SUSTAINABLE DEVELOPMENT LEARNING AS ENTICEMENT TO ENVIRONMENTAL ACTION

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JULIE D. JOHNSTON

APPROVED BY

ADVISOR

READER

SAINT FRANCIS XAVIER UNIVERSITY

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ABSTRACT

In this thesis, I address the question: As an environmental adult educator, how can I help adults overcome the many complex barriers to environmental learning and action? This study began with a compilation of barriers and enticements to environmental learning and action, drawn from the literature and categorized as cultural, psychosocial, and educational. The theoretical framework for my study acknowledges that Western society's greatest barrier to environmental action—and underpinning all other barriers identified in the literature—is a cultural belief that humans are separate from the rest of nature. Sustainable development education that focuses explicitly on the barriers that adults, as citizens, face receives minimal attention in the literature of environmental adult education. A rural community forum on sustainable development, which I organized and facilitated, provided a focus for my research question. Six weeks after the forum, I interviewed one quarter of the participants—13 community members diverse in age, gender, and commitment to the environment—as a way of understanding their lived experience of barriers and enticements, and the transfer of learning from this community education event. The findings that emerged from a qualitative analysis of the data led to practical facilitation guidelines for transformative environmental adult education consistent with adult learning principles and the United Nations Agenda 21. These guidelines include operationalizing the principles and practices of sustainable development as both content and process; using a roundtable approach; ensuring intergenerational equity; and integrating the three pillars of environment, economy, and social equity. I conclude that participatory facilitation based on principled dialogue—in other words, learning sustainable development by practising it—can lead to community harmony and rapprochement, reconnection with nature, and environmental action.

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And for my niece, Savannah, and for all the children, of all species, for all time.

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CHAPTER 1

THE FOCUS OF INQUIRY

According to my family's mythology, I was one of those young children placed outside on warm days in a pram and, later, in a playpen. In the context of my culture, that made me a lucky child. My earliest memories are of playing on sunny days in the ditch in front of the house, safely close to home yet creating my own little world populated by weeds and insects and the trickle of water meandering by. Thirty years later, following a career in language teaching, the activist's voice inside me emerged in the urgency to save my beloved Nechako River in northern British Columbia (and save it we did—not with marches and protests, but through an energetic community education campaign). This led to a shift in my teaching and learning priorities; my area of academic interest evolved into environmental adult education.

In my often volunteer but increasingly professional role of "eco-inspirationalist" or "facilitator-as-catalyst," my goal is to help people make lifestyle choices that respect the ecological principles governing life on this planet. I want to do this by reconnecting people with the rest of nature, by evoking for grown-ups their childhood experiences in the natural world. I want to be the matchmaker who helps people (re)kindle their love for the Earth, so that they will choose to do right for their home planet, for themselves, for people in less privileged parts of the world, and, ultimately, for their children and grandchildren and all future generations. This ambition led to three questions, which in turn led to their study. How can environmental adult educators entice adults to this kind of transformative learning opportunity? How can they ensure that it leads to action? And, can learning about sustainable development lead to environmental action?

Because my area of interest is environmental adult education (with a focus on barriers and enticements to environmental learning and action), and as a way of responding to these questions, I wanted to discover how to design and facilitate a transformative learning experience in workshop format that would help adults overcome the multiple barriers to environmental action. I also wanted to learn how to assure the transfer of this learning. What follows is the story of my unexpected discoveries about the potential of sustainable development learning to entice environmental action.

The Problem

For several decades, Canadians have been hearing of growing concern about environmental crises afflicting the biosphere's ecosystems, human beings, and the rest of nature all over the world: ozone depletion, global climate disruption, desertification, destruction of rainforest, air and water pollution, topsoil erosion, species losses, militarism. In 1992, the United Nations Conference on Environment and Development (the Earth Summit) in Rio de Janeiro saw an unprecedented 172 countries and 2,400 representatives of non-governmental organizations meet to "find ways to halt the destruction of irreplaceable natural resources and pollution of the planet" (United Nations, 1997). "The terror here," according to O'Sullivan (1999), "is that we have it within our power to make life extinct on this planet" (p. 70).

With Our Common Future, a report of the World Commission on Environment and Development (WCED) (1987), Brundtland and her colleagues stressed the importance of widespread public involvement in environmental issues:

> If we do not succeed in putting our message of urgency through to today's parents and decision makers, we risk undermining our children's fundamental right to a healthy, life-enhancing environment. . . .We call for a common endeavour and for new norms of behaviour at all levels and in the interests of all. The changes in

> new norms of behaviour at all levels and in the interests of all. The changes in attitudes, in social values, and in aspirations that [our] report urges depend on vast campaigns of education, debate and public participation. (p. xiv)

In 1992, the message of the Earth Summit—that nothing less than a transformation of people's attitudes and behaviour would bring about the necessary changes—was transmitted by almost 10,000 on-site journalists and heard by millions of people around the world. The Earth Summit led to adoption of Agenda 21, a blueprint for action to achieve sustainable development worldwide (United Nations, 1997), which includes a section on education, public awareness, and training (Sitarz, 1994).

My concern is that, although Canadians rank first in the world on environmental and scientific knowledge (T. W. Smith, 1997), as North Americans we continue to use more energy, create more waste, and contribute to more pollution per capita than almost anyone else in the world (Ryan, 1999, p. 4). Despite all this, environmental adult education has barely made it onto the map of the adult education field (National Institute for Adult and Continuing Education, UK, 1993, cited in Clover, 1995; Solar, 1998). Despite national and international efforts aimed at promoting environmental education (Government of Canada, 2002; Meadows, 1989), most adults are not enrolled in educational or environmental programs to help them learn about their environmental impacts or to gain skills for changing their lifestyles (Clover, 1995). Although there is "a flurry of adult environmental activities . . . they are so widely divergent that there is no central clearinghouse to locate or classify them easily" (Professor Jane Dawson, personal communication, February 24, 2003). For the most part, the citizens, consumers, workers, employers, and parents who make critical decisions affecting the Earth and its inhabitants every day rely on media for their environmental information, a source that offers only a "superficial, passive, and transitory" learning experience (Prazmowski, 1990, p. 4). But,

as Anne Camozzi, founding chair of the Canadian Network for Environmental Education and Communication (quoted in Government of Canada, 2002) urges, time is of the essence:

> We don't have time to wait for this generation of children to grow up and change attitudes and behaviours towards the environment. Education should be directed at all ages, especially adults in the home, community and workplace. Parents and grandparents, in particular, have a critical role to play in helping the next generation of leaders learn about the environment. This means that adult environmental education programs should be developed to help change attitudes, and teach new knowledge and skills. (p. 6)

Clover, Follen, and Hall (2000) believe that the task of adult educators in this century is "the production and distribution of ecological knowledge and the learning of new skills and methods of educating" (p. 9). According to Sumner (in press), "environmental learning can enable a revolution in learning if it is reconceptualized within an understanding of sustainability as a set of structures and processes that build the civil commons."

Purpose of the Study

The main issue for this study is how to develop and facilitate enticing environmental education opportunities for adults. What barriers keep adults from participating in environmental learning? If adults do not come to environmental education, how might environmental adult educators reach out to them? And what kinds of environmental education opportunities can have transformative effects, resulting in environmental action?

Many experts agree on the urgency of solving environmental problems, yet most adults that I know cannot or will not or simply do not give a lot of time to environmental learning, perhaps because they do not know where or how to begin. In response to this urgency, this study began with my search for a way to offer environmental education to

as many adults as possible, in the shortest and simplest educational format possible, with the most transformative effect possible given the many constraints facing adult learners.

With a focus on barriers and enticements to environmental learning and action, I went about learning how to design and facilitate a transformative learning experience in a workshop format that would contribute to reducing the multiple barriers to environmental learning that adults face. I also wanted to discover whether this type of learning might help participants to surmount barriers to environmental action and make more sustainable choices in their lives.

Hence, the purpose of my study is to improve my professional facilitation of transformative learning experiences that lead to environmental learning and action, by finding out how adult learners are enticed to environmental learning, and how they can be helped to overcome their barriers to environmental action. The purpose of this thesis is to describe the process I used, and to tell the story of my surprising experiences and unanticipated findings.

My hope is that this study will contribute to the body of knowledge on environmental adult education, in particular, barriers and enticements to environmental learning and action, and sustainable development learning.

Background to the Study

In my geographic setting (a rural island in British Columbia), the tension between knowing and doing, learning and action was playing out within a community that was divided between those who see development as good for the local economy and those who see development as bad for the local environment. Some people in this small community would not talk to each other, let alone work together, to ensure that we live

within the ecological carrying capacity of our island by developing support for sustainable lifestyles. Through this study, I have come to realize that my quest, for the sake of all the children of all species for all time, is to facilitate collaborative learning, rapprochement, and healing, and to create development opportunities that are socially equitable, economically viable, and environmentally friendly—in short, sustainable development.

Scope and Limitations

As 19th century poet Edward Dowden once said, "Sometimes a noble failure serves the world as faithfully as a distinguished success." A research project that I originally undertook did not provide enough data to meet my learning intents. (I mention this setback because it helped me understand an important barrier to environmental learning, which I discuss in chapter 4.) That is why a local forum on sustainable development, which I organized, promoted, and facilitated in my community under the auspices of the local conservation group to meet our education mandate, subsequently (and serendipitously) became the focus of my research.

The Community Forum on Sustainable Development, held at the community hall on Saturday, September 22, 2001, was an afternoon-long event broken into two sections: theory (with an invited keynote speaker preceded by my introduction to sustainable development) and practice (roundtable discussions of community issues).

The purpose of the forum was to introduce community members to the concept, history, definition, principles, and practices of sustainable development, in order to create more peaceful interactions in the community. The island's general public (with a population of 1,800) was invited and 66 participants attended, of all ages (6 months to 86 years old, but mainly middle-aged to retired) and many walks of life. The ratio of male to

female participants was fairly balanced, as was representation of those who align themselves with economic issues and those who think of themselves as environmentalists.

I attempted to derive meaning from data collected as observations in my fieldnotes, in informal conversations with several people after the forum, and through in-depth interviews with 13 forum participants (supplemented by short email responses from a 14th participant who lives outside the community). My semi-structured one-on-one interviews with about one quarter of the participants were conducted 6 to 8 weeks after the forum. They lasted 30 minutes to 2 hours. The findings that emerged from a qualitative analysis of the data led to practical facilitation guidelines for transformative environmental adult education using sustainable development learning. Further details on the research methodology are provided in chapter 3.

Assumptions

At the time that I was organizing and participating in the Community Forum on Sustainable Development, I had not even a hint that this event would become the focus of my research. I therefore went into it with no research-related preconceived notions or expectations. In fact, whereas many scholars stress the importance of turning research into action, I feel fortunate that this study enabled me to turn action into research. As I undertook this research, I assumed that the forum and the interviews would hold many insights about barriers and enticements.

Definition of Terms

The term sustainable development has been redefined in numerous ways since it was first conceived and introduced. In order to use an internationally accepted

philosophical framework, I work with the popularized definition that comes from the United Nations WCED (1987) report, Our Common Future: "development which meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43). This definition integrates the three pillars of (a) environmental protection, (b) social equity, and (c) economic growth (particularly for developing nations).

I use the term roundtable as a compound word in order to distinguish between the sustainable development principle and process, and the actual round tables that were used in the forum, about which several participants commented. The term Round Table is used in the literature to refer to a committee of people who meet regularly to discuss sustainable development issues.

The editorial we is used quite often in the literature cited in this thesis. I interpret this term to include me and most North Americans, consistent with a definition proposed by Mack (1995): "by 'we' I mean, by and large, citizens of Western and other industrialized nations, for many native cultures experience and avow a very different relationship to their environment" (p. 282). The terms West and Western refer to the dominant modern culture and world view of Europe and English-speaking societies in the world, including northern North America, Australia, and New Zealand, which grew out of the scientific and industrial revolutions, Christianity, and commercialization (Merchant, 1980). Many cited authors use the term earth when referring to planet Earth (as in Mars and Saturn), which is the term employed in this thesis.

The term barrier is self-explanatory. The term enticement holds negative connotations for some people, but this is not my intended use. Webster's (1981) defines the verb entice as "to draw on artfully or adroitly or by arousing hope or desire" (p. 377),

so it appears to be an appropriate term for the field of environmental adult education. More fascinating, perhaps, is the derivation of the verb entice. From the Latin in + titio, meaning firebrand, comes the idea that an "enticer" is "one that creates unrest or strife: agitator" (p. 427). I view enticements, then, as agitating situations or events that arouse hope and draw people to (environmental) learning and action. The term environmental learning and action refers to any learning and action (including non-action) that leads to fewer harmful impacts on Earth.

Plan of Presentation

Following this introductory chapter, the literature review in chapter 2 presents what I learned about cultural, psychosocial, adult learning, and environmental adult education barriers and enticements to environmental learning and action, as well as barriers and enticements to sustainable development. The discussion of barriers and enticements includes insights into several aspects of adult learning, including motivation, transfer of learning, and participatory and transformative educational approaches. Chapter 3 presents the story of my project, my research methodology, and my research findings. The participants in my study are described, using fictitious names, in this chapter. Chapter 4 presents my analysis and interpretation of these outcomes, with connections to the literature, and closes with implications and recommendations for both my professional practice and the field of environmental adult education.

CHAPTER 2

REVIEW OF THE LITERATURE

A trend in the literature in recent years is an increasingly urgent call for social transformation toward more sustainable ways of living through participation in learning and action. The intent of this chapter is to review literature that addresses barriers to environmental learning and action that face adults, and the enticements that might draw adults to more environmentally friendly behaviours, including sustainable development. The literature is drawn from a wide range of fields, including adult education, community development, deep ecology, ecofeminist theory, ecopsychology, environmental education, indigenous ecology, and social marketing, among others. This is not a traditional literature review in that it does not assess environmental adult education research; I did my research while living in an isolated rural area, with little access to research journals. Instead, my approach was to develop a composite picture of the kinds of claims made in the environmental literature, across a range of fields, that pertain to people's participation or non-participation in environmental learning and action. The authors reviewed, for the most part, do not write expressly about barriers and enticements to environmental learning and action; they write about their particular fields of expertise. I pulled out and categorized from their writings what I deem to be barriers and enticements. In the first two sections of this chapter, I examine cultural, psychosocial, adult learning, and environmental adult education factors that act as barriers and enticements to environmental learning and action. I then explore sustainable development learning as a potentially significant enticement to environmental learning by adults.

Barriers to Environmental Learning and Action

The authors who do write expressly of what impedes or separates people from learning or action use the term obstacles as well as the term barriers. Furthermore, McKenzie-Mohr and Smith (1999) distinguish between real versus perceived barriers, as well as internal versus external barriers. I have categorized the various barriers discussed in the literature into four categories: cultural, psychosocial, adult learning, and environmental adult education barriers.

Cultural Barriers

When I speak of cultural barriers in this review, I mean those external and collective barriers that stem from a society's historical, religious, scientific, technological, economic, and political foundations and parameters. I divide these into five categories.

Humans' separation from nature. Several authors note that Western societies tend to view humans as separated from nature. Cohen (1997) explains that "we think with a nature-disconnected process that produced and sustains industrial society" (p. 153). He challenges people to consider "the profound distorted effects produced by living year after year in stories and places that separate us from and demean nature and our natural senses" (Cohen, p. 56). Van Matre (1990) agrees, insisting that the Earth is in trouble because many people "have literally 'lost touch' with the other life of their planet. . . . They no longer have the necessary strong emotional attachments to sustain them in a healthy relationship with the earth" (pp. 128-129). Merchant (1980) expresses her agreement in the title of her book, The Death of Nature.

By contrast, Knudtson and Suzuki (1992) point out that "other, profoundly different notions of our relationship with Nature do indeed exist" (p. xxiv). According to Hughes (1996), in North America,

> the Indians saw themselves as at one with nature. All their traditions agree on this. Nature is the larger whole of which mankind is only a part. People stand within the natural world, not separate from it; and are dependent on it, not dominant over it. All living things are one, and people are joined with birds and trees, predators and prey, rocks and rain in a vast, powerful, interrelationship. (pp. 14-15)

Bowers (1997) believes that Western society is caught in an unquestioned anthropocentric world view. To Hunt (1993), the collective mindset or world view of a society "represents the ideas we think with rather than those we think about" thereby "constricting our thoughts and actions" (p. 23). Merchant (1980) explains that between the 16th and 17th centuries "the image of an organic cosmos with a living female earth at its center gave way to a mechanistic world view in which nature was reconstructed as dead and passive, to be dominated and controlled by humans" (p. xvi).

Others agree with the notion of Bowers (1997) and Merchant (1980) that the Western world view led to an unquestioned dominant paradigm that allows the exploitation of nature (e.g., Bookchin, 1980; Ehrenfeld, 1978; Wiener, 1990). Mack (1995) calls this "species arrogance" (p. 282). Knudtson and Suzuki (1992) assert that in a world "increasingly dominated by the growth imperative of global economics, [and] the infatuation with technology . . . we cling to assumptions founded on the inadequate Cartesian and Newtonian worldview" (p. xxiv). Suzuki and McConnell (1997) believe that the assumptions underlying the Western world view "fail to stand up to critical analysis yet are seldom challenged or questioned" (p. 212).

