

Ethics, Zoos and YOU!

Teacher Workbook

VCE Psychology
Unit 2 | Area of Study 2

How are people influenced to behave in particular ways?



The Ethics, Zoos and You program is an opportunity for students to understand science as a human endeavour, by gaining insight into how psychology skills and knowledge can be used in animal welfare and wildlife conservation.

The program consists of two Zoo Educator-led workshops. A Zoo Educator will lead the workshops at two locations – Digest Ed and the Orangutan Sanctuary. A map of these locations can be found in the Appendix. At the time of booking, teachers must select the focus of workshop two: **behaviour change or research methods**.

A big question will frame the students day, '**How are psychology skills and knowledge used in wildlife conservation?**' To help find an answer to this question, students will have the opportunity to:

- Develop an understanding of ethical principles and their importance, through facilitated discussions and experience as a participant in psychological research
- Apply understanding using the model of Zoo's Victoria's Animal Ethics Committee and a current ethical dilemma
- Workshop option 1: Undertake a scientific investigation into captive animal welfare at Melbourne Zoo which includes formulating a hypothesis, collecting and recording qualitative and quantitative data in an observational study, and analyzing and evaluating the data with the support of a Zoo expert
- Workshop option 2: Students explore key knowledge in Unit two; how Zoos Victoria applies the tri-component model to influence and shape the behaviour of our visitors through the analysis of a community conservation project, *Don't Palm Us Off*.

Curriculum Links – see Appendix 1 for detailed links to VCAA outcomes

- VCE Psychology
- Units 1-4: Key science skills: the role of ethics committees and ethical principles
- Units 1-4: Key science skills: conduct a scientific investigation including data collection
- Unit 2: Area of study 2: How are people influenced to behave in particular ways?

Student Booklet

The student booklet is the same format as the teacher booklet and includes preparation material, guiding questions and data collection sheets to be used on the day. The teacher booklet includes question answers, an introduction page, and an appendix with additional teacher resources.

Post-visit

Data collected onsite for option 1 can be used by students to complete a scientific poster relating to animal behaviour and to communicate authentic and assessable scientific ideas. VCAA mapping, a blank scientific poster and information on wild orangutan activity budgets are in the teacher appendix.

Alternatively, if teachers wish to extend students doing workshop option 2, analysis of behaviour change and *Don't Palm Us Off*; we encourage the development of a School Assessed Coursework that supports the tri-component model. Students may be asked to develop a school-based community project to encourage school-wide behaviour change or another of their choosing. More information about this project, and other projects, can be found at; <https://www.zoo.org.au/education/community-projects>

Prepare for your excursion to the Zoo

During your excursion at the Zoo, you will analyse strategies used by Zoos Victoria to encourage behaviour change through conservation projects like *Don't Palm Us Off*.

Before arriving, consider your perspective or attitudes and answer the questions below.

At the Zoo you will explore these further and your perspective may change or be influenced by your experience.

Pre-excursion questionnaire

Self-reflection exercise:

1. What do you know/feel about zoos? Think about your personal experiences, perceptions, attributes, attitudes and stereotypes.
2. Do the opinions of others influence how you feel about zoos? Including experts, celebrities, media and technology?
3. What do you know/feel about Zoos Victoria's community conservation project, *Don't Palm Us Off*, after viewing various media materials?
*View the *Don't Palm Us Off* video: <https://vimeo.com/107556862>
4. How could you use media such as advertising, television, video games and social media to positively influence zoo visitors to take up an action to help fight extinction of orangutans?

Consider your attitudes about the following statements and place an **X** on the lines below to indicate how you feel about each statement.

The rate of species extinction in the 20th century was 100 times higher than it would have been without human impact. The role of all Zoos in the 21st century must be about conservation.

Agree

Disagree

With the population expected to reach 9 billion by 2050, resources are depleting and competition between people and animals is increasing. It is OK for a wild species to become critically endangered or possibly extinct in order to support human communities.

Agree

Disagree

Your responses to the above statements reflect your own ethical standpoint. Other students may have totally different opinions and views as they bring with them their own beliefs, values, and experiences.



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Ethics and animal welfare

On site educator-led workshop

BIG QUESTION: How are psychology skills and knowledge used in wildlife conservation?

“As a zoo-based conservation organisation, Zoos Victoria believes that just as the conservation and welfare of species in the wild is paramount, so too is the welfare of the animals in our collection.”¹

How does psychology inform Zoos Victoria’s work with captive animals?

We have an ethical obligation to ensure all animals in our zoos receive the best care and remain in neutral or positive welfare states. With your understanding of psychology, the mind and behaviour, consider how this knowledge might inform Zoo practice of captive animals?

What does Zoos Victoria need to consider, to ensure the welfare of our animals?

“Psychology can inform us here at Zoos Victoria of the environmental, behavioural and psychological needs of a species. Psychology can also help us keep our animals free from fear and distress. For example: designing an enclosure to allow individual to choose how close visitors can come to them or even whether visitors can see them at all.

It can help us consider the following: how to promote species appropriate behaviours and activity levels; how to minimize aberrant (abnormal) behaviours; and how to provide the best enrichment and conditioning programs.”²

Ethical guidelines

Unit 1-4 Key science skill; *Comply with safety and ethical guidelines: understand the role of ethics committees in approving research and apply ethical principles.*

Zoos Victoria’s Animal Welfare Code is intended to ensure that at all times and in all instances, the needs, interests and welfare of our animals is our primary consideration.

