples	<p>Family, friends, colleagues who listen and learn from each other through association</p>	<p>Watershed sustainability workshops? <i>Footprints</i> project</p>	<p><i>Ethnic Communities' Sustainable Living Project</i></p>