Unexamined root metaphors in language. Bowers (1997) finds that "science . . . now functions both as a root and [as an] iconic metaphor, encompass[ing] the other root metaphors associated with modern high-status knowledge" (p. 205). Similarly, Merchant (1980) notes that in the 1700s, "the institutionalization of science [became] an ideology for organizing other areas of human life" (p. 252). Bowers lists the unexamined

root metaphors that continue to exert an influence in Western culture:

> (a) a mechanistic way of understanding life processes; (b) a view of changes as linear and progressive; (c) a view of the individual as the basic social unit; (d) an anthropocentric way of understanding human relationships with nature; and, (e) the view of science as the most powerful and legitimate source of knowledge. (pp. 204-205).

These root metaphors are embedded in language, language that tends to separate Western cultures from nature. As North Americans, our world view shapes the language and root metaphors we use, and our conceptions of nature are reflected in our language. Many of the metaphors we use are violent, militaristic, devoid of nature, or anti-nature. Think of the common expression, "killing two birds with one stone," or common allusions to the brain as computer, or argument as war (D. C. Smith, 1997). Several authors lament the evolution in our language away from nature-connected terminology, such as "mystery" and "wonder" (Devall, 1988, p. 198), love for the Earth (Van Matre, 1990), and references to the Earth Mother (Chard, 1994). "We in the West have rejected the language and experience of the sacred, the divine, and the animation of nature . . . and we distrust the language of reverence, spirit, and mystical connection," according to Mack (1995, p. 284).

At times, one word can act as a barrier to learning and action. Chard (1994) has discovered that the derogatory meanings attached to the word animal can have negative emotional effects. According to Wackernagel and Rees (1996), the term environment serves to create "mental apartheid" between humans and the rest of nature (p. 139).

Media inculcation and consumerism. Some authors point to the influence of media, specifically television, as a barrier to environmentally friendly behaviour. For example, Orr (1992) wonders why anyone would be puzzled at the inertia of young people in the face of environmental problems when the typical 18-year-old North American has watched 16,000 hours of television. The resulting "apathy, moral and

physical anemia" (p. 134) should surprise no one, he says. Orr also points out that modern young people "are increasingly shaped by the shopping mall, the freeway, the television, and the computer. They regard nature, if they see it at all, as through a rearview mirror receding in the haze" (p. 105). O'Sullivan (1999) refers to this barrier as "the wonderworld of consumer capitalism presented on the mass media" (p. 126).

Numerous authors see the North American addiction to consumerism as a huge barrier to environmental action. As religious historian Robert Bellah (cited in Durning, 1992) writes, "That happiness is to be attained through limitless material acquisition is denied by every religion and philosophy known to humankind, but is preached incessantly by every American television set" (p. 147). Devall (1988) believes that "we have been colonized by advertisements" (p. 36), at, Brower and Leon (1999) point out, the rate of three thousand advertising messages per day (p. 170). O'Sullivan (1999) insists that "the modern state, backed by the modern school, is in the business of developing consumers of goods rather than active participatory citizens" (p. 106).

Lack of immediate feedback. Human beings are more responsive to current information than to long-term trends (Ornstein & Ehrlich, 1989). Therefore, the lack of immediate feedback about long-term deleterious effects to the environment provided by fast-paced technologies and lifestyles is a barrier to timely responses to environmental problems (Hawken, Lovins, & Lovins, 1999). For example, Wackernagel and Rees (1996) explain that "the quiet loss of natural capital" (p. 150) is sometimes the only indication that humans are exceeding an ecosystem's carrying capacity. As Carson (1962) asserts, "it is human nature to shrug off what may seem to us a vague threat of future disaster" (p. 169). Boyd (2001) calls this "societal incremental amnesia" (p. 12), caused perhaps by the fact that humans do not think in "geological time" (Weiner, 1990, p. 233).

The greatest barrier to environmental action presented by the information age is perhaps the inability to get accurate and useful information through to people who are being bombarded with commercial messages (Brower & Leon, 1999; Durning, 1992), without overwhelming them (Clover, Follen, & Hall, 2000) or confusing them with unfamiliar scientific terms (Carson, 1962). The problem is not a lack of information; rather, it is not knowing where to find it, according to Button (1989).

Individualism and breakdown of community. Numerous authors cite the breakdown of communal life, and "the cult of individualism" (Devall, 1988, p. 188) as barriers to environmental action. According to Merchant (1980), several centuries ago "the organismic, communal orientation . . . was thrust aside to make way for efficiency and production in the sustained use of nature for human benefit" (p. 238). Collins (1998) describes the present-day "neo-conservative success story" as a tale of "the merits of competitive individualism and the enthronement of market-place values at the expense of community values and collective experience" (p. 48).

Psychosocial Barriers

Psychosocial barriers, for this review, are those internal and personal barriers that stem from an individual's beliefs, attitudes, values, hang-ups, and inhibitions, situated in that individual's social milieu. I divide these barriers into five categories.

Denial, guilt, and neurobiology. In the environmental context, denial and guilt are avoidance reactions. Devall (1988) defines denial as "denying the human impact on the Earth or evolution" (p. 200). He cites Lasch who in 1984 coined the term minimal self, which, Devall says, is the defensive, contracted self primarily concerned with ego gratification and psychic survival. "Seeing the problems of living in modern times . . . the minimal self prepares for the siege, retreats to private pleasure domes, and withdraws

from community service or any form of commitment to the peace movement or environmental movement" (p. 49). O'Sullivan (1999) explains denial that afflicts the privileged as "a grave cognitive deficit . . . not only not knowing but also not knowing that one does not know" (p. 130). Maccoby (1995) cites a neurobiology discovery that "the brain turns off when people cannot anticipate a positive future" (p. 37).

Guilt becomes a barrier when it is draining and oppressive (Suzuki & McConnell, 1997), when it serves as "a palliative for the conscience of the consumer class" (Durning, 1992, p. 125), and when it takes the place of action, its source not fully recognized, as O'Connor's (1995) equation illustrates:

> The equation here is: doing nothing plus feeling guilty about it equals doing something. Action is called for, but action motivated by guilt may only compound the problem. We are in disharmony with the world because we are in disharmony with ourselves. (p. 152)

According to neurologist Robert Ornstein and biologist Paul Ehrlich (1989), human nature is often blamed for people not taking action on environmental problems. But, they explain, the human nervous system is to blame, because it cannot easily perceive slow changes, long-term implications, or multiple connections. Argyris (1982) explains that psychologically, people need not pay attention to "the deeper issues until the counterproductive forces are so powerful that they inhibit even routine performance" (p. 24). Wackernagel and Rees (1996) believe that this "reductionist propensity to focus on mere symptoms of problems or on individual events," together with the way the human brain works, leads to the "boiled frog syndrome" (p. 139): "A frog placed in slowly heating water will not notice the gradual but eventually lethal trend" (p. 138). Gore (1992) believes that a sense of helplessness sets in, immobilizing people in "an imprudent hope that we can adapt to whatever changes are in store" (p. 239).

Misperceptions (mythperceptions?). Misperceptions about the natural world and our place in it, held personally (as well as culturally), can block environmental action. These include the belief that we are not a part of nature (Carson, 1962; Gore, 1992), "as if we could assault the environment without assaulting ourselves" (Meadows, 1989, p. 33), or that because humankind is part of nature, anything we do is "natural" and therefore all right (Hughes, 1996). These misperceptions also include the belief that technology will solve the ecological problems caused by technology (Orr, 1992; Packard, 1960), that more is always better, and that standard of living equals quality of life (Durning, 1992; Wackernagel & Rees, 1996). Some people believe that progress might be causing environmental problems but do not connect progress to economic growth (Frizzell & Pammett, 1997; Leopold, 1949). Meadows notes that resources are viewed as either scarce or abundant, leading to dualistic either/or solutions. Carson laments that poisons are not deemed as poisonous as they once were, becoming "something to be showered down indiscriminately from the skies" (p. 141).

A dangerous misperception is that we are in the midst of an information explosion when actually we are losing knowledge about the natural world at an alarming rate, "impoverishing the genetic knowledge accumulated through millions of years of evolution" (Orr, 1992, p. 152). Another powerful barrier is a belief that some people (versus others) are entitled to comfort and privilege, what Chard (1994) calls "an egocentric sense of entitlement" (p. 136). Orr goes further, speaking of "ecologically slovenly, self-indulgent people" (p. 31).

The I'm-not-an-expert barrier. Many people will not become involved in environmental issues because they believe they lack adequate knowledge and experience. Gaventa (1993) poses several questions that point to an ideology of expertise: "Who has

the right to define knowledge? . . . What is the relationship of 'popular' knowledge to 'official' knowledge? . . . Who produces knowledge? For whose interests? . . . What are the mechanisms of the power of expertise?" (pp. 22-28). Orr (1992) accounts for the I'm-not-an-expert barrier as an overspecialization problem, which makes ecoliteracy difficult for Westerners.

> The ability to think broadly, to know something of what is hitched to what . . . is being lost in an age of specialization. . . . To think in ecolate fashion presumes a breadth of experience with healthy natural systems, both of which are increasingly rare. (p. 87)

"Bahala na"—lack of concern for the future. Our shifting conception of time is becoming a barrier to environmental action. Orr (1992) points out that civilization is changing at an unprecedented pace "as technological time is superimposed on older patterns of day and night and changing seasons" (p. 58). But humans' ability to respond appropriately is not keeping pace with the overall rate of environmental change (Ornstein & Ehrlich, 1989). Knudtson and Suzuki (1992) explain that in the Native world view, consequences of human violations of the natural world are believed to be both immediate and long-term. This view contrasts sharply with a personally held attitude of waste and fatalism or "Bahala na" ("I don't care what happens in the future, as long as I survive now"), reported by Lubiano (2002) in the Philippines, but not restricted to that country.

Confusion, fear, and disempowerment. Brower and Leon (1999) stress that confusion about the real relationship between personal actions and the environment has become a barrier to environmental action. In their view, North Americans have been left concerned yet conflicted, confused, cynical, and discouraged about environmental issues because, besides recycling, "no clear consensus has emerged about what else they should do to protect the environment" (p. viii). Fear serves as a barrier because an appeal based

on fear—that is, an environmental message that stresses doom and gloom alone—is unlikely to be effective (Gardner, 2001, pp. 194-195). As Button (1989) points out, when people recognize that "every little thing we do has environmental implications and repercussions" (p. 210), they can become panicked and frightened. The resulting barrier is a sense of insignificance, resignation, pessimism, and massive cynicism (Suzuki & McConnell, 1997). Bookchin (1980) minces no words when he insists that until the "powerless" people regain a sense of power over their lives, "nothing they change in society will yield a new balance with the natural world" (p. 81).

Several authors (e.g., Button, 1989; Meadows, 1989) note that conformity to norms discourages risk taking and the willingness to be first to make a change. Suzuki and McConnell (1997) explain the phenomenon this way:

> In the cacophony of debate over the state of the biosphere, those calling for protection of species and wilderness and a different way of life are often castigated as "eco-terrorists," "neo-Luddites," "drug-crazed hippies," "do-gooders" or "antihuman preservationists," or as being "antiprogress," and are labelled with many other disparaging terms. (p. 6)

Fear of this kind of labelling certainly keeps some people from breaking norms to adopt environmentally friendly behaviours.

Adult Learning Barriers

According to Gardner (2001), education is an important institution of socialization, but he cites critics who see formal education as biased in favour of the status quo, and asks whether education today "is capable of standing outside of society and critiquing it in a way that creates a worldview grounded in sustainability" (p. 193). I divide the barriers to environmental action inherent in adult learning into four categories.

General barriers to participation in adult education. Cross (1981) distinguishes between perceived barriers and actual barriers to adult learning (p. 114); she

forms these into three categories: "situational barriers (arising from one's life situation), institutional barriers (practices that exclude or discourage adults), and dispositional barriers (attitudes and perceptions about oneself as learner)" (p. 98). Darkenwald and Merriam (cited in Merriam & Caffarella, 1991) use the term psychosocial barriers to describe "beliefs, values, attitudes, and perceptions about education or about oneself as a learner," and add a fourth category: informational barriers (pp. 88-89). Merriam and Caffarella raise an interesting barrier for environmental adult education: 64 percent of participants in a 1984 survey indicated that they participate in adult learning for job-related reasons (p. 81), which leaves only 36 percent for all other adult education offerings.

Lack of motivation-focused teaching. Wlodkowski (1999) suggests three motivation-related barriers to adult learning. First, new learning asks a lot of adult learners, who are independent thinkers and have strongly held convictions based on past experience.

> New learning often asks them to become temporarily dependent, to open their minds to new ideas, to rethink certain beliefs, and to try different ways of doing things. This is somewhat threatening to them, and their attitudes can easily lock in to support their resistance. (p. 82)

This resistance is based on the least effort principle, which sees adults applying past solutions to present problems, or past reactions to present experiences (p. 46). Second, the instructor can be a demotivating force in adult education. For example, a learner's negative attitude toward an instructor can become a barrier to learning (Wlodkowski, p. 75). Instructors must be passionate about what they teach without resorting to exhortation (Mager, cited in Wlodkowski). Third, as Wlodkowski explains, despite the complexity and mysteriousness of changing adults' attitudes and behaviours, most educators do not undertake explicit motivation planning.

Unsuccessful transfer of learning. Not being able to apply learning to solve problems or to change behaviour is another educational barrier to action. Parker and Parikh (1999) present Prochaska's transtheoretical model of change in adult behaviour as a framework for needs assessment, course design, and evaluation that helps explain why learning initiatives do not always change performance. According to the model, change is a gradual five-step process; if learners are not ready to change, or if the offering does not match their stage of readiness, they will not be able to transfer their learning to effect change in their behaviour.

Caffarella (1994) explains other reasons for unsuccessful transfer of learning. Program participants might lack the time and interest to incorporate changes into their daily lives, or might find those changes unrealistic or too disruptive. If program design does not include follow-up strategies, participants might be unable to overcome community forces that present rewards for not changing or societal norms that are not supportive of change. Program content might focus on irrelevant knowledge instead of needed skills and attitude changes, especially for participants confronting unsupportive family members or colleagues and peers, or "key leaders who are openly hostile" (p. 111).

Missing elements in the adult education curriculum. The very institutions that house and offer adult education can act as barriers to environmental action due to the philosophical foundations upon which they are built and upheld. Orr (1992) asks whether harmony with nature and ecologically appropriate values can be communicated if learning always takes place indoors, in a competitive setting (p. 142). "The campus as land, buildings, and relationships is thought to have no pedagogic value . . . . Without anyone saying as much, students learn the lesson of indifference to the ecology of their immediate place" (p. 103), he explains. O'Sullivan (1999) calls for a switch to a biocentric or

ecocentric curriculum.

Bioregion-based learning is another missing element in adult education. Orr (1992) laments that the importance of place in education has been overlooked, because "to a great extent we are a deplaced people for whom our immediate places are no longer sources of food, water, livelihood, energy, materials, friends, recreation, or sacred inspiration" (p. 126). As Bateson (1979) noted in the 1970s, most learning ignores the natural world:

> Official education was telling people almost nothing of the nature of all those things on the seashores and in the redwood forests, in the deserts and the plains. Even grown-up persons with children of their own cannot give a reasonable account of concepts such as entropy, sacrament . . . metaphor, topology, and so on. What are butterflies? What are starfish? What are beauty and ugliness? (p. 4)

Environmental Adult Education Barriers

Of the relatively small amount of literature available on environmental adult education, much is descriptive, sharing the details of programs successfully implemented in developed and developing countries. Several articles outline generic environmental education workshops for adult participants (Andrews, Camozzi, & Puntenney, 1994; Camozzi, 1994). However, these case studies do not speak to barriers (or enticements) to environmental action. I divide the barriers I uncovered into five categories.

Minimal support. Solar (1998), looking at trends in adult education in the 1990s, found only one article within the literacy theme on scientific literacy, out of 623 articles (p. 77). She calls the environment "another weak point in the corpus on adult education" (p. 83). Referring to the public school system, Orr (1992) complains that "what passes for environmental education is still mostly regarded as a frill to be cut when budgets get tight" (p. 83). Clover et al. (2000) note minimal support for the development and publication of environmental adult education resource texts. Burch (1994) points to the lack of "pedagogically sound environmental education materials suitable for the general

education of adults" (p. 5). Most texts and learning support materials either have been developed with children in mind or are too specialized or technical for average adults.

Poorly planned participatory processes. A frequent motif in the literature is a call to make environmental adult education more participatory, more democratic, and more oriented toward social issues. Clover and her colleagues (2000) point out that environmental adult education workshops are "an effective and popular educational space for social transformation, yet their value and advantages are not always realized" (p. 24) when experts take the podium and orchestrate a brief question and discussion period that postures as active participation. According to Hart (1997), "environmental education must be radically reconceived in order to be seen as fundamental to the residents of communities from all social classes in all countries" (p. 10). Residents want to identify and investigate their own problems through action research, and the teaching of environmental science or ecology must at first be related to the local environment.

Deceptions and disguises. Henry David Thoreau once spoke of consenting to be deceived. Van Matre (1990) believes that environmental educators have not managed to "peel away the disguises" used to mask the ecological processes that support us. "Most people in our societies . . . have been so isolated for so long from the realities of life . . . that they simply do not grasp how their own lives are a part of the overall process of life on earth" (p. 134). He offers as an example that many people do not know where their food comes from. According to Meadows (1989), environmental education is meant to expose misconceptions about the laws of the planet, but she finds that Westerners still live "as if there were an endless treasury of reasources [sic] to draw from, and an infinite and far-removed sink into which to throw our wastes" (p. 33), suggesting that educators have been unwilling or unable to move people past society's ecological deceptions.