The Zoo investigates animal welfare during animal encounters and interactions with visitors. **If this was an experiment and you were the participants, consider the role of the experimenter when you meet an animal. What ethical considerations would need to be discussed with the participants?** *Code of Ethics: Ethical Principles which ensure the respect and protection of participants*

<i>Protection and security of participants’ information – personal information is safe from misuse, interference, loss, unauthorised access, modification or disclosure.</i>	<i>5. Informed consent procedures – voluntary choice must be based on sufficient information and adequate understanding of research and consequences of participation.</i>
<i>2. Confidentiality - not to use or disclose private information for any purpose other than for which it was given</i>	<i>6. Use of deception – participants are deliberately misled or not fully informed. Only acceptable if benefits justify use and with debrief.</i>
<i>3. Voluntary participation – the researcher must ensure participants voluntary consent.</i>	<i>7. Debriefing – clarifying each participant’s understanding of the nature of the research after it has concluded.</i>
<i>4. Withdrawal rights – unconditional right to withdraw at any time without giving a reason.</i>	

Role of ethics committees

“The National Statement requires that all research that carries more than a low level of risk to human participants must first be reviewed and approved by an ethics committee. This type of committee is formally called a *Human Research Ethics Committee (HREC)*.”³

¹ Zoos Victoria. May, 2009. Animal Welfare Code. [<http://www.zoo.org.au/sites/default/files/ZV-animal-welfare-code.pdf>]

² Zoos Victoria. May, 2009. Animal Welfare Code. [<http://www.zoo.org.au/sites/default/files/ZV-animal-welfare-code.pdf>]

³ Grivas, J. 2016. PSYCHOLOGY VCE UNITS 1 AND 2, seventh edition. John Wiley & Sons, Australia. 70 pp.

In the process of saving endangered species and providing the best welfare for our animals, Zoos Victoria comes across many complex conservation dilemmas which need to go through a committee called an *Animal Ethics Committee (AEC)*.

What is an ethics committee? What are some of its roles and responsibilities?

An ethics committee has a minimum number of researchers and non-researcher participants. Its purpose is to assess research proposals for approval purposes, and then monitor the research to ensure all relevant ethical standards are adopted and followed.

Roles include: assessing research proposals using the National statement; deciding whether the researcher(s) are adequately experienced and qualified; monitor approved research; handling complaints; ensuring accountability of researchers.⁴

Zoos Victoria’s Animals Ethics Committee (AEC) is made up of a range of representatives as required by the Australian Code of Practice for the Care and Use of Animals for Scientific Purposes. Zoos Victoria’s AEC meet on a bi-monthly basis to assess and review the welfare and ethical considerations of research proposals.

Reference: <http://www.zoo.org.au/fighting-extinction/research>

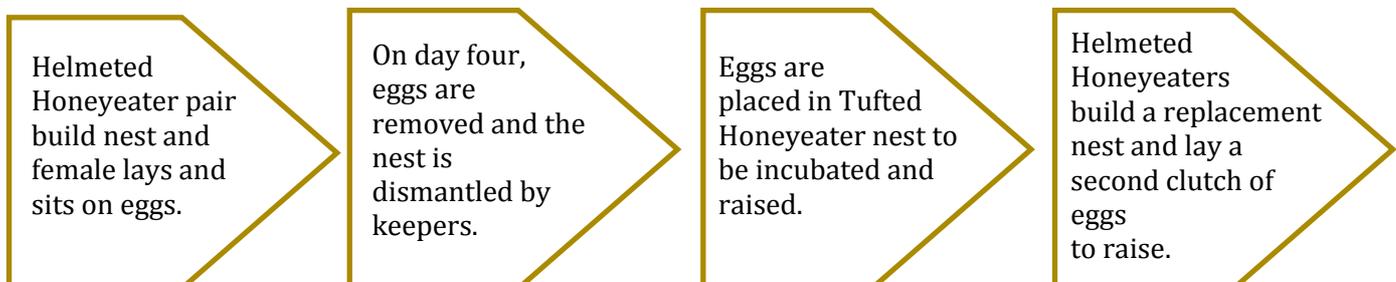
An AEC always consists of the four members listed below. Each member brings the following experience and expertise to the AEC.

Scientific researcher/expert	They have appropriate recent research or teaching experience. This experience should be relevant to the species used and the activities conducted in the institution.
Veterinarian	They have a degree in veterinary science with experience relevant to the species used and activities conducted in the institution.
Animal welfare representative	They are a person who is ideally an active member of an animal welfare organisation, with a commitment to furthering the welfare of animals.
Lay person	An independent person who does not currently, and has not previously conducted scientific or teaching activities using animals, and who is not an employee of the institution.

Reference: <http://www.animaethics.org.au/policies-and-guidelines/operation/criteria-for-assessment>

Case Study: Cross Fostering of Helmeted Honeyeater Eggs

Overview



⁴ Grivas, J. 2016. PSYCHOLOGY VCE UNITS 1 AND 2, seventh edition. John Wiley & Sons, Australia. 70 pp.
Melbourne Zoo Psychology – Teacher Resource

What ethical questions and concerns may arise from this case study?

In groups, discuss each viewpoint and note down any questions, concerns, recommendations or conditions from the perspective of each AEC member.