Breadth detracts from depth. Stevenson (1997) fears that environmental problems are superficially treated due to "an addiction to coverage" (p. 189), and hence students develop "little understanding of the complexities involved and little capacity for thoughtful decision-making on environmental issues they may encounter" (p. 184). Because unused learning begins to fade rapidly, Van Matre (1990) advocates a program of "informing, assimilating, applying" or "experiencing, responding, changing" (p. 279). He suggests that environmental educators must be careful not to cover "too much, too soon," thereby "siphon[ing] off the [learners'] concern and energy, concern and energy that might better be applied to their own lifestyle changes" (pp. 157-158).

Avoiding the experiential. According to Orr (1992), pure book learning "produces half-formed or deformed persons: thinkers who cannot do, and doers who cannot think" (p. 101). Clover et al. (2000) discovered that when it comes to environmental education approaches, children are "creatively engaged" whereas often adults are "told" (p. 4). Some adults, however, feel fear or discomfort when environmental education takes them outside, for which Clover and her colleagues suggest several reasons: unsuitable clothing or shoes; connecting the outdoors with getting dirty; an attitude that this type of learning is childish and a waste of time; fear of being laughed at or found inadequate to the challenge; an inability or unwillingness to participate in a spontaneous way; and, an innate fear (especially in urbanites and older adults) of animals, insects, or the dark (p. 82).

Environmental adult education should not simply seek to mitigate these fears, discomforts, and other barriers; in order to help learners experience and understand the natural world, educators also should seek to include enticements in their teaching.

Enticements to Environmental Learning and Action

No author in this literature review uses the term enticement when speaking of ways to inspire environmental learning and action, although Gardner (2001) does speak of "enticing incentives" (p. 195). Indeed, only a few authors speak in terms of inspiring environmental action, and there is no common terminology; McKenzie-Mohr and Smith (1999) speak of barriers versus benefits, and Caffarella (1994), speaking of transfer of learning, juxtaposes barriers and enhancers.

Like barriers, enticements can be collective (cultural), personal (psychosocial), or educational. Here, I note several actual enticements, already in practice, as well as many potential enticements. Enticements can work at several levels, first bringing adults to participate in learning, then facilitating their receptiveness to the learning, and, finally, supporting their transfer of learning into action. I further consider enticements to include the removal of barriers (see McKenzie-Mohr & Smith, 1999) as well as invitations to learning and action (see Clover et al., 2000).

Cultural Enticements

Orr (1992) believes that cultural change is necessary to monitor and curb human demands on the biosphere. He advocates "the institutionalization (or ritualization) of restraints through some combination of law, coercion, education, religion, social structure, myth, taboo, and market forces" (p. 21). Gardner (2001) suggests that cultural transformation will be easier and faster if enticements can be focused on "the opinion leaders—the innovators and early adopters . . . [who will] help the innovation or idea to spread" (p. 192). I divide the cultural enticements into 10 categories.

Reconnecting with nature through a new spirituality. Orr (1992 believes that the environmental crisis is "above all else . . . a crisis of spirit and spiritual resources"

(p. 4). Devall (1988) asserts that for human animals, however important environmental ethics are, ontological concerns are paramount (pp. 43-44). If this is true, then a crucial first enticement would be an invitation to reconnect with nature through a renewed spirituality. Clover et al. (2000) contend that we must passionately rekindle our connection with the rest of nature. Suzuki and McConnell (1997), Cohen (1997), and Chard (1994) present specific suggestions for how to rediscover our spiritual covenant with nature on a community, personal, and psychological basis, respectively. For example, Suzuki and McConnell say, "We have many rituals that could be built upon—Thanksgiving, Halloween, seasonal festivals celebrating fruits, vegetables, water or some special local feature" (p. 214). Cohen (1997) explains that

> when people make thoughtful contact with nature, they become more sensitive to life. They build personal, social, and environmental relationships in more enjoyable, caring, and responsible ways. The beauty and integrity of nature inspires them. Their spiritual relationship with the outdoors empowers and guides them. Natural areas nurture them. (p. 153)

As a psychologist, Chard offers his patients "behavioral prescriptions" or ceremonies that are "based upon profound contact with the healing capacities of the Earth" (p. 10).

Encourage examining one's world view. Several authors suggest transforming, or at least examining, what Bateson (1979) calls "the pattern which connects," the metapattern or "pattern of patterns" in a society (p. 11). Bateson explains that "the world partly becomes—comes to be—how it is imagined" (p. 205), and Suzuki and McConnell (1997) encourage us to "think deeply about some of our most widely held assumptions; many underlie the destructive path we're on" (pp. 211-212). O'Sullivan (1999) says we must change from "an exploitative anthropocentrism to a participative biocentrism" (p. 204).

Devall (1988) proposes that people in bioregional groups work together to

"delegitimize the dominant mechanistic worldview and present positive models for social change" (p. 128). He recommends deep ecological practice (versus only talking about changing paradigms), and encourages "stroking pigs, thinking like mountains, and respecting wild animals" (p. 192); in other words, interacting with the rest of nature in new ways to create what Orr (1992) calls "an ecological enlightenment which revolutionizes our world and worldviews" (p. 145).

Sin versus sinfulness, hope versus pessimism. If Western culture is to change its dominant paradigm, Dominican scholar Matthew Fox (1983) suggests changing the dominant religion's doctrine of original sin and fall/redemption to an emphasis on original blessing and creation-centred spirituality (p. 317). "To teach original sin and never to teach original blessing creates pessimism and cynicism," he says. Orr (1992) agrees that "older notions of virtue found in antiquity" could guide us back to a sense of interconnectedness. "Virtue once implied actions that were harmonious in a larger commonwealth" (pp. 182-183), he says.

If we love our children. Suzuki and McConnell (1997) ask us to project our minds far ahead into the future and consider the problems that we are leaving as a legacy for our children and grandchildren (p. 211). Several authors believe that appealing to the love and concern that adults feel for their progeny (if not their descendants) will help create a future "free from intergenerational remote tyranny" (McDonough, 2001). Several authors suggest the rousing of our sense of responsibility for future generations. Bateman (2000) and Devall (1988) hint at the notion of sacrifice. Referring to the Iroquois seven generations ethic, McDonough offers a particularly evocative question: "How do you love all the children, of all species, for all time?"

Learning from the ecocentric indigenous world view. Einstein is credited with

saying that we humans cannot solve problems at the same level of thinking that created them. What does an ecocentric indigenous world view have to offer Western problem solvers? Knudtson and Suzuki (1992) highlight a Native spirituality that places nature at the centre of all decision making. According to Black Elk, indigenous spiritual experiences help Native people "to realize our oneness with all things, to know that all things are our relatives" (cited in Hughes, 1996, p. 84). For example, Tatanga Mani (also cited in Hughes) explains that he learned a lot about the natural world by listening to the trees and "other voices in nature" (p. 49). Bowers (1997) lists several traits of ecologically centered cultures (see pp. 207-208) that he believes educators should be at least teaching if not emulating.

Minding our metaphors. Cultural metaphors reflect our understanding of the human-Earth relationship; in Western cultures, the dominant metaphors used often reflect machine images, violence, and dominance of nature. That is why, according to Bowers (1997), moving toward a new, ecologically centred ideology must entail changing our operative metaphors (p. 105) and raising awareness that "individual thought and behavior cannot be separated from the complex language processes that characterize a living culture" (p. 103). Chard (1994) points out that the image of the Earth as our mother is not "just a flowery metaphor" (p. 13) but reality. "Many of us understand this intellectually, but few of us believe it in our bones" (p. 13), Chard contends. He suggests that we start perceiving the Earth as a "thou" rather than an "it" in order to view our home planet as a living entity (p. 14).

Involve the family and the community. An important enticement to environmental learning and action is to go beyond individuals to involve their families and communities. Orr (1992) agrees, saying that "the constituency for global change must be

created in local communities, neighborhoods, and households" (p. 31). Hughes (1996) points out that traditionally, Native North Americans did not define themselves primarily as autonomous individuals, but as members of their tribe and as parts of the whole of nature (pp. 16-17). Devall (1988) calls on this indigenous world view as well as deep ecology for the nurturing of a real community, a mixed one that includes many different species: "This vision of mixed community inspires us and draws us away from the shallow and narrowly anthropocentric concerns of contemporary society" (p. 155).

Effective communication. Several authors remark that environmental messages can be delivered in enticing, captivating ways. Gardner (2001) reports that people respond best to effective communication, the actions of their peers, direct appeals, and enticing incentives (p. 195). Van Matre (1990) notes that educators must emulate advertisers if they are to capture attention; he insists that environmental messages be simplified and prioritized (p. 277). McKenzie-Mohr and Smith (1999) explain that vivid, concrete, and personalized information stands out against competing messages, and is more likely to be remembered (pp. 84-85).

Creating better feedback loops. As if to prove the point about vivid messages, Hawken and his colleagues (1999) ask, "How clean a car would you buy if its exhaust pipe, instead of being aimed at pedestrians, fed directly into the passenger compartment?" (p. 283). (That image has certainly stuck in my mind since the moment I first read it.) Hughes (1996) points out that Native North Americans lived so close to nature, and depended on it so completely, they got immediate feedback for any mistakes in their treatment of the natural world (p. 5).

The hundredth monkey. The hundredth monkey was the hypothesized anonymous monkey on a Japanese island whose change in eating behaviour "meant that

all monkeys [on neighbouring islands] would from then on wash their sweet potatoes before eating them" (Bolen, 1999, p. 12). This story, taken as an allegorical tale, supplies hope that when enough people in a culture make a change, that culture changes also (Merchant, 1980). According to Bolen, "once a critical number of people make that shift, it becomes what we do and how we are as human beings" (p. 13).

Psychosocial Enticements

According to Gardner (2001), when enticements help people "sidestep the psychological obstacles that block them from sustainable behavior" (p. 194), their actions can quickly become consistent with their beliefs. Psychosocial enticements are those aimed at individuals, outside of an educational context. I divide them into six categories.

The power of one. The "I'm-not-an-expert" barrier to environmental action loses its hold when people realize the impact or influence that one person can have. Suzuki and McConnell (1997) note that thousands of positive stories from around the world show "just how much power each one of us has over the Earth's future" (p. 219). Several authors write about the cumulative importance of individual actions. Conn (1995) suggests that people find their own niche "in cooperative, collective action" rather than think in terms of individualistic solutions (pp. 169-170).

Asking for commitment, sacrifice, and dedication. Research shows that the act of making a commitment can lead people from good intentions to action. McKenzie-Mohr and Smith (1999) explain that commitment works because people want to be seen as consistent. According to Gardner (2001), "so strong is our need to be true to our word that small commitments have been shown to make people more receptive to larger commitments" (p. 195). Public, written, and group commitments are even more likely to be honoured.

Although sacrifice seems to be considered a barrier by some authors (e.g., Brower & Leon, 1999), others see in it a potential enticement to environmental action. Sunderlal Bahuguna from the Chipko Movement in India (cited in Devall, 1988) observes that social activists who are willing and happy to make what others would consider sacrifices will "touch the hearts of the people" (p. 130). Van Matre (1990) calls for a renewed love for the planet, "because when you love something you will give things up for it, and that is what we must do for the earth. We must sacrifice our appetites on behalf of the future" (p. 129). Knudtson and Suzuki (1992) explain that the Native way emphasizes the need for humans "to express gratitude and make sacrifices routinely" to reciprocate for gifts received from the Earth (p. 13). Bingham (2002) changes the focus of sacrifice ("doing what you don't want to do") to dedication. "To make any lifestyle change last a lifetime, you need dedication" (p. 62), he suggests.

Crisis. A common belief among both lay people and experts is that crisis leads to change. Aslanian and Brickell (cited in Cross, 1981) refer to trigger events as potent motivating forces (p. 144), and Wlodkowski (1999) refers to change events that affect people's previous goals, attitudes, and behaviours (p. 73). Gould (1990) describes this psychological process as an adaptational response to a transition, challenge, or crisis, calling these stress situations "new sets of facts" (p. 136).

Sense of belonging. One of the cornerstones of good mental health, individually and societally, is a sense of belonging and connection to other people and the Earth (Chard, 1994). When humans feel that they are part of a community, they are enticed to action that benefits the common good. The local community, according to Suzuki and McConnell (1997), provides individuals and families with "a sense of place and belonging, fellowship and support, purpose and meaning" (p. 213).

New norms. People often look to the behaviour of those around them to determine how they will act. Merchant (1980) explains that we form our concepts about nature and our relationship to it by drawing on "the ideas and norms of the society into which [we] are born, socialized, and educated" (p. xvi). McKenzie-Mohr and Smith (1999) contend that social norms can build community support for environmental changes through compliance or conformity. They therefore suggest that our society "develop a new set of societal norms that support sustainable lifestyles" (pp. 72-73) for individuals.

Guilt as a signal of ecological conscience. Although many authors see guilt as a barrier to environmental action, others see guilt as the first step to a renaissance of conscience. According to O'Connor (1995), "Guilt is a warning that there is an incongruity in our value system, a schism in our sense of self that needs to be investigated" (p. 152). Leopold (1949) calls the extension of social conscience from people to land an "ecological conscience" (p. 258). Brower and Leon (1999) give permission to "strike a balance that suits [one's] conscience and [one's] needs" (p. 83).

Adult Learning Enticements

Educational enticements to environmental action are increasing as more calls go out for transforming our education systems. In 1989, Ornstein and Ehrlich called for "a revolution in the way we bring up children and in the way we teach and what we teach" (p. 192). In 1991, Apps advocated "love for the earth" and "concern for quality above expediency" (p. 113) as touchstones for educational decision making. In 1992, Orr described a "life-centered" postmodern education "designed to heal, connect, liberate, empower, create, and celebrate" (p. x). In 1999, O'Sullivan called for "transformative planetary education" (p. 20). I divide aspects of adult learning that entice environmental action into six categories.

Enticements to participation. Getting adults to participate in some form of adult education about the environment can be a first step in enticing environmental action. Cross (1981) suggests identifying which groups of people are logically deterred by the provisions and requirements of a program (p. 147). Cross also explains that potential learners must actually receive program information before the information can entice participation. She further notes that consumers of education "cannot respond beyond their experience" (p. 149), hence educating adults about the availability of environmental adult education is in order. Apps (1991) and Houle (cited in Cross, 1981) point out that environmental adult education should appeal to learners of all learning styles. Also, because positive attitudes toward education seem to be contagious, word of mouth is a powerful recruiting device, as is using membership groups (Cross, pp. 139-140).

Successful transfer of learning. Parker and Parikh (1999) remind us that numerous complex factors influence change in adult learners: "Forces from within the learner such as motivation, and external forces such as work environment and colleagues, all play a critical role in changing [adults'] behavior" (p. 99). Caffarella (1994) defines transfer of learning as "the effective application by program participants of what they learned as a result of attending an educational program . . . often referred to as the 'so what' or 'now what' phase of the learning process" (p. 108). She notes that "much of what adults learn tends to have an effect on others (for example, on work colleagues and family)" (p. 25), hence transfer of learning sometimes can be taken literally and promoted thus. According to Caffarella, planning programs that enhance transfer of learning means ensuring that program participants are ready and willing to learn, and have prerequisite prior skills and knowledge. Program design and implementation must include well executed application strategies, and program content must be relevant and practical,

building on participants' previous experience. Participants must view the changes to be made as doable, with enough time allotted. Participants' organizational and community context must be receptive to change, offering tangible rewards and support from key leaders (p. 111).

Motivating teaching. Teaching that is based on adult learning theories of motivation and infused with techniques for motivating learners can entice adults to environmental learning and action. Mezirow (1990) contends that "no need is more fundamentally human than our need to understand the meaning of our experience" (p. 11). Wlodkowski (1999) agrees that what fuels adults' motivation to learn is their desire to "make sense of their world, find meaning, and be effective at what they value" (p. xi). The key to effective instruction, he says, is to evoke and encourage the natural inclination to want to be competent. Wlodkowski explains that adult learners expect success, choice, value, and enjoyment. He talks of five pillars of effective, motivating instruction (expertise, empathy, enthusiasm, clarity, and cultural responsiveness) (p. 25), and four motivational conditions (inclusion, attitude, meaning, and competence) (p. 69). Parker and Parikh (1999), using Prochaska's transtheoretical model of change in adult behaviour, point out that learning events should be designed taking into account a learner's stage of readiness to change (p. 98).

Transformative approaches. Learning that inspires environmental action will often, by necessity, be transformative. The adult educator's job, according to Brookfield (1986), is to help learners realize that what they know and believe is contextual and culturally constructed. "Such an awareness is the necessary prelude to their taking action to alter their personal and collective circumstances" (p. 125). Brookfield adds that adult learners must be assisted to "contemplate alternatives, to come to see the world as

malleable, to be critically reflective, and to perceive themselves as proactive beings" (p. 125). Greene (1990) describes this process as provoking "an unease that leads to wonder and to inquiries, that awakens a passion, that provokes desires to choose and to transform" (p. 266).

Mezirow (1978) contends that "transformation in meaning perspective can happen only through taking the perspective of others who have a more critical awareness of the psychocultural assumptions which shape our histories and experience" (p. 109). Chard (1994) adds a new dimension to this concept when he asks, "Why not learn from some other entity or process? People are not the only good role models" (p. 73).