<p>Scientific researcher/expert</p>	<ul style="list-style-type: none"> • <i>What is the conservation status of each species involved?</i> • <i>(Yellow Tufted Honeyeaters are rated Least Concern (IUCN Red List of Threatened Species 2012). Currently they do not require any conservation support. Helmeted Honeyeaters are critically endangered and are extremely unlikely to recover without human intervention and help.)</i> • <i>What are similarities and differences between the two species? In particular, do both species feed their young the same diet, and will there be any behaviours that are unique to Tufted Honeyeaters that the fostered chicks may learn?</i> • <i>Are there any other species that could raise the eggs instead?</i> 	
<p>Veterinarian</p>	<ul style="list-style-type: none"> • <i>Are there any pathogens that could be transmitted from the Tufted Honeyeaters to the Helmeted Honeyeaters?</i> • <i>Are there carry-over effects of this practice in adult birds? E.g. mate selection, parent-offspring communication and imprinting?</i> 	
<p>Animal welfare representative</p>	<ul style="list-style-type: none"> • <i>Where will the Tufted Honeyeaters be sourced from?</i> • <i>Where will the birds be kept?</i> • <i>Will they be released back into the wild afterwards if they are wild caught?</i> • <i>Is there a backup plan if the Tufted Honeyeaters reject the new eggs?</i> • <i>Do the Helmeted Honeyeaters who have eggs removed show any signs of distress?</i> • <i>Can the cross-fostered chicks be released into the wild once they are mature?</i> 	
<p>Lay person</p>	<ul style="list-style-type: none"> • <i>How might the general public feel about cross fostering the Honeyeaters?</i> • <i>What may influence their opinions? (values/morals/life experiences)</i> • <i>Why can't the removed eggs be raised by zoo keepers?</i> • <i>Does it actually make a noticeable difference to the size of the Helmeted Honeyeater population?</i> 	

How does psychology inform the interaction with our visitors?

Zoos Victoria welcomes over two million visitors across the zoos annually and has over 200,000 members; this is more than any AFL club.

Why might Zoos Victoria want to influence the behavior of visitors?

Students may have a variety of answers. Examples include:

- *To inspire visitors to take simple actions that will help wildlife*
- *To raise awareness and spread messages through the community*
- *To encourage visitors to be involved in a campaign by donating something, pledging or emailing, or being aware of how choices in the supermarket can impact animals.*
- *By joining Zoos Victoria and making a bigger difference to a conservation goal*

Human Behaviour Change

On site educator-led fieldwork

What factors might influence a person to change their behaviour?

Select the top three factors that you think would most influence a person to change their behaviour.

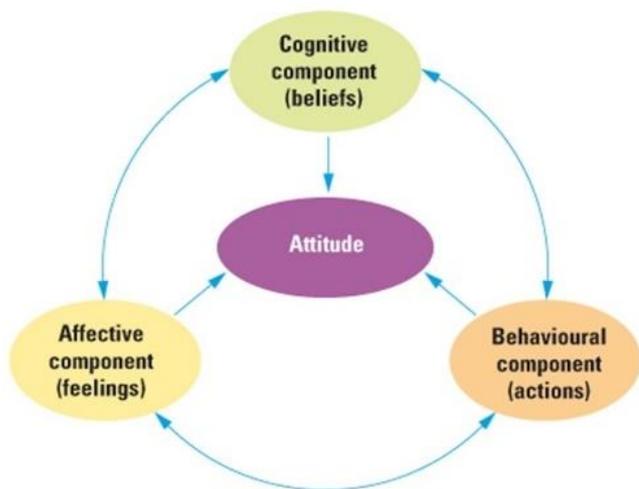
Factor	Your Ranking
Values	
Leadership	
Demographics	
Knowledge – ABOUT	
Knowledge – HOW	
Attitudes	
Convenience	
Incentives	
Social Pressure	

Provide an explanation for your first choice:

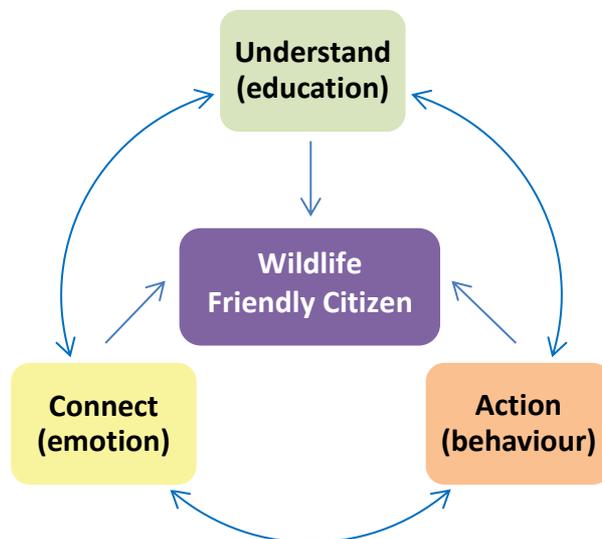
Answers will vary depending upon student's background and prior knowledge.

Zoos Victoria's Community Conservation Campaigns are about influencing behaviour to have a direct, positive impact on wildlife. These campaigns are informed by theories of Social Psychology, incorporating Community Based Social Marketing (Dr Doug Mackenzie Mohr) and the tri-component model of attitudes using the Connect, Understand and Act model.

STRUCTURE OF ATTITUDES: TRI-COMPONENT MODEL



STRUCTURE OF BEHAVIOUR CHANGE: ZOOS VICTORIA'S CUA MODEL



How could the campaign tools of *Don't Palm Us Off* be applied to the tri-component model of attitudes?

The link between CONNECT and AFFECTIVE

CONNECT tools could be linked into the AFFECTIVE attitudes as they are both about emotions and feelings

The link between UNDERSTAND and COGNITIVE

UNDERSTAND tools could be linked to the COGNITIVE attitudes as they both are about understandings and beliefs.