Chard (1994) notes that changes made or forced are different from (not as long-lasting as) transformations "grown out of experience, emotional journeys, and ritual" (p. 68). Forester (1999) explains that transformative learning takes place in the "messiness, complexity, detail, and moral entanglements of living stories and dramatic role-playing presentations" (p. 152), pointing to the significance of participatory learning approaches.

Participatory techniques. Transformative education often includes participatory techniques, what Slocum, Wichhart, Rocheleau, and Thomas-Slayter (1995) call "social imagination at micro-scale" (p. 117). As one example, Clover and her colleagues (2000) explain that popular education—using tools such as theatre, poetry, storytelling, dancing, singing, and drawing—is based on "the assumption that the world can be transformed, and that all people have both the knowledge and the power to bring transformation about" (p. 15). Forester (1999) talks of "participatory and deliberative rituals" (p. 139) that help learners voice and acknowledge concerns and new commitments. "Our learning, our transformation, is both cognitive and collective" (p. 140), Forester says.

A second example of participatory learning is participatory action research, or

PAR. According to Park (1993), PAR is learning by researching, and "the result of this kind of activity is living knowledge that gets translated into action" (p. 3). Gaventa (1993) further explains, "In the process [of PAR], research is seen not only as a process of creating knowledge, but simultaneously as education and development of consciousness and of mobilization for action" (p. 34).

A third participatory technique is dialogue—such as happens in discussion, the quintessential participatory technique for adult learners (what Lindeman, cited in Brookfield, 1986, called "the methodological heart" of adult education [p. 138]). Designing for dialogue is based on the assumption that all adult learners come with life experience and personal perceptions that must be respected (Vella, 1994, p. 22). According to Scott (1998), critical reflection in dialogue with others can lead to personal and social transformation (p. 103). Clover et al. (2000) emphasize the importance of creating a safe space for collectively challenging, debating, and critiquing long-held assumptions and beliefs (p. 32). Slocum et al. (1995) agree, pointing out that

> close attention to the appropriate scale [national, community, livingroom] of problem definition, analysis and action can make a major difference in the quality of participation, the rate of participation, and the representation of all groups involved in a given process. (p. 26)

Credibility. As an enticement to learning, credibility can be expedited at several points in the learning process. Wlodkowski (1999) lists expertise among his five pillars of effective, motivating instruction (p. 25). Aitchison (1998) echoes this when he includes in the necessary skills and values of an extension agent the "need to be specialized in order to have credibility" (p. 111). The Government of Canada (2002) recommends that learners be provided with "access to sound, credible, and relevant information from a variety of sources" (p. 10).

Environmental Adult Education Enticements

Dr. Mostafa Kamal Tolba, Former Executive Director of the UN Environment Programme (cited in Meadows, 1989) said that education is necessary to ensure appropriate action, through motivation, widespread understanding, and sound information and technical skills (p. vi). According to Meadows, the job of environmental education is to provide these key understandings, information, skills, and inspiration (p. 1). I have divided the enticements inherent in environmental adult education into five categories.

Eco-conscientization and eco-metaphors. Freire (1998) defines conscientization as learning to perceive sociocultural and economic contradictions, and to take action to transform the oppressive elements of reality (p. 17). Mezirow (1990) defines it further as learning to "negotiate meanings, purposes, and values critically, reflectively, and rationally . . . [rather than] passively accepting the social realities defined by others" (p. 3). What I call eco-conscientization takes Freire's concept into the realm of environmental education.

As Clover and her colleagues (2000) explain, environmental educators need to "actively, critically and creatively engage people, challenging ideas and assumptions" (p. 2) to create new knowledge together. As illustration, they point out that nature "cannot state its case or needs" within an environmental education setting, no matter how nurturing, creative, or challenging that setting is for human participants. For this reason, they suggest using facilitation techniques that give nature a voice: continually using examples from the rest of nature, using nature-friendly language and natural metaphors, reinforcing nature's existence and our inclusion in it, engaging with nature directly (p. 85). Heaney and Horton (1990) point out that strategies such as these can entice the critical reflection and conscientization essential to transformative action (p. 85).

As part of the process of eco-conscientization, environmental educators should

examine and carefully choose the metaphors they use in their teaching, as explained by Clover et al. (2000), and Bowers (1997). Lake (2001) suggests that environmental educators should pay more attention to the emotional links in the metaphors they employ, because "the words we use do matter; they shape the way we look at the world" (p. 56). Mezirow (1990) contends that searching out new themes and metaphors is part of the transformative learning process (p. 9).

Direct sensory and Earth-bonding experiences outdoors. Numerous authors agree that direct experience in the natural world is a vital aspect of environmental education. For example, Orr (1992) contends that the way education occurs is as important, and as telling, as its content.

> Students taught environmental awareness in a setting that does not alter their relationship to basic life-support systems learn that it is sufficient to intellectualize, emote, or posture about such things without having to live differently. . . . Real learning is participatory and experiential. (p. 91)

Thomashow (1995) has found that the "direct experience of wild place" has a transformational effect on many people (p. 15). Clover et al. (2000) advise letting the rest of nature and the community become partners, co-teachers, and co-facilitators in environmental adult education.

Enticing people to care about the environment must entail opportunities for sensory awareness, what Devall (1988) calls "earth-bonding" experiences (p. 57), and Van Matre (1990) calls "barrier-breaking sensory and conceptual experiences" (p. 263). Adult learners can hear facts and information with little transformative impact, but fully using the senses can provide motivation, inspiration, and empowerment to change, according to Clover et al. (2000, p. 9). Ecologist E. O. Wilson (cited in Roszak et al., 1995) coined and defined biophilia as "the innately emotional affiliation of human beings to other living

organisms" (p. 4). This intrinsic attraction to natural beauty provides a direct path to Earth bonding. For example, Brave Buffalo, a Teton Sioux (cited in Hughes, 1996), advises building on the connection that all people have for "some special animal, tree, plant, or spot of earth" (p. 80) in order to teach respect for the wisdom of the natural world.

Bioregional learning. Bioregionalism is defined by Orr (1992) as a celebration of a region's ecology, and efforts to create a local culture based on regionally appropriate "economies, technologies, material flows and educational systems" (p. 73). Learning about "home" or one's local watershed is an enticing feature of environmental adult education recommended by several authors, who name it variously "locality education" or "sense of place" (O'Sullivan, 1999), "bioregional consciousness" or "spirit-of-place" (Devall, 1988). O'Sullivan believes that educational institutions must take on the role of cultivating a community's sense of place (p. 246), and Meadows (1989) urges environmental adult educators to integrate nearby surroundings into their teaching.

Remove disguises. Helping learners cut through euphemism, illusion, fallacy, and other misperceptions can hasten transformation to environmentally friendly behaviour. Van Matre (1990) suggests "emphasizing magic and meaning instead of names and numbers" (p. 33), calling things by names that reveal their hidden nature or underlying reality, and tracing things to their true origins or destinations, as ways of helping learners remove disguises (p. 136). Rowe (2003) believes that because "thought goes wherever words chart the way," creating "a language and vocabulary of the commons" will help reclaim the concept of the commons (p. 9). He cites economist John Ruskin, who said, "If there are goods, there must be bads. If there are services, there must be disservices. If there is productivity, there must be destructivity." Rowe adds, "We must give words and therefore reality to this invisible side of the ledger" (p. 9).

Removing disguises entails pointing out what people do not or cannot see. For example, Ray and Anderson (2000) say that Cultural Creatives—described as people who want to see deep, integral change in the culture of America—are leading the way in concern for the natural world.

> The environmental movement is the most successful of all the new social movements. It has succeeded in changing the central beliefs and desires of the population—not just in the United States or even the West but in the entire world. In opinion surveys, 70 to 90 percent of people in most countries world-wide are deeply concerned about the environment. (p. 140)

But a change in beliefs, desires, and concerns is not equivalent to a change in behaviours. My husband suggested that we talk instead about "cultural destructives" to point out that the typical North American lifestyle is not normal, and still ecologically devastating (Peter Carter, personal communication, February 7, 2003) despite the Cultural Creatives, whose complicity in the destructive North American way of life is not acknowledged by Ray and Anderson.

Focus on personal action. Environmental action is easier to entice when the educational focus is on concrete and local changes. Personal lifestyle changes are the easiest to make, according to Van Matre (1990), because people can control their lifestyle choices, whereas they cannot "absorb and utilize all the multidimensional understandings of any major environmental issue" (p. 19). Camozzi (1994) talks of the need to help adult learners adopt new ideas and change their behaviours. Burch (1994) suggests helping adults "make a psychologically meaningful linkage between their present behavior, which is personal, immediate and concrete, and its long-term ecological consequences, which are impersonal, far off in time, and seemingly quite abstract" (p. 6).

Personal action also serves as an antidote to the overwhelming nature of environmental issues. Barry Lopez (cited in Dauncey and Mazza, 2001) says, "I know of

no restorative of heart, body, and soul that is more effective against hopelessness than the restoration of the Earth" (p. 195). Nattrass and Altomare (1999) refer to practical ideas for change as "low-hanging fruit" (p. 153) that should be plucked first. Van Matre (1990) suggests getting abstract ecological concepts into a concrete context for learners (p. 281), and Meadows (1989) suggests applying "the general planetary laws to local problems and opportunities" (p. 3), a notion summarized by the environmental motto "Think globally, act locally." Finally, contrary to popular belief, a change in beliefs or attitude is not a prerequisite to environmental action. As Suzuki and McConnell (1997) explain, "action invariably precedes a profound shift in values, so actually doing something is important. In the process, one learns and becomes committed" (p. 214).

Sustainable Development to the Rescue?

Sitarz (1994) credits the Brundtland Commission with thrusting the concept of sustainable development "into the mainstream of world debate" (p. 4). Tolba (cited in Meadows, 1989) and Orr (1992) suggest that sustainable development is a new expression of an age-old concept, one practised in traditional cultures. Gore (1992) points out that the introduction of sustainable development and Agenda 21 (created through an international effort and accepted globally as the blueprint for sustainable development) to the world at the World Summit in Rio in 1992 changed the way nations interact on environmental and other issues (p. xiii). For example, David Hales (2003), chair of the Stakeholder Forum, explains that "there is broad interest among governments in finding more effective ways to meet the mandate of the [United Nations] Commission on Sustainable Development" (p. 1). In this section, I examine barriers and enticements to learning about sustainable development, and then outline support that is available for sustainable development learning for adults.

Barriers to Sustainable Development

The barriers most commonly encountered by those who want to learn about sustainable development or facilitate its implementation include confusion about the focus, definition, and goals of sustainable development; an academic debate that obfuscates its implementation; the complacency of a society that goes on living as if there is no need for sustainable development; and a lack of trust or faith in the processes of sustainable development.

Orr (1992), Roseland (1998), and Wackernagel and Rees (1996) agree that many sustainability strategies already exist, but lack the proper focus, which should be on local communities (rather than global institutions, according to Roseland) and on the "software" (people) rather than the "hardware" (technologies) necessary to build a "sustainable global civilization" (Orr, p. 139).

The term sustainable development has generated enormous controversy and confusion in several fields, but especially in the field of education. Although the World Commission on Environment and Development (1987) defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (p. 43), many authors (e.g., Dauncey & Mazza, 2001; Meadows, 1989; Orr, 1992; Slocum et al., 1995) redefine or reslant sustainable development in their works.

Jickling (1994), among others, criticizes the term and its definition if not the spirit of the concept. He insists that "there is considerable skepticism about the coherence and efficacy of the term" (para. 18). For example, the term is "characterized by a paucity of precision" (para. 11, citing Slocombe & Van Bers, 1990), "an oxymoron—a self-contained non sequitur between noun and modifier" (para. 12, citing Disinger, 1990), "logically

inconsistent" and "for many, a vague slogan susceptible to manipulation" (para. 1). Perhaps forgetting that sustainable development is a deliberately coined conjunctive term meaning more than the two words would denote separately, Jickling calls for philosophical research, particularly conceptual analysis, to clear up the "conceptual muddle" that surrounds sustainable development (para. 12).

Questioning the partnership between education and sustainable development proposed by the term education for sustainable development, Jickling (1994) asks whether advancing "a particular end such as sustainable development" should be an aim of education (para. 16). Huckle (1991, cited in Jickling) and Orr (1992) agree that sustainable development has taken different meanings for technocentrists (advocates of technological sustainability) and ecocentrists (advocates of ecological sustainability). "According to this view, the term is contested and its shared understanding is rendered impossible by inherent contradictions arising from these divergent world views" (Jickling, para. 12). Kimmins (1992) agrees, but is more hopeful: "There is still no agreement about exactly what sustainable development means, and even less on how to achieve it. . . . [However], the environment is too important for us to go on arguing about it" (pp. 232-234).

Too few people see the need for a switch to sustainable development. Wackernagel and Rees (1996) see little evidence that the public understands the nature or implications of the global ecological crisis (echoing the beliefs of Bowers, 1997; Sitarz, 1994). Orr (1992) is convinced that the crisis of sustainability should be the most important item on the public agenda, "and yet we still educate at all levels as if no such crisis existed" (p. 83).

Finally, many people fear that sustainable development will mean fewer jobs (Dauncey & Mazza, 2001), sacrifices (Wackernagel & Rees, 1996), and more difficult or expensive options (Roseland, 1998), or that it will be, simply, less interesting

(McDonough, 2001). According to Wackernagel and Rees, sustainable development will remain "a hard sell" until people are convinced that they have more to gain than to lose by changing (p. 137).

Enticements to Sustainable Development

The most often cited enticements to sustainable development include making it attractive, highlighting sustainable development principles, using participatory approaches in its implementation, and accentuating the fact that sustainable development is a collective venture.

Many authors recognize the importance of making sustainable development attractive to the public (e.g., Durning, 1992; O'Sullivan, 1999; Suzuki & McConnell, 1997; Wackernagel & Rees, 1996). Orr (1992) and Dauncey and Mazza (2001) suggest that it is easier to motivate people by presenting a compelling vision of the future. Wlodkowski (1999) explains that "most people's motivation to learn is released by a vision of a hopeful future" (p. 60), and Flavin (2001), quoting a Greenpeace representative, explains that if you want people to build boats, you must first create a longing for the islands (p. 14). Clover et al. (2000) agree that this transformation must involve a vision of "building healthy, just and sustainable communities through new social relationships and partnerships with the rest of nature" (p. 5).

Three principles of sustainable development (ensuring intergenerational equity; integrating social, economic, and environmental concerns; and using roundtable processes) are inherently attractive to people. Kimmins (1992) refers to the first principle (intergenerational equity) as the balance between short-term benefits for today and long-term benefits for future generations. The Government of Canada (2002) reports that mutual respect, richer experiences, and joyful connections result from intergenerational

approaches to learning about sustainability (p. 8). Sitarz (1994), Orr (1992), Roseland (1998), and Kimmins comment on the importance of the second principle (integrating economic issues with social and environmental issues). In the forestry sector, for example, Kimmins asserts that "we can 'have our cake and eat it.' But this will be true only if we manage forests with both a biophysical and a sociological/economic perspective" (p. 231). The third principle (the roundtable approach to sustainable development) is lauded by Bolen (1999). Applying Marshall McLuhan's maxim that the medium is the message, she explains that circles are nonhierarchical and hence demonstrate and create equality in any process. Brookfield (1986), reporting on Swedish study circles, relates that they "engender a spirit of increased commitment to . . . participation" (p. 155).

Participatory approaches to sustainable development are seen as transformative by several authors (see Clover et al., 2000; Forester, 1999; Government of Canada, 2002; Orr, 1992). According to Roseland (1998), because democracy is an inherent aspect of the sustainable development process, sustainable development is "about the quantity and quality of empowerment and participation of people" (p. 24).

Finally, because sustainable development is based on participatory processes, it is not a lonely venture (Roseland, 1998). Suzuki and McConnell (1997) note that people working together in groups and organizations can create sudden shifts toward sustainable development. They "may seem powerless and insignificant, but all of them can add up to a force that can become irresistible" (p. 218).

Support for Sustainable Development Learning for Adults

Since the WCED's (1987) call for widespread public involvement in environmental issues, numerous authors have expressed support for the implementation of education, formal and nonformal, at all levels, for promoting sustainable development (see Orr, 1992;

O'Sullivan, 1999; Sitarz, 1994). Solar (1998) reports that a focus on sustainable development was among alternatives suggested by adult educators who advocate a proactive role as social change agents (p. 91). Stevenson (1997) explains that the underlying concepts and processes of sustainable development create an imperative to forge links between environmental education and development education (p. 187).

National sustainable development efforts in the United States, Australia, the United Kingdom, and Canada (Government of Canada, 2002) now support the implementation of sustainable development education. For example, the aims of the UK's Learning to Last project (Learning and Skills Development Agency, 2002) include "[raising] awareness among policy and decision makers that sustainable development should be a key principle informing the development of formal and informal learning organisations and activities" (p. 2).

Publishers are beginning to respond to the demand for learning resources on sustainable development. For example, New Society Publishers is creating a series (Education for Sustainability) focusing on "strategies for educating professionals, local officials, activists, and the general public about ways to promote effective sustainability at all levels: local, regional, national, and international" (see McKenzie-Mohr & Smith, 1999, p. v).

And finally, sustainable development learning is coming to be viewed and described in a more positive light as, variously, education for interdisciplinary problem solving (Flint, 2002), an integration of indigenous education (Knudtson & Suzuki, 1992), citizenship education (Orr, 1992), and support for more beneficial economic development (Devall, 1988).