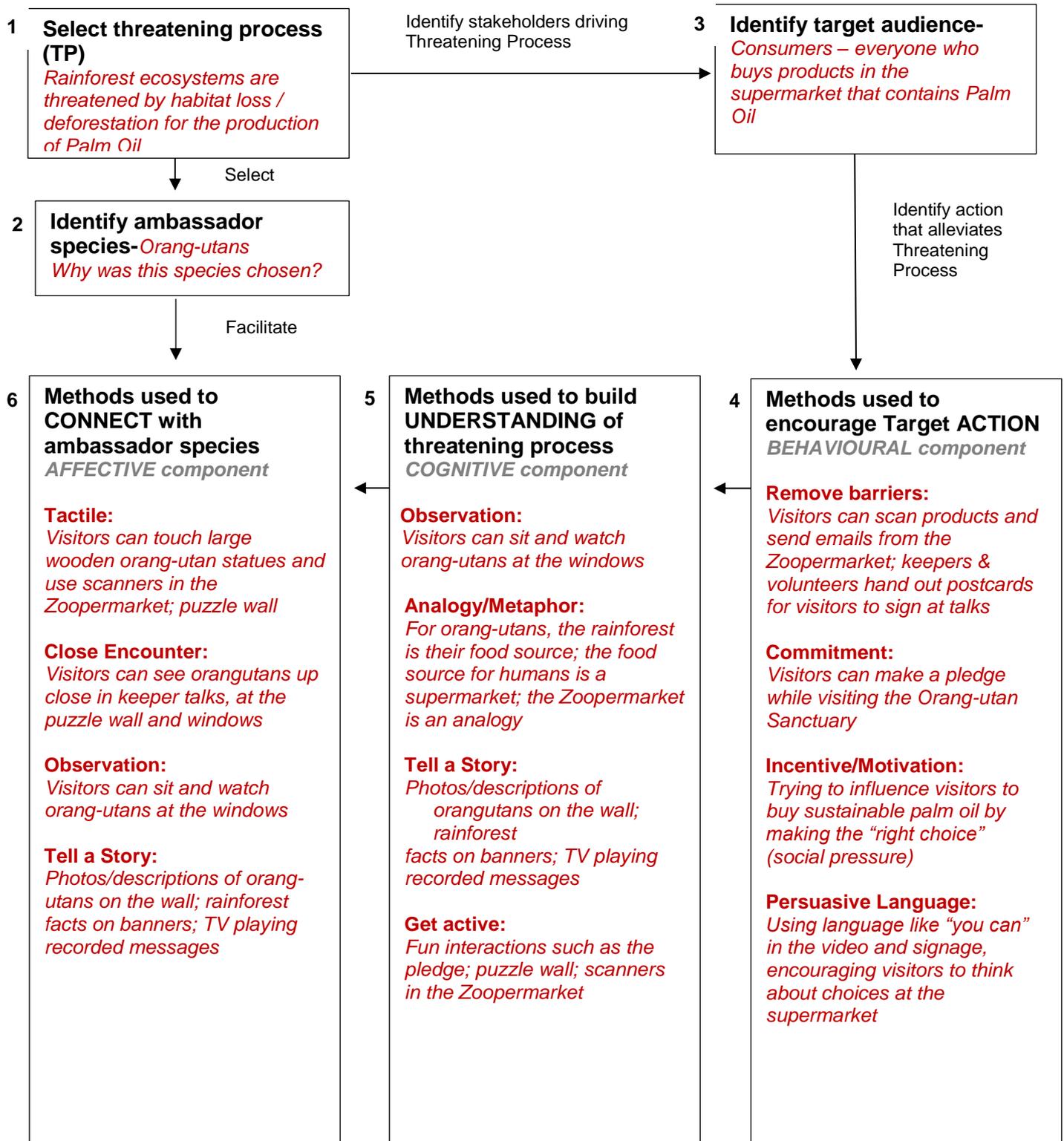
The link between ACTION and BEHAVIOUR

ACT tools could be linked to the BEHAVIOURAL attitudes as they are both about taking action and empowering people

CONNECT - UNDERSTAND - ACT

Behavioural Based Conservation Education Model: 'Don't Palm Us Off'

Zoos Victoria's campaigns are developed using the following six step process



Do you think *Don't Palm Us Off* is effective in changing the behaviour of visitors? Why/why not? In your answer consider how it has impacted you. What tool did you find most effective?

Answers will vary depending upon student's background and prior knowledge.

Teacher Resource: Post-Excursion Extension

Ethics, Zoos and You has been designed with opportunities to extend students learning back at school.

A list of extension ideas are listed below and resources can be found in the following Appendix. Resources include VCAA mapping, a Zoo map with key locations, and an article by Doug McKenzie-Mohr Ph.D., Environmental Psychologist.

Post-excursion reflection – Students can reference their pre-excursion questionnaire and consider if their perceptions have changed. As a class, discuss the changes and if Melbourne Zoo is effective at influencing behaviour?

Analysis of ‘Community-Based Social Marketing’ Author - Dr. Doug McKenzie-Mohr Ph.D., Environmental Psychologist – *Article is found in Appendix 3.*

Students read the article and answer the following questions:

- *What are the main tools that influence a person to change their behaviour according to McKenzie-Mohr?*
- *Were any of these surprising?*

Implement a conservation project like *Don't Palm Us Off*, at school:

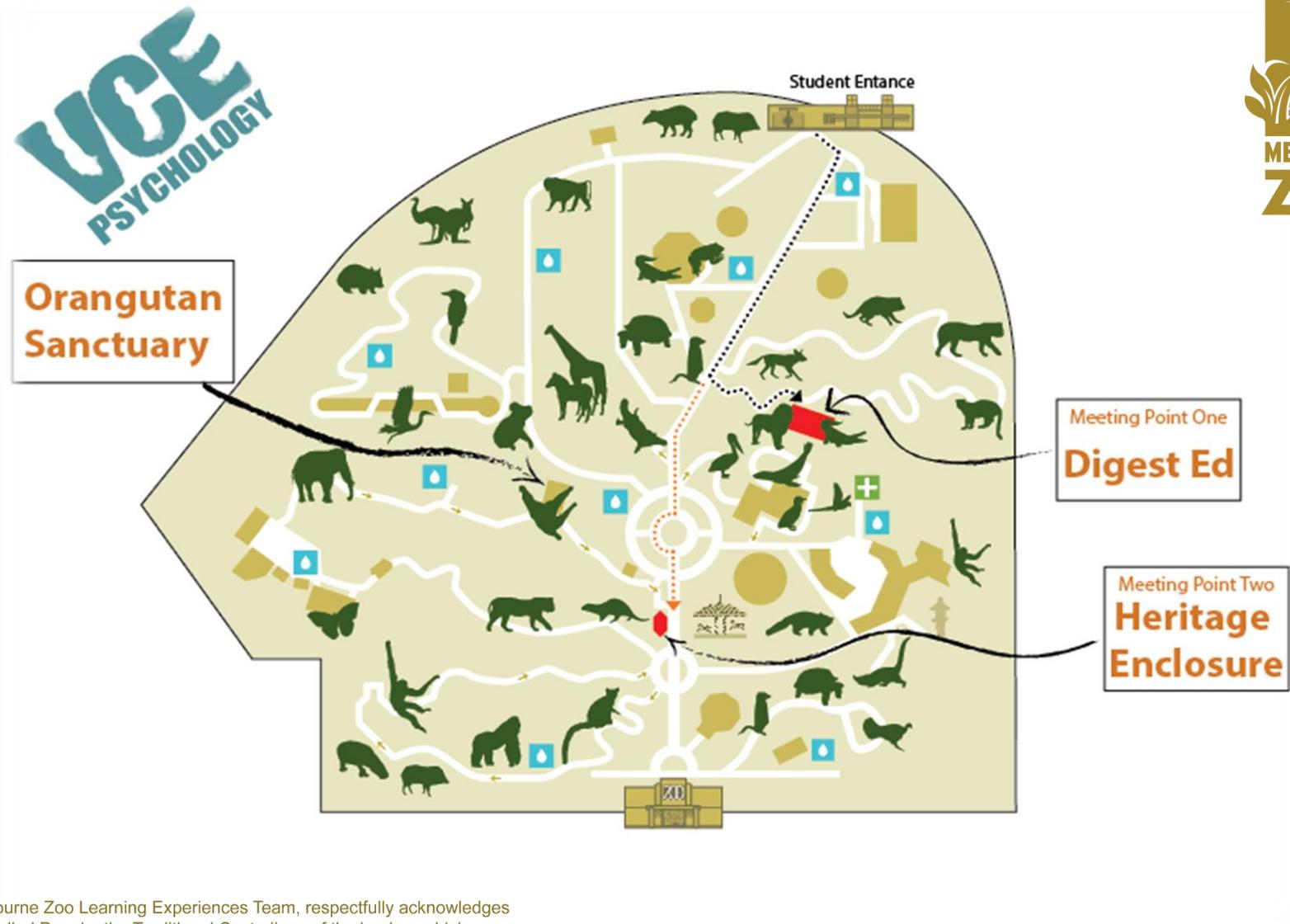
Encourage students to visit:

- <https://www.zoo.org.au/education/community-projects>
- Test and compare the success of the campaign using little information VS lots of information.

Appendix 1 – VCAA outcome mapping

Activity	VCAA Outcomes	Learning intentions
<p>Educator-led Workshop 1 <i>45 minutes</i></p> <p>A Zoo educator will introduce students to ethics at the Zoo and the ways we use psychology skills and knowledge in animal welfare and wildlife conservation.</p>	<p>VCE Psychology Units 1 - 4: Key Science skills</p> <p>Comply with safety and ethical guidelines: understand role of ethics committees and application of ethical principles.</p>	<ul style="list-style-type: none"> • To gain a deeper understanding of how ethical principles in psychology are applied in animal research • To understand the role of the ethics committee at the Melbourne Zoo and how they create ethical animal research
<p>Educator-led Workshop 2 <i>45 minutes</i></p> <p>A Zoo educator will facilitate a workshop at the orangutan sanctuary.</p> <p>At the time of booking, teachers must select the focus of the session: behaviour change or research methods.</p>	<p>VCE Psychology Unit 2</p> <p>Area of study 2: How are people influenced to behave in particular ways?</p>	<ul style="list-style-type: none"> • To apply the Tri-Component model of attitude formation to the Melbourne Zoo’s Conservation Project, <i>Don’t Palm Us Off</i> • To understand how Melbourne Zoo uses this model to change the behaviour of zoo visitors

VCE Psychology Map



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**Appendix 3 – “Community-Based Social Marketing”
Author – Dr. Doug McKenzie-Mohr**

Quick Reference: Community-Based Social Marketing

by Doug McKenzie-Mohr, Ph.D.
Environmental Psychologist
www.cbsm.com

When members of a community use resources wisely, for example by recycling or taking mass transit, a community moves toward sustainability. To promote sustainability, then, it is essential to have a firm grasp of how to effectively encourage individuals and businesses to adopt behaviors that are resource efficient.

Most initiatives to foster sustainable behavior rely upon large-scale information campaigns that utilize education and/or advertising to encourage behavior change. While education and advertising can be effective in creating public awareness and in changing attitudes, numerous studies show that behavior change rarely occurs as a result of simply providing information (see Chapter 1 of the online guide at www.cbsm.com). Community-based social marketing is an attractive alternative to information-based campaigns. Community-based social marketing is based upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities benefits.

Community-based social marketing involves four steps: 1) Identifying the barriers and benefits to an activity, 2) Developing a strategy that utilizes “tools” that have been shown to be effective in changing behavior, 3) Piloting the strategy, and 4) Evaluating the strategy once it has been implemented across a community.

Identifying Barriers and Benefits

Research indicates that each form of sustainable behavior has its own set of barriers and benefits. For example, the factors that impede individuals from composting are quite

different from those that preclude more sustainable forms of transportation. Even with apparently closely associated activities such as recycling, composting and source reduction, different sets of barriers and benefits have been found to be important.

Barriers to a sustainable behavior may be internal to an individual, such as one’s lack of knowledge, non-supportive attitudes or an absence of motivation. On the other hand, barriers may reside outside the individual, as in changes that need to be made in order for the behavior to be more convenient (e.g., providing curbside organic collection) or affordable (e.g., subsidizing public transit or compost units). Multiple barriers and benefits may exist for any form of sustainable behavior. As a result, community-based social marketers begin the development of their marketing plan by identifying these barriers and benefits.

Uncovering barriers and benefits involves three steps (see Chapter 2 of the online guide at www.cbsm.com). Begin by reviewing relevant articles and reports. Next, conduct obtain qualitative information through focus groups and observation to explore in-depth attitudes and behavior of residents regarding the activity. Finally, conduct a survey with a random sample of residents.

Prior to conducting a literature review, ensure that you have a clear mandate. That is, you need to know exactly what behavior(s) you are to promote. For example, a mandate to promote waste reduction is too general, while a mandate to promote curbside recycling and backyard composting has the level of detail you need to focus your literature search. In conducting the literature review consult four sources: 1) Trade magazines and newsletters; 2) Reports, 3) Academic articles, and 4) Authors of reports and articles that you found particu-

larly useful.

The literature review will assist you in identifying issues to be further explored with residents of your community through focus groups, observation and surveys. Limit the size of each of your focus groups to 6 to 8 people and make it easy for people to participate by providing services such as childcare and transportation. Come to the focus groups with a set of clearly defined questions that have been informed by your literature review. The facilitator of the focus groups, must clearly steer the discussion and ensure that all participants feel comfortable in participating. Have an assistant who takes notes during the group. Don't provide information about your program prior to the focus groups as this information will influence the information you receive from participants. When the focus groups are completed, tabulate the responses that you received and identify barriers and benefits that are mentioned by significant numbers of participants.

Focus groups are useful in obtaining in-depth information but are limited by the small number of participants and the influence that the group itself has upon what each member feels comfortable saying. Surveys overcome these two limitations.

Observational studies of specific behaviors are another valuable tool. By directly observing what people do you can more easily identify skill deficits, sequences and incentives that are already at work to reward existing behaviors. Observational studies help reduce the problems of self-report data and get the researcher much closer to the community and the behavior. Observation is also useful in evaluating behavioral compliance, particularly for behaviors where people are being asked to learn and maintain new skills.

Conducting a survey consists of seven steps.

First, begin by clarifying the objective of the survey. Do this by creating a survey objective statement which indicates the purpose of the survey. This statement can be used to ensure that you have the support of your colleagues before proceeding. This statement can also act as a reference when later deciding upon the relevance of potential survey items.

Second, list the items which are to be measured. Note that at this point you are not concerned with writing the questions, but rather with identifying the "themes" or "topics" that will be covered in the questionnaire.

Third, write the survey. In writing the survey avoid "open-ended" questions since they are difficult to analyze and extend the length of the survey. Further, limit yourself to only using a few types of scales for "closed-ended" questions, as this will speed conducting of the survey. When selecting how many options to provide on the scale, use six- or seven-point scales as they provide a broader range of answers than scales with fewer options. Whether you select six- or seven-point scales, stay with your choice throughout the survey. As you write your survey, ask four questions of each item: 1) Is this a question that can be asked exactly as written?; 2) Is this a question that will mean the same thing to everyone?; 3) Is this a question that people can answer, and 4) Is this a question that people will be willing to answer?

Fourth, when the survey is completed, take the time to pilot it with 10 to 15 people. Piloting the survey allows you to scrutinize the wording of the questions and the length of the survey. Don't include the data you obtain from the pilot with the data you obtain from the actual survey.

Fifth, select the sample. Surveys are most useful when the respondents are randomly selected from your community. A sample has been randomly selected when each adult in the community has an equal chance of being asked to participate. When this criteria is met, you can generalize your results back to the whole community with confidence.

Sixth, conduct the survey. If you are conducting the survey in-house, see the set of instructions for interviewers provided in Chapter 2 of the online guide at www.cbsm.com. If the survey is being conducted for you by a research firm you can expect that it will take approximately a week to two weeks for the survey to be completed.

Seventh, analyze the data. Unless you have someone on staff with a statistical background, you will want to have the survey data analyzed for you. In having the data analyzed, ask for a thorough description of those individuals who are engaging in the activity, as well as for those that are not

(descriptive statistics). Also, ask for the factors that distinguish people who are doing the behavior, such as composting, from those who are not, and the relative importance of these factors (multivariate statistics).

Significant pressures, such as time and staffing constraints, and increased project costs often result in this first step, the identification of barriers, being skipped. While these pressures are real and important, failure to identify barriers and benefits will often result in a program that either has a diminished impact or no impact at all. The identification of barriers and benefits is an essential first step to the development of a sound community-based social marketing strategy. By conducting a literature review, focus groups, observation and a survey you will be well positioned to develop an effective strategy.

Tools of Behavior Change

Community-based social marketing draws upon research in the social sciences, and particularly psychology, that has identified a variety of effective “tools” for promoting behavior change. Keep in mind that these tools are often most effective when used in combination with one another.

These tools are as follows:

Commitment

In a wide variety of settings people who have initially agreed to a small request, such as to wear a button saying they support the purchase of products with recycled-content, have subsequently been found to be far more likely to agree to a larger request, such as actually purchasing these products.

Why does seeking commitment to an initial small request work? There are likely two reasons. First, when people go along with an initial request, it often alters the way they perceive themselves. That is, they come to see themselves, for example, as the type of person who believes it is important to purchase products that have recycled content. Second, we have a strong desire to be seen as consistent by others. Indeed, our society emphasizes consistency and people who are inconsistent are often viewed negatively. As a result, if we agree to wear a button supporting the purchase of recycled-

content products, it would be inconsistent not to purchase these products when we shop.