Conclusions and Future Challenges for Environmental Adult Educators

In this review of the literature on barriers and enticements to environmental learning and action, I have compiled cultural, psychosocial, adult learning, and environmental adult education barriers and enticements, and then illustrated that learning about sustainable development can serve as an enticement to environmental action. This compilation and categorization—all in one place—of cultural, psychosocial, and educational barriers and enticements to environmental learning and action is my contribution to the understanding of environmental adult education. Although many authors write about what blocks people from changing their environmental behaviour, and several write about what could inspire people to make environmentally friendly changes, nowhere did I find a comprehensive, annotated list. Environmental educators can now have a big picture of what to consider when trying to entice adults to environmental learning and subsequent action.

Most of the barriers and enticements that I uncovered are the antithesis or flip side of each other. Although several authors see media inculcation and advertising as a major barrier to environmental action, no reviewed author mentioned the teaching of media literacy, per se, as a possible enticement. Notably, asking for commitment and a focus on personal action are two enticements that stand alone. Each is highly personal, yet can be facilitated by an environmental or sustainable development educator.

I have found no one barrier that, once mitigated or removed, will solve all the world's environmental ills. However, the West's cultural belief that we are separate from nature might be a good barrier for environmental adult educators to focus on, because so many other barriers seem to revolve around it, either explaining and reinforcing our separation or emanating from it.

Although I chose a very wide topic and took a very broad look at the literature, I did take note of some trends in the literature and gaps in the research. I noted that there is little written to date on sustainable development learning for adults specifically, and scant accessible research (if any) on the teaching of sustainable development to adults. For example, in a promotion of its June 2002 booklet Sustainable Development Is More Than Able, de Visser and Myrthu-Nielsen (2002) of Eco-Net, a Danish environmental non-governmental organization, write:

> Denmark has a long-standing tradition of democracy and public education, also practiced in compulsory education and via our folk high schools and evening schools. We thus have some potential for launching a community education project on sustainable development. All the same, our results and experience in the field are rather limited. There might be examples of—and experience in—education for sustainability in other countries and cultures that we could learn from. Eco-Net intends to find out. (p. 1)

Several authors remark that environmental education (and education generally) is not achieving its goal of societal transformation toward sustainability. Orr (1992), for example, laments that as a culture we do not question whether we are educating for "an active, ecologically competent citizenry" (p. 28). If our culture's version of education is truly serving as a barrier rather than an enticement to developing "an active, ecologically competent citizenry," then environmental adult educators have a big role to play in transforming social and educational systems, and indeed, the world. But whereas education should be a major enticement to environmental learning and action, disagreement on the meaning of sustainable development (notably in academic circles) seems to be a major barrier, braking if not blocking the implementation of sustainable development.

For the research study that this review supports, a clear understanding of the enticing aspects of sustainable development became valuable. I have found that sustainable development is as much a process as a goal. Although some authors have

suggested a curriculum to use in teaching for or about sustainable development (e.g., Flint, 2002), I did not find during my review of the literature a sustainable development education methodology that adheres to and exemplifies the principles and processes of sustainable development. Whether and what kind of sustainable development learning can entice environmental action is the focus of my study, presented in the next chapter; it is based on a community forum on sustainable development.

CHAPTER 3

DESCRIPTION OF THE STUDY

This chapter presents the story of my project, my research methodology, and the findings of my research. The findings are in five major categories: participant barriers to learning about sustainable development, barriers in facilitation, participant enticements to learning, enticements in facilitation, and transfer of learning to practice. The participants in the study introduce themselves, using fictitious names, early in this chapter.

The Story of My Project

My research project went through many transformations before it serendipitously presented itself to me in its current form. My initial intention was to offer one short workshop (1 to 2 hours) on environmental citizenship to several community groups as their guest speaker of the month, with transfer-of-learning follow-up 1 and 3 months later via questionnaires and testimonials from workshop participants who volunteered to respond. If adults did not come to environmental education, I was going to take environmental education to them, wherever they met on a regular basis. But this idea took a long time to gel because I was new in the community and a bit shy about phoning organizers to invite myself as a guest speaker.

When I did finally get up the nerve, this first research project, as designed, turned out to be not only unwieldy but also unwelcome (or, let us say, unembraced) in the community. Cross (1981) suggests that using membership groups can be a powerful device for encouraging greater participation in adult education (p. 140), but I experienced definite difficulty negotiating access to membership groups in my community. My offering (a workshop/presentation called Environmental Citizenship) was greeted with

what appeared to be bewilderment, skepticism, or complete indifference—not the responses I expected (but perhaps should have). Most groups told me that their agendas were too full to include a workshop (this did not change even after I offered to customize the workshop to fit the time slot available, down to 20 minutes), and some felt their membership would not see the relevance of an environmental theme. I became discouraged and dropped this project. It was my husband who pointed out that for my master's, I could examine more closely the surprising success of the Community Forum on Sustainable Development that I had organized and hosted a few weeks earlier, which is why I think of it as my "accidental" research project.

Origin of the Project

The idea of a community forum on sustainable development was hatched in response to what I perceived as a rather terse letter I received from a local politician in October 2000. His reply was to a letter drafted by the community's conservation group (and written and sent by me in my role as then vice-chairperson) concerning a controversial proposed land-use bylaw. Our letter was a series of questions to the politicians to determine whether their decision-making process was based on a sustainable development framework. When the reply came, I reread our letter and realized that I had not mentioned the term "sustainable development" until well down on the first page, after the politician must have already taken offense. I set about then and there to educate my community on sustainable development so that further misunderstandings could be avoided. To this day, these local politicians and the conservation group have a somewhat tense and tenuous relationship, but the forum seems to have been the start of an era of rapprochement.

Time and Place Matter

The Community Forum on Sustainable Development finally took place (we had postponed it from June 2001 to avoid coinciding with a court case involving local politicians and another environmental group in the community) on Saturday, September 22, 2001 after the farmers' market packed up. We began at 1:30 p.m., finished around 5:30 p.m. and then shared in a potluck supper, open mike event, and dance (with music on an ecological theme).

We held the forum at the new community hall, which was not the cheapest venue, but which our conservation group regarded as a local example of sustainable development and a symbol of community achievement and pride. We knew it was large enough to hold the size of group we had originally hoped for, and a kitchen was available to make the potluck easier. Participants were pleased with the venue, commenting that the ambiance was good in part because the hall is "a really good space" and "a wonderful forum to hold a forum in . . . a clear, good example of what it's all about."

Promotion Matters

Publicity began 7 months before the forum in the conservation group's newsletters and climaxed with 2 weeks of local cable television advertising, newspaper listings and front page story, an article and listing in the community newsletter/calendar, space on the grocery store's weekly advertising flyer, a notice in the school newsletter to parents, a three-dimensional display at the shopping plaza, personalized invitations to several community groups, and handmade paper posters posted around the community. Three months before the event, I had made a short presentation on sustainable development to the regional council of political representatives and invited all 23 to attend. As far as I know, I used every available form of promotion in the community. Every mention of the

forum asked people to phone me to register, to volunteer, or to sign up for childminding. I asked conservation group board members to talk up the forum with friends, and twice I visited the upper grades at the local school. Despite all this publicity, the day before the event I had only 17 names on my list of registrants. I was disappointed. Optimistically I made 30 copies of the handouts.

The day of the forum was sensationally sunny and warm for the first day of autumn. I mention this because nice weather has been known to negatively affect turnout in this rural community. I greeted the first few participants as they arrived but quickly became overwhelmed as an astonishing 60-plus people showed up. (This represents a significant percentage of our small population!) Flabbergasted and panicking as my handouts ran out, I turned to a friend who had come purely to support our endeavour. Her whispered response, "Quit your bitching and look on the bright side," helped calm my panic and I scrambled to set out more chairs. One participant later commented how much she appreciated the "hodgepodge" of our seating arrangements: "I always look for that, Julie," she said, "because if chairs are arranged in rows, forget it, the meeting's gonna be just awful." I must admit that the hodgepodge was completely unintentional.

Content and Process Matter

I designed the forum to comprise an introductory presentation on sustainable development by me, a keynote speech by a visitor, a short video, a nature break, roundtable discussions, roundtable presentations, a closure activity, and a friendship circle. My introductory presentation gave the history, definition, and principles of sustainable development, using overhead slides. Using computer-generated slides, the keynote speaker (from a nearby coastal community) highlighted his town's experience with the process of sustainable development. A 15-minute World Bank video illustrated

success stories from Curitiba, Brazil, a city that has chosen a sustainable development path. The nature break (during what is normally called a coffee break) was to have been a simple sensory awareness activity outdoors, followed by refreshments.

Following the break, participants returned to choose their table topic, choosing from forestry, energy, transportation, water, agriculture and food security, youth and recreation opportunities, seniors and health issues, small business and commerce, housing, and tourism. I had arranged a facilitator for each of the 10 topics, and had given each facilitator a dossier containing background material on their topic and a facilitator's copy of the agenda, which explained the "three hats" activity. I had made three brightly coloured construction paper headbands for each table to represent each of the three pillars of sustainable development (environment, economy, and society). My hope was that the hats would be seen as a playful reminder to consider all three pillars during the roundtable discussions. After participants settled in, I explained this activity to the whole group and became timekeeper as well as facilitator of my own group (transportation, which had combined with the energy group due to small numbers at both of these tables).

The 45-minute "three-hats" roundtable discussions were followed by group presentations on their discussions. This was to have been followed by a simple closure activity whereby each table group would present three ideas for sharing what they had discussed and learned at the forum with community members who did not attend. Here I must admit a regrettable mistake; I had left the piece of paper describing the closure activity in a dossier in a stash of materials at the side of the room, and at 4:50 p.m., after each group had presented, I simply could not recall what the final activity was supposed to be. I then wrapped up the forum with a friendship circle, a First Nations traditional way for each participant to give greetings and thanks to every other participant.

Participants Matter

As a shorthand to the community demographics of the research participants that I interviewed and to their pseudonyms for this thesis, the participants will introduce themselves by way of their responses to the question I posed on what motivated them to attend the forum.

Donnica, a female secondary student, laughed and said, "You!"

Uriah, a male secondary student, responded, "Um, probably just trying to give other kids and other people more of a chance, like later on in years, for more stuff to do 'cause [this community] doesn't have much right now."

Sheadon, another male secondary student, said, "I heard there was going to be a youth table and we might be able to get some sort of recreation, anything for us to do so that we don't have this whole 'bad teen, bad youth' thing going around."

Fiona, a female upper elementary student, said, "I was interested in it, so I thought, come and learn more about it."

Newcomer Ingrid, female Gen Xer, carpenter, seeker, and music lover, exclaimed, "Ah, I was so thrilled that somebody was organizing such an event and I wanted to meet the people [in this community] that were into that and support the initiative."

Kathryn, a female environmentally minded artist, explained, "To support the [local conservation group]. Out of curiosity, and a real desire to understand this term that's so used but so, I think, misunderstood, or is not understood at all. And how do we, once you understand the term, how does that translate into my personal life, how do I make it translate into my personal life?"

Aislinn, a female environmentally minded musician, social activist, and former lawyer, said simply, "Wanting to learn more about sustainable development, and wanting

to support my community learning more about sustainable development."

Norah, a community-minded retired businesswoman, thought about it and said, "Hmm, I feel that it's important for communities to work together on many aspects of community problems, and I felt that this was a very important area."

Francis, a politically minded semi-retired businessman, replied, "My motivation primarily was based upon urgency, to understand the mechanisms, the true mechanisms of sustainability, the three pillars in fact, the three pillars being economic, social, and environment."

Neil, a very busy local businessman, said, "I wanted to see what the community had to say, and wanted to see what the community reaction would be to it, and I, as a part of the business community, I wanted to see what effect it would have on me."

Dyanne, an environmentally minded renaissance woman, put it simply: "Just, I believe in it and it's something that's important to me."

Quinn, a retired female biological scientist, very involved in the community, admitted, "To some extent, interest in the subject, but also support because many people that I knew were involved in the forum and I was a little afraid that no-one would go and I thought I would go in order to make sure that there was somebody there."

Dick, a male environmentally minded retired public sector worker, said, "Well, because I'm interested in sustainable development—well, sustainability, let's put it that way. And I think it was a good cause, so why not go?"

Mary, a guest from another community and a female professional who uses sustainable development in her work, stated in an e-mail response: "I guess my interest may be a bit more 'academic' than some other participants. I was interested in seeing what [your] community was doing/thinking regarding sustainability and in getting some ideas

about implementation, etc. Also in getting to know some of the people in the [region] with an interest in this topic."

Participation Matters

How did people come to be at this forum? And who, exactly, came to be at this forum? Dick said the forum "had a reasonably good cross-section of people in the community," but Quinn believed that "some of the people who would have benefited most by going didn't attend." Although the community's politicians had received personal invitations, it was still a shock to me that three out of the four local politicians showed up. Kathryn, as someone who considers herself an environmentalist, also felt "really quite surprised at the people that were there, particularly the [politicians] and some of their cronies." She was acutely aware of the people who were there and the range of attitudes and perceptions, and she said:

> There're developer types there, and etcetera. And I was a little, that made me a little uncomfortable. But then as we got into it, and I would say that your leadership helped dispel some of that initial, um, feeling of, "Oh my gawd, what's he gonna say, what's he gonna do?"

Francis, someone involved in local politics, was similarly surprised. "It was very interesting for me to look around and feel very surprised that <u>that</u> person was there in attendance, and <u>that</u> lady was there in attendance. So yes, there was some surprises." Aislinn, pleased at the turn-out, said:

> It was good to see a bunch of people there, some of whom I might have felt as being more conservative, of the more conservative anti-environmental ilk, so it was good to see them there and go, "Oh, this looks like a person who might support sustainable development. Maybe there's more of them in the community than I thought."

Having noticed that there were not many people representing the social groups in the community, I asked Dick, a long-time resident, to give me some insight into who

attended and who did not. "Social would be, well, seniors' housing or housing, and stuff like that. People that came from areas of social concern . . . like the church wasn't represented, the [social awareness group] people weren't there."

Dick also speculated on why some of the people from an economic perspective did attend. He thought they might have been saying to themselves, "Is this going to affect our business?" and, "We have to get in on this, otherwise we might find ourselves shortchanged." Norah whispered to me that "some people—businesspeople—felt that it [sustainable development] might be a threat and they came and realized that it wasn't," and she thought that was "wonderful."

Research Methodology

I had not encumbered the actual learning event with the paraphernalia of research, and I credit this for the forum's flowing so smoothly. However, my qualitative research then had to be based on post-forum observations I made in my fieldnotes, informal conversations I had with several people soon after the forum, and in-depth interviews I conducted with 13 forum participants individually, 6 to 8 weeks after the forum. (A 14th participant who lives outside the community sent short responses by email.)

I was able to interview at least one community representative from each of the roundtable discussion topics but one, and all four of the students who attended. I included all the youth because I wanted both to respect an important principle of sustainable development (intergenerational equity), and to discover how to honour the participation of youth in adult learning events. However, I was unable to achieve a balance in representation from the three pillars of sustainable development, for two reasons: (a) I came away from the forum without a list of participants' names (because, at the time, the

forum was not the subject of my research) and, therefore, I could only ask those I knew personally or heard about from others to participate in interviews; and (b) two people who could have represented economic interests (one from the missing topic) told me that they were too busy with their businesses to be interviewed.

The interviews, which lasted from 30 minutes to 2 hours (some people were chattier than others), were based on an interview schedule that changed very little from interview to interview. However, I did add more questions after piloting the schedule with Quinn, and I found myself starting to emphasize certain phrases to clarify questions and to distinguish between environmental learning and environmental action. A summary of the final interview schedule is included in the Appendix. I commented in my fieldnotes that during the initial three or four interviews, I sat and did nothing but pose the questions. Those participants were the ones who remarked that the timing of my interviewing was poor—too long after the event. Once I started making reassuring comments during the interviews, that complaint stopped.

The emergent design of this research was very intriguing for me. I taped and carefully transcribed the interviews myself, and during transcription I jotted down the main themes or motifs that arose in each interview. During the discovery phase, these jottings helped me to begin reducing the data into themes, with some exciting findings. During the data analysis phase, categories began to cascade from the data. My qualitative analysis evolved some considerations for facilitating transformative environmental adult education using sustainable development learning.

Barriers to Learning About Sustainable Development

What barriers might keep adults from choosing to learn about sustainable development? Keeping in mind that all responses about barriers were, in essence,

conjectural (because participants had overcome any barriers they faced in order to attend the forum), I posed questions that led to several insights about unattractive aspects of sustainable development as well as general barriers to learning about sustainable development. I have organized these learning barriers into seven categories.

Stubborn Misconceptions about Sustainable Development

A hefty barrier for many people was a preconceived notion that the concept of sustainable development is an oxymoron. Although Francis explained that his use of the term "sustainability" was merely "habit, habit, habit," some participants use it to avoid the word "development," and some wanted to explain why the term "sustainable development" might frighten people. Some participants believed that sustainable development implies that change (read development) is inevitable. Dick said, "The word 'sustainable development' is tough because development means you are changing things." Quinn agreed, saying that the least attractive aspect of sustainable development

> is the fact that there will be change. . . . If you look, we have a pretty perfect environment right here, right now, and the knowledge that some development may cause a change in it is not good. We all come here because we like the way it is and we don't want anything to be different. Again, that's why the word "development" scares people.