Commitment as a behavior change tool has been utilized in a variety of studies with often dramatic results (see Chapter 3 of the online guide at www.cbsm.com). In considering using commitment, follow these guidelines:

Emphasize written over verbal commitments. Written commitments have been found to be more effective in bringing about long-term change.

Ask for public commitments: When commitments are made public, such as by having names advertised in a newspaper, behavior change is more likely.

Seek commitments in groups: If possible, seek commitments from groups of people that are highly cohesive, such as a church group. The close ties of these individuals, coupled with the importance of being consistent, make it more likely that people will follow through with their commitment.

Actively involve the person. When people are actively involved, such as being asked to peer into an attic or hold a container to measure the flow-rate of a shower, they are more likely to see themselves as committed to the activity.

Use existing points of contact to obtain commitments: Wherever natural contact occurs, look for opportunities to seek a commitment. For example, when people purchase paint ask them to sign a commitment that they will dispose of any left-over paint properly, or, better yet, take it to a paint exchange if one exists.

Help people to view themselves as environmentally concerned. We can help people to see themselves as environmentally concerned, and therefore more committed to other sustainable activities, by commenting on their past actions. For example, when someone comes to pick up a composter, ask them if they recycle. If they do, note that their recycling is evidence of their concern for the environment and that beginning composting is a natural way to reduce waste even more.

Don't use coercion. In order for this behavior change tool to be effective, the commitment has to be freely volunteered. That is, only ask for commitments when people

appear to be interested in an activity.

See the cases studies and graphics at www.cbsm.com for examples of how to use commitment.

Prompts

Numerous behaviors that support sustainability are susceptible to the most human of traits: forgetting. People have to *remember* to turn off lights, check the air pressure in car tires, turn off the engine when waiting to pick someone up, turn down the thermostat, select items that have recycled-content, etc. Fortunately, prompts can be very effective in reminding us to perform these activities (see Chapter 4 of the online guide at www.cbsm.com). Prompts are visual or auditory aids which remind us to carry out an activity that we might otherwise forget. In using prompts you will want to ensure that you follow these guidelines:

Make the prompt noticeable. In order for a prompt to be effective it has to first be noticed. Make sure that your prompt is vivid (a bright color) and eye-catching.

Make the prompt self-explanatory. All the information that is needed for someone to take the appropriate action should be conveyed in the prompt. For example, if you were using a prompt to increase the likelihood that people with odd numbered street addresses would only water their lawns on odd numbered calendar days (and vice versa), the prompt that you attach to an outside faucet could read (water your lawn only on odd numbered calendar days).

Present the prompt in as close proximity as is possible to where the action is to be taken. If you want to encourage people to turn off lights upon leaving a room, for example, affix the prompt beside or directly on the light switch plate.

Use prompts to encourage people to engage in positive behaviors. It is important, when possible, to encourage positive behaviors. If you want people to purchase environmentally friendly products when shopping, place prompts throughout a store that bring attention to those items rather than bringing attention to items that should be avoided. Not only is the encouragement of positive behaviors more likely to be supported by retail outlets (few would let negative prompts be posted), but positive behaviors also make people feel good about their actions, which increases the

likelihood that the actions will be carried out in the future.

See the cases studies and graphics at www.cbsm.com for examples of how to use prompts.

Norms

To date, few programs have emphasized the development of community norms which support people engaging in sustainable behavior. This lack of attention to norms is unfortunate given the impact they can have upon behavior (see Chapter 5 of the online guide at www.cbsm.com). Norms guide how we should behave. If we observe others acting unsustainably, such as using water inefficiently, we are more likely to act similarly. In contrast, if we observe members of our community acting sustainably we are more likely to do the same.

When considering including norms in programs you develop, keep the following guidelines in mind:

Make the Norm Visible. For norms to influence the behavior of others they have to be aware of the norm. The very act of taking recyclables to the curbside, for example, communicates a community norm about the importance of recycling. Most sustainable activities, however, do not have the community visibility which recycling has, and norms that support the activity, therefore, have to be promoted more actively. Find ways to publicize involvement in sustainable activities, such as providing ongoing community feedback on the amount of water that has been saved by homes using water efficiently.

Use Personal Contact to Reinforce Norms. Research suggests that internalization of norms is more likely to occur as a result of personal contact. As a consequence, use personal contact as an opportunity to reinforce norms that support sustainable behavior.

See the cases studies and graphics at www.cbsm.com for examples of how to use norms.

Communication

All programs to foster sustainable behavior include a communication component. The impact of communications upon behavior can vary dramatically based upon how the communication is developed (see Chapter 6 of the online guide at www.cbsm.com). To develop effective communica-

tions, include the following elements:

Use Captivating Information. All persuasion depends upon capturing attention. Without attention, persuasion is impossible. Communications can be made more effective by ensuring that they are vivid, personal and concrete.

Know your Audience. All communications should be developed with your audience in mind. Before developing communications, you should have a firm sense of the attitudes, beliefs and behavior of your intended audience(s).

Use a Credible Source. The individual or organization that presents your message can have a dramatic impact upon how it is received and subsequent behavior. Ensure that whoever delivers your message is seen as credible. Individuals or organizations tend to be viewed as credible when they have expertise, or are seen as trustworthy.

Frame your Message. How you present or “frame” your activity can impact upon the likelihood that people will engage in it. In general, you should emphasize the losses that occur as a result of inaction (e.g., from not insulating) rather than the savings that occur from action (e.g. insulating).

Carefully Consider Threatening Messages. While environmental issues lend themselves easily to the use of threatening or fearful messages, do so with caution. While the public needs to understand the implications of such serious issues as global warming, toxic waste, or ozone depletion, they also need to be told what positive action they can take if threatening information is to be useful. In short, whenever you contemplate using a threatening message consider whether you can at the same time present concrete actions that individuals can take to reduce the threat.

Decide on a One-Sided versus Two-Sided Message. One-sided communications are usually more persuasive with audiences who have little or no comprehension of an issue. As knowledge increases, however, two-sided messages are generally more persuasive.

Make Your Message Easy to Remember. All sustainable activities depend upon memory. People have to remember *what* to do, *when* to do it, and *how* to do it. Use prompts (Chapter 4) to assist people in remembering. Also develop messages that are clear and specific.

Provide Personal or Community Goals. Providing targets for a household or community to achieve can help to provide motivation for sustainable behavior.

Emphasize Personal Contact. Research on persuasion documents that the major influence upon our attitudes and behavior is the people we interact with rather than the media. Create opportunities for people to talk to one another through programs such as block leaders, in which individuals from a neighborhood who already have experience in a sustainable activity, such as composting, speak to others who live close by. Through personal contact, provide opportunities for people to model sustainable behavior for one another, such as installing weather-stripping, and facilitate ongoing discussions in your community to allow social diffusion of new behaviors to occur.

Provide Feedback. Remember to provide members of your community with feedback about the effectiveness of their actions. Feedback has been found to have a positive impact upon the adoption and maintenance of sustainable behaviors.

See the cases studies and graphics at www.cbsm.com for examples of how to effectively communicate.

Incentives

Incentives have been shown to have a substantial impact on a variety of sustainable activities including waste reduction, energy efficiency and transportation (see Chapter 7 of the online guide at www.cbsm.com). They are particularly useful when motivation to engage in action is low or people are not doing the activity as effectively as they could. Gardner and Stern (1996) suggest the following guidelines in using incentives:

Closely Pair the Incentive and the Behavior. The closer in time the incentive is presented to the behavior it is meant to affect, the more likely that it will be effective.

Use Incentives to Reward Positive Behavior. Where possible, use incentives to reward people for taking positive actions, such as returning beverage containers, rather than fining them for engaging in negative actions, such as littering.

Make the Incentive Visible. For incentives to be effective, you need to draw people’s attention to them. Consider

using vivid techniques to make incentives noticeable (see Chapter 6). Also, incentives can be made more visible by closely associating them with the behavior they are meant to effect, such as having people attach tags to their garbage bags in order to have them picked up in a user pay garbage disposal program.

Be Cautious about Removing Incentives: Incentives can be powerful levers to motivate behavior, but they can also undermine internal motivations that people have for engaging in an activity. If you plan to use an incentive to encourage a sustainable behavior, remember that if you elect to remove the incentive at a later time the level of motivation that existed prior to the introduction of the incentive may no longer exist.

Prepare for People's Attempts to Avoid the Incentive. Incentives such as separate laneways for multiple occupant vehicles can have a significant impact upon behavior. However, because these incentives powerfully reward one behavior (car pooling) and strongly punish another (single occupant driving), there is strong motivation to try to “beat” the incentive. In preparing incentives, give careful consideration to how people may try to avoid the incentive and plan accordingly.

Carefully Consider the Size of the Incentive. In arriving at what size of incentive to use, study the experience of other communities in applying incentives to motivate the same behavior.

Use Non-Monetary Incentives. While most incentives are monetary, nonmonetary incentives, such as social approval, can also exert a strong influence upon behavior. Consider ways that social approval and other nonmonetary incentives can be integrated into your program.

See the cases studies and graphics at www.cbsm.com for examples of how to use incentives.

Removing External Barriers

The behavior change strategies presented above can have a significant influence upon the adoption and maintenance of behavior. However, they will be ineffectual if significant external barriers exist to the behavior you wish to

promote (see Chapter 8 of the online guide at www.cbsm.com). It is important to identify these barriers and plan for how you will overcome them. Study other communities to see how they have managed to overcome similar obstacles. Assess whether you have the resources to overcome the external barriers you identify. If you do not, carefully consider whether you wish to implement a program.

Design and Evaluation

The design of a community-based social marketing strategy begins with identifying the barriers to the activity you wish to promote (see Chapter 9 of the online guide at www.cbsm.com). Knowledge of barriers is particularly important. Without this information it is impossible to design an effective program. In identifying barriers, be sure to conduct statistical analysis that allows you to prioritize the barriers. Knowing the relative importance of barriers will allow you to use limited resources to their greatest benefit. Once you have identified and prioritized your barriers, select behavior change tools that match the barriers you are trying to overcome. When you have arrived at a design for your program, obtain feedback on your plans from several focus groups. Look for recurring themes in their comments as they may indicate areas in which your planned program needs to be redesigned. Once you are confident that you have a program that should affect behavior, pilot the program. In conducting the pilot, ensure that you have at least two groups; one that receives the intervention and another that serves as a comparison or control group. Randomly assign households or individuals into either group to ensure that the only difference between the groups is whether or not they received the intervention. In evaluating the effectiveness of your pilot, focus on behavior change rather than measures of awareness or attitude change. If your pilot is not successful in altering behavior, revise your strategy and pilot it again. Assuming that you know why a pilot did not work, and that you now have the information you need to go straight to community-wide implementation, can be a very expensive mistake. When your pilot is effectively changing

behavior you are ready to implement your strategy across the community. Evaluate the community-wide implementation by obtaining information on baseline involvement in the activity prior to implementation, and at several points afterward.

To learn more about community-based social marketing (cbsm) and how it can be used to promote sustainable behavior see: McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society. To order call New Society at (250) 247 9737 or order online at www.newsociety.com.

You may also wish to visit the community-based social marketing website (www.cbsm.com). At this site you will find an online guide, searchable databases of articles, case studies and graphics related to fostering sustainable behavior as well as a discussion forum. Dr. Doug McKenzie-Mohr delivers workshops and provides consulting services regarding the use of community-based social marketing. He can be reached at 506.455.5061 or by email at dmm@cbsm.com.