She went on to explain what happens "as soon as you introduce the word 'development'":

> Another barrier that people are going to have is the fact that it has the word "development" in it, and there's a large group of people [in this community] that are "environmentally based" or whatever you want to call it. As soon as you use the word "development" they immediately fly off the handle and say, "This has gotta be bad," and can't even be bothered to even listen.

For Dick, the least attractive aspect of sustainable development is the economic pillar "because it does still emphasize profits and business." Francis pointed out that "an economic happening" could have merits by the criteria of sustainable development but

still be unpopular with segments of the community. Others identified an opposite misperception, that sustainable development is "just an environmental issue."

Another identified barrier is that preconceived notions about other people in the community and their attitudes toward sustainable development get in the way of learning together. Kathryn's admission that "our preconceptions of other people really screw us up" is probably true of this community's situation. Other participants revealed the perception that sustainable development is too complex, creating a reluctance to deal with it.

Sustainable Development as a Long, Difficult Process

Most participants view sustainable development as a long, slow (albeit urgent), and overly complex process that involves a lot of time, hard work, self-discipline, and bureaucratic hurdles. Dyanne gave two examples on a personal level: "I drove my car [to the forum] and I don't know how to get out of it. Like building [my] house, there are so many toxic materials I had to use. . . . You know, it's really hard, it's really, really hard." Neil agreed, but was more optimistic: "There's a lot of work to be done. Other than that, there isn't really a down side to it."

Sense of Hopelessness and Other Emotional Barriers

Participants believed that feelings of impotence, of being overwhelmed, and other emotional states such as depression, or personality traits such as shyness, might keep people from attending sustainable development learning events.

Donnica claimed that lack of confidence ("disbelief that they could do it") is a barrier. She also mentioned lack of support (or the fear of lack of support), saying, "I mean, it's environment. Some people can get cranky and you know, there's lawsuits and stuff."

Other emotional barriers included pessimism and a sense of futility, expressed as What's the point? or What's the use? Some participants see a problem in "getting people on board." Ingrid said, "The least attractive is the sense that it's hopeless to even think about it working. . . . that you're just voices crying in the wilderness." (She added that she thinks this is only an illusion "and that miracles can and do happen.")

Complacency and Laziness

Although some participants named tradition and convention as a barrier, others seemed less sympathetic, seeing this barrier as complacency, indifference, and apathy. Several participants linked unawareness with lack of access to (accurate) information and ideas about sustainable development, and explained that this lack of awareness leads to an inability to see the relevance of environmental action. Neil saw the barrier as an inability to make the connection between global and local issues. "I think a lot of it is attitude as in, What can I do? You know, it's back to the saying of Act locally, think globally. And I think a lot of people can't quite make that connection." But Aislinn told me that some people "actually do think it [environmental degradation] could never affect them."

Several participants mentioned the barriers of too much busyness (Donnica: "They've got families to support and they've gotta go to work."), and lack of time or willingness to give priority to this kind of learning. Young Fiona said, "Spending half a day, like, a whole half day at a place listening to people. A lot of people don't have time to do that." Norah theorized that senior citizens "would agree that it's an important subject, but they feel, Oh let younger people worry about it."

But many participants felt a more common barrier was laziness, described variously as lethargy, apathy, indifference, a can't-be-bothered attitude, lack of will or initiative, not wanting to get involved, closed-mindedness, and resistance to change.

Fear in Many Guises

Participants identified denial and fear (especially fear of change) as a major barrier to learning about sustainable development. As Dyanne explained, this is "probably fear that [people] might have to change their lifestyle. And also fear of just facing it, that the world is such a mess, and it's easier to live in denial."

Fear was certainly mentioned in several contexts as the premier barrier to environmental action. Aislinn told me, "People fear putting themselves out there, being visible, putting their opinions on the line." This includes fear of being judged or sanctioned by their community; fear of confrontation, unpleasantness, and conflict; even fear of economic reprisals. Again, Aislinn explained, "They might fear having their livelihood impacted if . . . they're considered to be too greenie."

Other financial issues came up: fear of rising taxes, fear of extra expense (such as the extra cost of organic foods), fear of losing income. Dick said:

> Barriers might be economic survival, you know, like profits. Most businesses, here in particular, are marginal and most people who are in business have difficulty making ends meet, and therefore that would be a big barrier to you if they felt that some environmental action was going to detract from their income. That would be a major barrier.

Aislinn, an astute social activist, summed up the challenge presented by fear when she said, "[Sustainable development] involves work, and changing established patterns, and moving against fear. And those are all things that people, as human beings, have a hard time with."

Perceived Lack of Leadership and Support in the Community

Participants admitted as a barrier the perceived lack of credible people willing to take the lead. Donnica told me, "We need big people, we need important people, we need people that can influence." Neil said, "Community leaders will have to, not grab people

by the nose, but kind of show them the path and say, 'Here, if we do this, this will work.'" A further reminder came from Sheadon: "[People need] someone to lead them or a group [who is] really enthusiastic about something. I think you need enthusiasm to keep people going." Ingrid also noted the perceived importance of leadership:

> Talking up ahead of time what the action's going to be . . . [and] having people that are recognized as leaders promote the action, or support it, helps. . . . People need a cheering section and they need to feel like they're in harmony with what the community wants.

Another community-based barrier is a perceived lack of convenience, translated as the lack of tools, facilities, and services "at their fingertips" to entice or support environmental action. For example, Neil suggested that a community composting centre would get more food scraps and other vegetation out of the waste stream just as the recycling station has enticed the community to recycle "because the service is there for the people to use." Participants also explained that laws, bylaws, and a number of other perceived or real bureaucratic hurdles serve as barriers.

Reputation of the Messenger

When asked if the forum presented any barriers to environmental action, most said no, but one young participant laughed, "Well, some things [suggested] were like, nobody would want to organize them or anything." This comment takes on greater significance in light of a barrier candidly shared by an older participant:

> The barriers basically are the individuals that hold themselves out as being the custodians of these protected areas, etcetera. In a community this size, it's very important who the messenger is, I believe anyway. And if a person is a complete sort of turn-off, either by their excessive enthusiasm for what they believe, or worse, become you know, almost bordering on eccentricity, then you know, it's pretty tough to get excited.

In response to a different question, this same participant noted that building interest in

sustainable development is possible "providing the person who is orchestrating the forum is doing a good job. And this did happen, actually, so it was able to expand quite readily, with the result that it was a fabulous outcome when it was completed." The reputation of "the messenger" is not a barrier I had considered, but it warrants reflection as I move into the world of environmental education consulting and sustainable development facilitating.

Facilitation Barriers to Sustainable Development Learning

This section draws from the 12 adult learning principles described by Vella (1994) in Learning to Listen, Learning to Teach, a book that talks about the power of dialogue in educating adults. She explains that these principles are a means to close the gap and develop a dialogue between educator and learner, "across cultures, genders, classes, and ages" (p. xiv). Four of Vella's principles were raised by participants in the context of barriers to learning about sustainable development.

Not Ensuring Safety Related to Process and Content

Vella (1994) emphasizes creating a safe learning environment for every learner (p. 6). I did not set up audio-visual equipment that was big enough or loud enough for 66 people (I had pictured easily squeezing the less than two dozen registrants into the lounge where the big-screen TV is located), and some people found the film difficult to see and hear, especially those older adults with failing eyesight and hearing. An important audio-visual presentation should be treated with as much respect (and advance preparation) as guest speaker.

A content-related safety issue came up unexpectedly. Uriah raised an issue I had not considered—hearing about barriers can become a barrier. Someone could learn something at the forum that blocked further learning or action. What he heard from others about all the bureaucratic obstacles in his way disheartened him somewhat:

> I guess some of the stuff that I learned there did sorta hamper, like a straight line and had to go around some things because of the government so, and different bylaws and stuff that you had to sorta jump over, so it's like a whole bunch of hurdles you had to get over. . . . Yeah, like, what you had to get past [passed?] to get something done.

Forgetting to Integrate Ideas, Feelings, and Actions into Learning

Effective adult education, according to Vella (1994, p. 14) integrates cognitive, affective, and psychomotor aspects, helping adults to learn with their mind, emotions and muscles. When asked whether the forum itself presented any barriers to learning, Kathryn laughed and said that she wanted a longer forum, whereas Ingrid thought that we sat too long. She suggested that we "get up and have some moderate level of activity and get the blood flowing . . . have a tai chi break or something."

My envisioned "nature break" (a sensory awareness activity outside) was scuttled when so many participants showed up unexpectedly. But I regret not offering an activity that brought the emotions and muscles into the very cognitive learning about the concept and principles of sustainable development.

Lack of Immediacy and Relevance

Teaching what is immediately useful to learners is an important principle of adult education, according to Vella (1994, p. 16). For forum participants, lack of a clear next step, post-forum, acted as a barrier to learning. Further, when I asked participants what would add to their learning the next time we hold a forum on sustainable development, a

common theme was relevance. Several felt the presentations gave abstract information rather than concrete examples, and lacked specific examples from similar communities and specific applications to this community. Donnica explained it this way:

> I think if it was related to something, like if they use an example that people could relate to. Like when you use something that people are really familiar with, they're more able to accept it and more able to want to learn about it, because they go, Oh, well, we could, that's us! . . . Just because it's us and, Look! the example they're using is <u>us</u> so like, we can actually do this.

Neil anticipated my problem in meeting this request for relevance when he asked for "more of a local model . . . more based on what our community goes through . . . if there is one available." In fact, when I began organizing the forum, the international headquarters of the UN's Local Agenda 21 Initiatives in Toronto told me they had no cases on file of rural communities in Canada adopting sustainable development. (Since then, a rural island not far from my island community has become a Local Agenda 21 Initiative community.)

<u>"Just Talkin' About It"—Talk as Replacement for Action</u>

Vella's (1994) principle of praxis, or learning by doing (p. 11), explains why dialogue alone, without action and reflection, can be a barrier to learning. Although 11 out of 13 participants told me their favourite activity was talking in the roundtable groups, several then expressed a concern about "talk" as a barrier to environmental action. Quinn was perhaps the most vehement, explaining that "it's all very well to say these things in this room, but if nothing ever happens, so what?" When asked whether she thought the community roundtable sustainable development process has value, she responded:

> I don't think that anything happens. Sorry, it's all very well for a bunch of those people to sit in a room and talk about these things, but so what? What ultimately happens as a result of this forum is probably nothing. That's my negative take on the forum. I mean, yeah, everybody says, "This is great," we all talk about this,

> but so what? Where does it go from here? Ideas come out. At least positively the [politicians] were present at this meeting, but what happens now? Where does it go from here? Airing ideas makes people feel good for a bit, and then it all just goes away again.

Quinn's negative "take" on the value of discussions at the forum sent me to my Webster's New Collegiate Dictionary (1981): forum is a Latin word, akin to foris (outside) and fores (door), that can mean "a public meeting place for open discussion" or "a public meeting or lecture involving audience discussion" (p. 449). So this was indeed a forum, and my intention had not been to aim for an end result, but rather to educate around the process of sustainable development. As I wrote in my fieldnotes, "it would have been more effective if I had clearly explained the purpose of this first forum: just to try sustainable development processes on for size, to see if the community could amicably and respectfully come together in this way."

Nor did Ingrid sense that the forum enticed environmental action. "People at my table mentioned, 'Are we just gonna be talking about it?' Because there really wasn't a clear action plan that emerged, a clear next step," she admitted. But my conservation group was treading carefully at a politically sensitive time and did not want to be seen as owning a community action plan for sustainable development after the forum, especially when that was not the advertised goal. That step needed to be left to the local politicians, or to the community as a whole.

Donnica liked the interactivity of seeing, doing, and talking. However, she thought that "if we'd just talked about it, it wouldn't have sunk in as much." She also appreciated the video because "a lot of this kind of stuff gets talked about, and a lot of stuff's talk and it's kinda cool when you can actually go, Look, this happened. It's not just talk, right?"

When asked how we can keep our community focused on sustainable

development, Donnica suggested, "Progress interests people. Probably regular meetings, but with regular meetings you have to make sure that there is progress, because if there's just meetings, people will again think, Oh, it's just talk, we're not really going anywhere." Norah concurred that "a carrot at the end of the session . . . would make people feel that we're just not going to have a broad-ranging discussion but they will be able to accomplish something."

What might explain the genesis of this dismay at "just talking about it" is my forgetting the planned wrap-up activity. It was meant to help the participants decide what would happen to their ideas and discussions post-forum. Without it, participants were left with no reflection time, and no plans to put our learning into action in the community. This is where Vella's (1994) concept of immediacy, or immediate usefulness to learners, would have been assured.

I admitted to myself in my fieldnotes that Quinn's critique "makes me all the more determined to make something more happen!" I hope that her "so what" will be further forums and continued interest in sustainable development in the community—maybe a Round Table that meets regularly, or a community sustainable development planning policy.

Enticements to Learning About Sustainable Development

When I asked participants to explain why sustainable development is enticing to them, I learned that many different factors and reasons can entice people to want to learn about sustainable development, and that there are many attractive aspects of sustainable development. I have organized these factors into three categories.

Hope Set Against Despair

The concept of sustainable development is not only enticing but also imperative for participants. For example, Aislinn explained that enticement can come from either problematic or affirming roots, or both.

> It's enticing to me because, again, maybe I'm a body ruled by fear, but because I'm afraid that if I don't get bloody well enticed by it, I won't have a world to get up in and live in every day—at least not a world as I know it. And also because there are things in the world that are upsetting, so it feels good to imagine them going better, being fairer.

On the one hand, several participants concluded that the biggest enticement to learning about sustainable development is discovering "what could happen if they didn't learn about it" (Fiona); how one's life and lifestyle could be impacted or affected, compromised or threatened by environmental deterioration ("as a consequence of economic activity or any other development," explained Dick). Quinn alluded to the keynote speech in saying that a crisis, or an event that increases community consciousness, is "always the kind of thing that brings people together." Sheadon told me, "If something was gonna happen . . . if people didn't like it, they'd come and talk about it, and if people who did like it hear that, I think they'd come too."

On the other hand, several participants see sustainable development as "our only hope," an important new paradigm that is worth considering because it can be achieved in small increments and have lasting effects. For example, Francis believes the greatest enticement of sustainable development is this sense of hope: "Everybody really wins. I mean, that's the whole thing, isn't it? It's gotta have nice things that happen at the end of it. And for the most part, I think it does." Ingrid described sustainable development as a "joyful alternative . . . [to] the slippery slope . . . [into a] little shredded web."

Making Connections

Participants saw the benefits of sustainable development reaching out in ever-expanding circles, locally and globally. Sustainable development "works . . . because it goes in a circle, it doesn't end, it's not linear," Dyanne told me. At the personal level, sustainable development is "just way more fun! It's more rich! It feeds the soul!" according to Ingrid. For the youth, it means creating fun activities for them to do. At the community level, it means "harmony," "connectedness," and working together. Dick laughed, saying, "It's better than just pure non-sustainable development," and Quinn said, "Our community may change, but it won't be any worse. . . . By definition, sustainable development says things are gonna change, but this is a change that we're able to live with."

An attractive principle of sustainable development is intragenerational equity, ensuring that people in less privileged parts of the world are not adversely affected by our development. Ingrid said, "The alternative [referring to sustainable development] is people's lives get better everywhere, and richer and more meaningful." Aislinn agreed, saying, "Sustainable development will make a better world for many, many more people."

Several participants (two youth and a businessperson) viewed positive effects on the environment, including global benefits, as the highlight of sustainable development. For example, Neil said, "If you implement it properly, it shows respect for the environment and it means that we can continue to develop without depleting or decimating resources."

Participants believed that sustainable development could make connections between the present and the future. Both younger and older participants confirmed that sustainable development can be viewed as a process to ensure intergenerational equity.

Fiona (a younger participant) said it entices her "because it will protect our world and it will still be a good world for our children." Neil (an older participant) agreed that sustainable development is "for the future of my children. And their children. And their children's children. And to make this a better place for everybody."

Some participants alluded to a spiritual connection with the rest of nature. For example, Ingrid spoke of a deepening of human beings' bonds with nature as an enticing aspect of sustainable development. "The depths of relationship with the natural world become deeper," she said. Another participant cited a potential enticement that speaks to my raison d'être as an eco-inspirationalist: bonding experiences in the natural world that create biophilia, or a love, respect, and care for the Earth. According to Kathryn, a willingness to undertake environmental action

> starts with one's feeling, one's awareness of their immediate environment and their connection to the environment, their bond to that environment. . . . So, how do we create that bond? I don't know. We start with kids. And just make sure that they have the experiences in nature that they need . . . to nourish their souls and to encourage that bond. . . . I had a very outdoor childhood and I know that that's where this care comes from.

Participation and Voice

Several participants (especially the young people) mentioned how much they appreciated having their voice heard. Uriah commented that "it was energizing to be able to finally say, 'This is what we think.'" He reiterated that the forum was "a good place to get your voice heard and give out ideas and hear ideas from other people and discuss and debate 'em."

Dyanne saw the group sharing session as an enticement. Both Kathryn and Norah saw the forum itself as an alluring beginning, a stepping stone or building block toward sustainable development in the community. For Norah, this enticed further individual

learning and exploration:

> Well, I felt it was just a beginning so, ah, I'd like to do more reading and to see what I can do, what our community can do, what our relationship should be, and the directions we might explore together.

Facilitation Enticements to Sustainable Development Learning

In this section, I again draw from Vella's (1994) adult learning principles to categorize participants' responses. Eight of Vella's principles were raised in the context of enticements to sustainable development learning and subsequent environmental action. Four additional facilitation enticements were also mentioned: offering a balance of fear and inspiration, using popular education techniques, creating a compelling vision, and credibility.

Creating a Safe Ambiance for Learning and Sharing

According to Vella (1994), creating a safe and inviting environment for learning includes the atmosphere in the room, the design of the learning challenge, and the design of the learning process (p. 6). All the respondents agreed that the atmosphere of the forum was "good" ("great"; "really nice"; or simply "okay" for a participant who arrived late). They commented that the event fostered optimism and wasn't depressing, that it had "a good ambiance, a good energy, a good feeling." Donnica said:

> The whole atmosphere just seemed like, really positive and everybody was like, "Yeah, we can do this." And there was no negative feelings. You felt really comfortable there. You felt like everybody respected you. We were all there for the same purpose.

Sheadon told me "it was not like a real tight feeling." Uriah concurred: "Most of it was pretty comfortable, because everybody was there to share ideas." Fiona, the youngest of the participants, added, "It was fun, especially the table part. I liked the feel of it. We were all in it together and connected." The oldest of my respondents said that I

"kept a very good kind of an upbeat atmosphere."

Quinn used the magic word, harmony: "In spite of the fact that . . . there were people of diverse backgrounds and interests there, there was a general feeling of harmony."

Ensuring that Content and Process are Equally Important

Vella (1994) advises paying careful attention to the sequencing of content and reinforcement in adult education (p. 9), from easy to difficult, from simple to complex. Participants agreed that the forum's content and process were sequenced in a way that helped overcome barriers to learning about sustainable development, and that each of the instructional components of the forum helped overcome barriers to environmental action.

According to participants, the introductory presentation and keynote speech were seen as interesting and informative, increasing their awareness and showing them positive solutions to environmental problems. The keynote speaker modelled commitment and inspired action with his intelligence and credibility. The video on the successes of Curitiba, Brazil, in implementing sustainable development was appreciated for "its nice added dimension" and for the inspiration and encouragement it offered. Neil admitted that the forum "was a real awakening, right sort of from the start, right through the whole thing."

Aislinn said the forum "simplified some of the information but also still provided a level of detail that was useful . . . some core principles that can be part of the road map to a solution." According to Marlene, the forum overcame some participants' indifference to environmental issues by ensuring discussion of economic and social factors as well, and Uriah said that "people saw different ways of dealing with things."

My plan was to teach the principles of sustainable development by explaining

them during my introductory presentation, and then reinforce them by building them into the structure and activities of the forum, giving participants an experience of praxis in ways that respected different learning styles. Kathryn seemed to think this was a successful strategy:

> Well, people got to talk, people got to listen, people got to see visuals, people got to laugh, people got to share. So it's like, What more? I don't know. That seems like a good way to start and a good way to carry on.

Putting Principles into Practice

Vella's (1994) principle of praxis, or learning by doing (p. 11), played a vital role in the forum. The principle of integration of the three pillars of sustainable development (environmental conservation, economic sustainability, and social equity) was perhaps the most visible at the forum, because of the "hats" (brightly coloured construction paper headbands) at each table, to represent each of the pillars. I had hoped the hats would be seen as a playful reminder to consider all three pillars during the roundtable discussions. Although I discovered that receptivity to the hats was mixed (some participants found the strategy useful and others found it a nuisance, or silly), I wrote in my fieldnotes, "The hats strategy seemed to do what I wanted it to do: keep the peace." I discuss the three-hats facilitation technique in further detail in chapter 4.

Ensuring Integrated Learning

Vella (1994) emphasizes the integration of three aspects of learning: cognitive, affective, and psychomotor. Some participants talked about the flow and the feel of the forum. Keeping the educational event upbeat is an idea that came up more than once. Ingrid remarked that the forum "was well presented and it moved along, and the passion of the speakers and the organizers was evident and was contagious." Her comment pointed out the affective aspect of the event.

Aislinn said, "It was good to have a combination of presentations and small groups and films, and potluck, socializing and music. To me, that's variety—that was a good way to entice learning." This variety in the activities ensured that the psychomotor aspect of learning was involved.

Teaching What Is Immediate and Relevant

When asked how this forum enticed learning about sustainable development, participants told me that it got them thinking, kindled their interest, and made them curious about specific issues. This comes close to what Vella (1994) calls the principle of immediacy, or "teaching what is really useful" (p. x). Neil said,

> I think just by having a forum, it brought people's, it brought very specific issues to everybody's attention. It brought them to the forefront and people had to really think about what they were doing, not just in the groups they were doing, but what I got from the overall, there was, you know, the water issues, the land use, the forestry. And it really makes you think.

Donnica reiterated that local examples are empowering and motivating, and she thought that talking about local issues in the roundtable discussions enticed learning. "When you use something that's really familiar to people, it gets them interested and it keeps them interested because it's about them."

"Finally Talkin' About It" – Talk as Action

Vella (1994) highlights the dialogue process in adult education, and the importance of moving "toward dialogue" (p. 18). The favourite activity for 11 of the 13 interviewed participants was talking in the roundtable groups; when they told me this, the interview moved to several of them suggesting that "talk" can serve as an enticement to environmental action. When asked how this forum enticed environmental action, Aislinn said, "It involved people talking to each other so that's a good foundation for action. As long as people are learning and talking to each other, things can start to happen." Ingrid

agreed: "Just getting together, without any clear action, can . . . inspire people to go ahead and bother to take little actions they may have been thinking about anyway."

Furthermore, the community sharing aspect of the forum was seen by some participants as action itself. For example, Norah said, "It's nice when people can talk about serious issues together and work together. That's a wonderful goal for us to have." Kathryn said that she would support more "dialogue, or just exchange of ideas" about the environmental actions we are already taking. This would amount to acknowledging "ways that we already live sustainably," which in itself can be an enticement to further action.

Fiona told me that the forum enticed environmental action because of "all the people talking about it and telling you what you could do." Other youth agreed, saying that "hearing what other people had to say" and then discussing those ideas afterward in their classroom got them talking together about what they can make happen in the community.

Neil probably expressed most fervently the view that talk (and reflection on that talk) can serve as an enticement to environmental action. "Making those people aware of, and really forcing people to think about all the different aspects of each topic that we talked at, I think will help force that action, and motivate them to carry on with it."

Using Small Group Learning

Vella (1994) explains that adults learn best in small teams, where learning is enhanced by peers (pp. 19-20). All but one of the participants felt that the interactive roundtable discussions were the high point of the forum. Several said they would have enjoyed a second session at a different table.

In terms of process, some participants appreciated the range of roundtable choices and the fact that, as Kathryn explained, they "got to pick and choose their workshop"

without having to defend their choice or their interest. This activity, especially, gave participants a sense that they are not alone, that "there's some resonance there," as Ingrid put it. Interacting with others who are supportive of sustainable development can help them "have the courage of their convictions."

The content of the youth and recreation roundtable discussion showed the youth how to overcome barriers to action. Sheadon mentioned that fund raising and money making were discussed in his group, "so I think that could really help take action." Uriah evoked images of physical barricades with his metaphor: "My eyes were opened to different ideas and how to go around certain things, and once you're around them, the barrier behind you sorta gets taken down and then it's easier for the next wave to come through."

Ensuring Success

Vella (1994) believes that accountability is one of the foremost principles of adult learning, and that success is in the eyes of the learner (p. 21). She suggests posing the question "How do they know they know?" (p. 190) as a way to ensure accountability. Although I did not use that exact question, participants agreed that the forum helped overcome barriers to learning about sustainable development by bringing sustainable development to the attention of the community. Dyanne said that "just the fact that it happened, that you created the forum, that it existed" surmounted barriers. Norah was "surprised and delighted" that we talked about sustainable development "in a very public forum with widespread support of examining the issues." Neil added that what happened after the forum also helped overcome barriers.

> Just by having the forum, having the people there, and I think by having those people who went to that forum also spread the word throughout the community. And you know, I'm sure I'm not the only one who went, "Wow, there's a lot of things that we need to really work on and think about," and through talking it out with other members of the community who weren't there, you're gonna spread the word and spread the idea.

Offering a Magic Balance

Aislinn pointed out that there is no one best way to entice people to sustainable development learning or environmental action. She felt that "some kind of magical combination of frightening them and inspiring them" would work:

> They have to know how serious it is, but there needs to be a balance of constructive things they can do now that give them reason to hope that the situation can be improved. So I don't know what the magic combination is, but if they just thought it was all a party and no big deal, they wouldn't be involved, and if they thought it was a horrific situation that could never be resolved, they wouldn't be involved either, so some kind of balance of the wake-up call and a measure of hope.

Facilitating Serious Play Through Popular Education

Participants enjoyed the different ways that group findings were presented, some with visuals, song and poetry. For example, the Agriculture and Food Security table offered this poem:

> There is a time for all seasons
> There is a time to look at the food we eat
> There is a time to ask where it comes from
> It's the time to ask, "Can we grow it here—organically?"
> And if not, "Do we really need it?"
> There is a time to ask whether we need asparagus in January!
> So adopt a fruit tree, develop a community garden,
> and support local growers at an economic level
> There is mental, physical, emotional and spiritual health in people coming together
> around the growth, sale, preparation, and eating of food.
> There is a time for all seasons, and now is the time.

Kathryn suggested that an opportunity for the community to come together and laugh together, to honour the environment in an enjoyable, humorous way, could make learning about sustainable development memorable.

Offering a Clear and Compelling Conceptual Framework

Sustainable development does not have to be an abstract concept, and the more practical it seems, the more compelling. Several participants thought that active promotion might help community members see the practical application of sustainable development to their lives or, as Ingrid put it, "that it's not just an abstract thing . . . that it's going somewhere, that people have made positive steps and we can too." Norah told me that it would be helpful for people to "understand the relationship of sustainable development to their own lives, their private lives, instead of its being a very nice phrase that they see in literature, but they can't see how they might fit in." Marlene made a specific suggestion for enticing people to sustainable development education:

> For people who may not be immediately interested, the explanation of economic, social and environmental "capital" often seems to be a hook, i.e., it is already a well-understood financial concept that is easy for people to translate to other values.

Credibility

In an attempt to avoid any perception of taking sides, I had decided to invite a reputable keynote speaker from outside the community. I did not realize how successful this strategy of perceived impartiality was for enticing learning until I interviewed two people who seem to consider themselves diametrically opposed in their views. I heard them both use the same term: credibility. In response to the question on how this forum overcame barriers, Francis said it was "primarily by the way it was structured, I mean the keynote speaker from [elsewhere], not being one of the residents, I thought that was very, very good, and a person of credibility to boot." Kathryn's response was similar:

> Well, it presented some good solid information, and it was presented by very credible people. It seems like credibility is a really important thing, to me and probably to other people too. . . . I loved that this highly credentialed person was standing up there saying what he was saying. That really mattered to me, because

> I think so many times environmentalists are kinda put down 'cause they don't have the right clothes or they don't have the right education.

One of the young people agreed. Uriah said that "having one of the speakers that was very knowledgeable and doing this in other places in [the province], and having a slide show set up and sort of going step-by-step" was an enticement to learning.

Participants' Transfer of Sustainable Development Learning to Practice

Most of the participants I interviewed said that, because of the forum, they underwent some sort of transformation, which I categorized as new ideas, new attitudes, and new actions. They expressed a variety of cognitive learnings—among them the naming of sustainable development—that led to other changes, confirming Kurt Lewin's well-known aphorism, "There is nothing so practical as a good theory." Some expressed their new learnings in terms of feelings and beliefs that were reinforced at the forum. And when I asked participants about changes they had made since the forum, I learned that learning about sustainable development can have an impact on environmental action.

Bringing Home the Concept of Sustainable Development

In general, the forum served to define and bring home the concept of sustainable development—personally and for the community—by localizing the possibilities and potential it presents. Fiona told me the forum made her "think more about what could happen if we didn't start developing sustainably." Neil became aware of how unsustainable our local lifestyle is "because we're just growing and growing and eating up our natural resources"; he commented on how much more his business can do to become sustainable. (I see a contract for a sustainable development facilitator there!)

I asked participants how their definition or understanding of sustainable development had changed because of the forum. One of the young participants told me

development had changed because of the forum. One of the young participants told me that she had not realized "it was called sustainable development" so the forum gave it a name for her. Some learned the definition of sustainable development for the first time. Others pointed out that the forum clarified, strengthened, or expanded their understanding. Two participants said the forum opened their eyes. For example, Norah said the film "was an eye-opener and made me recognize that, Gee! Everybody can do it! Everyone can get involved. . . . I always had the feeling that . . . only people who are interested in 'the environment' in quotes are going to become involved."

Aislinn's newly broadened definition of sustainable development adds elements to the WCED's (1987) definition that I currently use. For Aislinn, sustainable development is "whatever sustains a community as a healthy, happy, environmentally respectful, economically viable body." Here is what she took away from the forum:

> The world is going to keep developing in one way or another, no matter what, and what is the way for it to do that, so that there will be, both for those who live now and for all future generations, a happy, healthy, safe, environmentally flourishing, and economically just place for them to do that in?

Learning About Process

Process-wise, due to the set up of the roundtable activity, participants learned something about their community through the sheer range of table topics available. They also learned that the process is vital for hearing and discussing what other community members value. Furthermore, they learned that sustainable development matters to other people in the community and around the world, and that it is increasingly accepted and supported. A sense of "in it together" was an important piece of learning, especially for those who came with a lot of background knowledge.

Two participants advanced very different views on the locus of control for

sustainable development and whether it is an individual process or a community process. On the one hand, Kathryn's definition became less "airy-fairy" because of the forum, and she said, "We can say this community is striving to become sustainable. But . . . in fact, that term doesn't mean anything until you really define it for yourself. Every person has to define it for themselves." Norah, on the other hand, sees sustainable development as a whole community process:

> Wow, [the forum] made me feel that the process can be applied to this community, which is very encouraging, that it isn't necessary to have a completely ecologically, environmentally centred community, but everyone can participate, and I thought that was wonderful.

Learning About Sustainable Development Principles

In terms of principles, what truly impressed me was that quite a few participants came up with or remembered (from the keynote address) key principles of sustainable development that I did not know, had not remembered, or had never considered. Ironically, many of these same participants then apologized for not being able to name "three important aspects or principles of sustainable development" (showing me that questions that sound like test items can act as barriers to recall of learning). However, several participants were able to name the three pillars of sustainable development, and with prompting several more remembered them.

Most participants were certainly able to talk about the principles of sustainable development, even if they could not name them. They learned that sustainable development should focus on the good of the community, and that it includes everyone in the community (diversity). They learned it is a participatory process that, according to Sheadon, "holds everyone as equal, not one group higher than the others." Norah noted that sustainable development is "not imposed on anybody, but everyone's concerns are

important" (social pillar). Kathryn mentioned that "we need to find ways to support local community and livelihoods and eventually that all has to do with the well-being of community and people" (economic pillar). Several participants echoed Aislinn's call for conservation and "respectful and sustainable use of the world's non-renewable resources" (environmental pillar). Kathryn said that the 3Rs (reduce, reuse, recycle) and the concept of ecological footprint ("the footprint of my behaviour is far beyond my septic tank") were affirmed at the forum. Aislinn linked the social, economic, and environmental pillars by calling for "greater movement towards equity and equality in the sharing of the world's resources" (integration).

Ingrid mentioned meeting the needs of future generations (intergenerational equity). Others learned that the themes and issues of sustainable development are interrelated both locally and globally (intragenerational equity). Two participants illustrated the think globally, act locally motto: Francis remarked that sustainable development "is not an isolated phenomenon" but is "pretty much universal. It's not just one small piece of geography. It's a big thing." Ingrid commented:

> I liked that the theory if you will, what's coming from the so-called experts, matches my own intuitive sense that sustainable development is a very locally based thing that really engages the hearts of people in the place where they live. And it's really all about ownership.

Learning About New Topics

In terms of content, the youth participants said they learned the history and importance of sustainable development, what it is, "what's being done and what's not being done," what we need to pay closer attention to, and how to manage local resources better. Some of the older participants concurred. Neil said he learned that "instead of decimating a stand of timber with clearcut logging practices, to bring in eco-tourists to see it."

Dick learned "that governments can accomplish things if they put their mind to it" (confidence-raising of a sort). Ingrid remembered the keynote speaker saying that a key criterion for successful implementation of sustainable development planning is having "a sense of the boundary of the community, knowing who you're talking about." (This could partly explain the success of the forum in this small community, but it might be a fascinating challenge in larger centres.) And Kathryn came to a consequential realization, one that does not yet seem to be shared by many community members, gauging by the exodus of cars from this community to a large urban centre every day:

> In terms of economics and business here, if we're going to have a sustainable community, then we need to support the efforts that already exist here. . . . We don't necessarily need to go 50 miles away to buy cheap goods. I know personally I have to consider greater support for the businesses here.

Her new understanding that deliberately choosing alternative behaviours is part of achieving sustainable development is an example of some of the changes participants have made because of the forum.

Change in Stance

Some participants experienced a change in their attitude toward sustainable development. Several who came to the forum "interested" in sustainable development left with a sense of "acceptance" or "conviction," including Sheadon who now wants to be involved and have "some sort of say." A few who classified themselves as "unaware" before the forum raised their awareness and became interested in the concept of sustainable development, even committed to it. Donnica said, "I just never knew that it was like this whole, enormous, organized . . . I didn't realize so many people were thinkin' like that and stuff, so I thought it was pretty cool." I discovered that the forum did not convert any participants who described their pre-forum attitude as "acceptance,"

"conviction," or "commitment," (although Ingrid went from commitment to "enthusiastic commitment"), as they already felt converted. The response most notable for me came from the politically involved local who told me his attitude changed from "awareness" to "commitment."

Shift in Consciousness

When I asked participants whether what they learned at the forum had contributed in some way toward a shift in consciousness for them, about half said no, three said a little bit, and four said a definite yes. Two of the youth felt that being heard and seen by the community helped create a transformative experience for them; Sheadon said the forum "really put me out there, making me want to do something." Norah was in the latter category as well: "Yes, absolutely, because [I discovered] it's not an esoteric subject. I discovered, especially from the video, that this is a very practical subject that can be addressed by all kinds of communities and there's hope for us too." Probably Neil made the biggest shift in consciousness:

> The whole thing . . . was a bit of a real awakening for me, and got me thinking about the environment and the economics of development . . . . It made me think of being in business over here, what all I produce—my garbage was my big one as I make a mess. And all that garbage I produce, I ship off to somebody else to deal with. And you know, to remain sustainable we have to sort of stay within our own area, and we're not. We're exploiting . . . . Globally, we have a finite number of resources. And a lot of them are renewable . . . but we're not renewing it as fast as we're depleting it. And that's quite worrisome, because I've got three little kids that are coming into a nasty world.

The Converted Compared to the Unconverted

The sense of a transformation was evidently strongest in the previously unconverted, while for the converted it was more relative—along a spectrum—or not at all. Aislinn was shifted "further along the continuum of being both concerned about the

ways the world is in trouble and also optimistic that there are solutions to the ways the world is in trouble." For Ingrid, the sense of transformation was "just another step in that direction." Also, the forum helped her, as a newcomer, feel "more at home and more networked and more a part of the community."

Increased Interest in Learning About Sustainable Development

When asked how the forum influenced their learning about sustainable development, responses were neutral or positive; one might even say productive. Only one participant admitted that the forum had unleashed "niggly guilt" for driving her car around and indulging herself.

While some participants said that the forum made them feel more optimistic about the future, and broadened their views and awareness of sustainable development, fully half of the participants told me that it increased their interest in learning more. What Ingrid experienced at the forum continues to inspire her "to feel that this is a special place and that we can, in fact, be a world leader on this issue, or in this transformative process." Aislinn echoed others when she explained how the forum affected her learning:

> It inspired me to continue to try to learn more, both about how sustainable development affects my community and can be enhanced in my community, and about how it can operate in the world. So it inspired me and gave me some useful information, and gave me some hope for the possibility that things can be improved.

A New View of Their Community

Three participants said they had made changes in how they see their community because of the forum. One youth had not realized how open her community is to sustainable development. Donnica also exalted in how accepting the older participants were when the Youth and Recreation Opportunities table made its presentation: "When we presented the bike trails and the youth stuff, it was really well accepted and I thought

that was really cool because I thought we'd kinda get shot down." Another youth, Sheadon, has started talking to people in the community about recreation issues and has gained a clearer opinion on some development issues, such as housing. When Neil, as one of the biggest local employers, told me he had not changed how he sees his community, I made the observation that his attendance at the forum will probably have changed how the community views him and his business (I know this is true for me).

Ingrid, a newcomer, is feeling more confident and connected to the community because of the forum. She was encouraged by the keynote speaker "when he talked about leadership emerging from unconventional places; I thought, Wow, that could be me!" (She has since planted the seed that grew into a local Peace Circle and a Celebration of Peace in the community.) She also remarked that the forum created common ground for participants:

> I mean, it says a lot about me right off the bat that I showed up at that event, so hopefully, you know, people that have similar concerns will now feel more comfortable approaching me. Now we can talk about it, and it's a good common base.

Little Steps to Environmental Action

Some of the participants explained that they have not made any changes because they have always been involved in environmental action (helping in beach clean-ups, clearing trails, not driving a car), but several recounted changes they have made in their own lives. Neil is "a little more conscious now at home of the recycling and making sure we're not leaving the water running." Aislinn is going "a little further out of [her] way" to reuse and recycle. Ingrid has "started to get a little bit more in tune" with what she believes by buying more organic food, and hitching a ride or using her bicycle more often instead of driving. Norah told me that several influences have contributed to making her feel that "every little thing" she does will be helpful. Her local women's group has since put together a booklet on environmentally friendly products and cleaning techniques for

put together a booklet on environmentally friendly products and cleaning techniques for the home—and Norah is using baking soda in some new old-fashioned ways.

Aislinn is bridging two types of change—personal and community—by trying to connect the local parks organization, with which she is involved, with the forum's youth, so that "they can talk about . . . recreation on the trails in an environmentally respectful way [that] also meets the needs of the youth."

Commitments to Personal Involvement or Contribution

After asking participants what they thought was the single best step the community could take toward sustainable development, I asked how they would like to be involved. Almost half of them told me that they do not have much time to be involved; many of these were the converted, so their response proves that time is indeed perceived as a barrier to environmental action. In the end, however, almost all gave some way that they could make a contribution, despite their lack of time.

Perhaps the enticement of little steps might work to overcome the time barrier. Neil said that his time is "in incredibly short supply" but that his business could help the sustainable development effort by donating some time, labour, or advertising.

Three participants mentioned more exploring, reading, and learning about sustainable development. Aislinn said that her job is "first try to decrease [the] impact [I have] on the environment, then try to inform myself, then when I have time and the interest in a particular way, to be more active." Norah would like to find out what the community's relationship to sustainable development should be. Neil said that he would come to another forum "to see where we can go and to see how, as a member of the business community, we can participate in keeping things sustainable, and not creating problems, and trying to live properly where we live."

Donnica would specifically like to build more mountain bike trails in the community. Sheadon would like to "be a volunteer, just help out in small ways." He added that he and Uriah "are getting things together for the youth." Fiona said that she would be willing to take action if someone she knew took the initiative first. And Uriah would not mind being that person; he would like to be the one who shows others how fun the chaos of this work can be. "So it's sort of the big push before it becomes easier, but there's more people to push," he explained. Advice from an elder was that people prefer to back a winner; Dick said, "It would depend a lot on how things went if I wanted to be involved or not." This advice proved true when Uriah combined his design skills and enthusiasm with the moral support of peers and the financial support of parents and the community to build a movable indoor skateboard park at the community hall—the most visible (and fun!) impact of the forum to date.

Several participants pictured being involved through their vocations or avocations. Dyanne said that she could talk about natural building techniques at a future forum. Kathryn, who helped create the ambiance of the forum with some of her artwork, said that she could talk to other artists about creating seasonal pieces for the quarterly forums that she and I discussed. Francis knows that he will be involved in sustainable development professionally,

> in terms of guiding, if you will, the public through bylaws that are introduced. And it is a driven machine, in terms of legislation, from the bottom up, in my view, and not from the top down. And if it's driven from the bottom up correctly, with this approach with the three pillars through it, then I think it would be marvelous, absolutely marvelous.

Similarly, Ingrid sees herself collaborating with me "on future excitements" by playing music and serving as a bridge between cultures and generations. She is envisioning a "fun revolution."

There is an old fund raising trick that says, "Never leave empty-handed. Always get something, even if it's just a letter of support for your cause." These responses remind me of that saying, because in 11 of 13 cases participants finally came up with some way to contribute to community sustainable development.

Impacts on the Community

Participants came up with several rather intangible ways the community was impacted by the forum, all of them favourable. Francis, for example, told me he was "confident that only good will come out of this."

The biggest theme expressed was that the forum served as a catalyst, getting people going and ideas flowing. Sheadon said, "It will either get things going or stop things that aren't good for the environment or social issues." Francis, who pointed out the synchronicity of this event with other sustainable development happenings in the region, said, "The energy is now being unleashed or, as they say, the genie is out of the bottle, and I think it will grow." I appreciated Dyanne's metaphor that the forum "started some seeds . . . some real creative thought."

Others mentioned the effect of word-of-mouth sharing, the possibility of other participants "pulling strings" to make things happen, the focus it gave people's attention, the information it made available, their willingness to take part in other similar events, and a rite of passage for a new community leader (me). Aislinn again mentioned the juxtaposition of optimism and fear: "[The forum] inspired [people] and gave them reasons for hope and also gave them reasons for concern. So I believe it'll have a positive effect."

I asked participants if they thought the community roundtable process has value by bringing people together in a way that avoids political agendas. The majority felt that the forum had met that aim, that it did not seem to be a politically allied concept but

could be embraced by anyone of any political background or leaning. The educational aspect of the forum outshone any politicking. For instance, although Norah "suspected" an "unexpressed agenda on the part of the [politicians in attendance]," she said:

> It was encouraging that a number of people in the business community were very relieved that this wasn't going to be some sort of "far leftwing socialist environmental" in quotes activity, and it made them feel that they wanted to listen and . . . participate. And I thought that was a great service that you gave the community.

Uriah noted that the forum was not about "having big government shooters in there saying, 'This is what you can and cannot do.'" Francis said that the roundtable process "forces people to leave their baggage outside the forum." However, Quinn added some realism by returning sustainable development to the political arena:

> Something political has to happen as a result of this. You're stressing the fact that it's apolitical, which it should be, but the only way things happen is to go through political channels eventually, and the only way that something is going to occur in the long run as the result of forums such as this, is that proposals—discrete proposals—go towards some [political] body. . . . That's the only way anything's going to happen. If the community is sitting down and talking, it may be a feel good, but the only way you're going to enact any changes that are going to have a long term effect on the community is to enact a legislation of some sort.

Another theme mentioned was community understanding. One of the youth said that people will be more forgiving now. Norah commented that the forum has made the community much more open to looking at issues of sustainable development. Francis intimated that this new openness will help the community consider all sides of an issue: "There are three legs to the stool and without the three legs, the stool will fall over." Ingrid said, "For the children it's a really positive thing to see a bunch of adults gettin' together, tryin' to grapple with the real shit and not avoid it."

A Sense of Harmony

An offshoot of this last theme is conflict reduction. When asked whether sustainable development can contribute to conflict reduction or resolution, three participants said no, that conflict will always exist, especially when some people are not interested in changing, and that the sustainable development process might create conflict. But most participants said yes, and stressed the importance of "the roundtable effect" created by effective facilitation and tone setting; positive peer pressure and ground rules of courtesy, openness, and fairness; and sticking to the three pillars of sustainable development.

In truth, the most joyous moment in my data analysis came when I read Kathryn's observation about "the sense of harmony that sustainability would create" after reading Francis' take on the most attractive aspect of sustainable development: "harmony, and harmony means happiness." My philosophy of life has always been that happiness is not a destination but a way of travel. I conclude then, in a roundabout way, that sustainable development is indeed a path this community can—and wants to—walk together, in peace.

In the final chapter, I analyze and interpret the findings of my research by examining the connections between my research and the literature on barriers and enticements to environmental learning and action. I conclude with lessons learned from the community forum on sustainable development and the participants I interviewed, as well as recommendations for how I, and others, might integrate this new knowledge into environmental adult education practice.

CHAPTER 4

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

In this chapter, I examine the relevance of the key findings of my study in light of the literature reviewed in chapter 2. I then offer my reflections on the role of the facilitator in sustainable development learning, as well as conclusions and implications for the field of adult education. I close with recommendations for environmental adult educators and for my own professional practice.

Relevance of the Key Findings

My research study confirmed or extended several of the barriers and enticements to environmental learning and action noted in the literature reviewed in chapter 2. These connections involve the issue of peace, environmentalism as its own barrier, balancing despair with hope, placing community at the centre of sustainable development considerations, and using media literacy as an enticement to environmental action. My study also uncovered two new enticements: teaching sustainable development by applying adult learning principles, and attracting participants to environmental learning and action via sustainable development learning.

Harmony and Rapprochement

The World Commission on Environment and Development (1987) states, "Certain aspects of the issues of peace and security bear directly upon the concept of sustainable development. Indeed they are central to it" (p. 290). They explain that environmental stress—especially when it is combined with poverty and injustice—can be a source of conflict (p. 291), and that conflict can lead to unsustainable development (p. 294). The findings in this study demonstrate that a well-facilitated forum for learning about

sustainable development can lead to greater harmony and a spirit of rapprochement at the community level. Quinn, one of the forum participants, pointed out that "in spite of the fact that . . . there were people of diverse backgrounds and interests [at the forum], there was a general feeling of harmony." Several participants agreed that for a community, sustainable development means harmony, connectedness, and working together.

One youth participant noted that the forum gave participants an opportunity to have their ideas heard and to discuss others' ideas. According to Forester (1999), "participatory and deliberative rituals . . . [enable participants] to listen and learn without forcing their attention so narrowly that they miss the richness of concerns and capacity that others bring to their encounters" (pp. 145-146). He describes the process as "inquiring and learning together in the face of difference and conflict, telling compelling stories and arguing together in negotiations, coming to see issues, relationships, and options in new ways, thus arguing and acting together" (p. ix).

Participants were invited, through the three-hats strategy, to listen to others' perspectives and to speak from other than the position they feel most aligned and comfortable with. This strategy contributed to the forum's advancement of harmony by keeping the discussion focused on the three pillars (economy, environment, and social equity), and by eliminating defensiveness, or even the need for it. Indeed, the participants at each table all spoke from the perspective of one pillar at a time, and everyone knew that all three perspectives would be heard in turn, in no particular order.

As Bolen (1999) points out, the "roundtable effect" (a term coined by two youth participants) creates an expectation of equality around the circle. I believe the roundtable participatory process shows participants that what they have to say is valued by the group, and that what the other people at their round table have to say will be of value to

the group. Forester (1999) explains that ground rules are vital in a participatory process:

> If the participants do not have some shared sense of the rules of the game ensuring safety in their meeting together, they may not be able to act together. If they do not have some sense of structure and process, of protocols of turn taking, of appropriate and inappropriate action (and storytelling) in this meeting, they may be too confused or threatened or shy or reticent to participate. (p. 141)

Participants noted that effective facilitation of the roundtable format was accomplished by table facilitators who encouraged positive peer pressure within ground rules of courtesy, openness, and fairness.

Environmentalism Acts as a Barrier

Sustainable development learning can help environmental adult educators reach an adult audience turned off or turned away by the term environmental. According to Wackernagel and Rees (1996), the very term environment (what I sometimes call thuh environment to make a point) serves to create "mental apartheid" (p. 139) between humans and the rest of nature. I discovered that it also keeps many people who might need to learn about green issues away from environmental learning events. For example, after offering to make an environmental presentation to a local business club, I was told the subject was not relevant to the club's membership.

In response to my lamenting the failure of my initial research project (taking an environmental citizenship workshop to community group meetings), a forum participant confided her belief that the term environmental is a turn-off for many people, perceived as an ideology they do not want to be seen associating with or supporting. Similarly, Suzuki and McConnell (1997) confirm the perception that environmentalism and environmentalists are viewed—with derision and disrespect—as "other," conveyed by terms such as tree huggers or greenies. As an eco-nuance of the adult education literature that extols the importance of a safe learning environment (e.g., Vella, 1994), this is a

reminder that non-environmentalists might automatically think they will feel unsafe at an environmental adult education event.

Fear of being labelled or identified as environmental keeps some people from attending environmental events or from breaking norms to adopt environmentally friendly behaviours. Button (1989) and Meadows (1989) note that societal norms discourage risk taking and the willingness to be first to make a change. Donnica mentioned lack of support (or the fear of lack of support) as a barrier, saying, "I mean, it's environment. Some people can get cranky and you know, there's lawsuits and stuff." Aislinn said, "People fear putting themselves out there, being visible, putting their opinions on the line." This includes fear of being judged or sanctioned by their community; fear of confrontation, unpleasantness, and conflict; even fear of economic reprisals. Again, Aislinn explained, "They might fear having their livelihood impacted if . . . they're considered to be too greenie."

McKenzie-Mohr and Smith (1999) contend that social norms can build community support for environmental changes, and urge readers to "develop a new set of societal norms that support sustainable lifestyles" (pp. 72-73). Caffarella (1994) explains that if educational program design does not include follow-up support strategies, participants might be unable to overcome community forces that present rewards for not changing or societal norms that are not supportive of change. And indeed participants lamented the absence of a follow-up plan or clear next step. Quinn was perhaps the most vehement, explaining that "it's all very well to say these things in this room, but if nothing ever happens, so what?"

What the literature does not mention, and what became the most salient conclusion from my research, is that sustainable development learning can serve as an

enticement that overcomes the barrier presented by environmentalism. Participants did not mention conformity as a barrier to learning about sustainable development or attending a sustainable development event. As Sheadon explained, "If something was gonna happen . . . if people didn't like it, they'd come and talk about it, and if people who did like it hear that, I think they'd come too." Sustainable development still has a positive, or perhaps a neutral, and probably a non-confrontational connotation for the people in my community. Looking at the variety of participants who attended, I can say that community members were not afraid of being labelled greenie by coming to this forum. Where the term environmental is itself a barrier to environmental learning and action for some adults, sustainable development can be an enticement to learning about how to make environmentally friendly choices and lifestyle changes.

A Magic Balance

Several authors (for example, Durning, 1992; O'Connor, 1995; Suzuki & McConnell, 1997) caution that guilt or doom and gloom alone will not serve to catalyze action. McKenzie-Mohr and Smith (1999) point out that threatening or fear-arousing messages need to be combined with clear suggestions regarding what people can do to reduce the threat. "If you are not able at the same time to engender a feeling of common purpose and efficacy in dealing with the threat, your message may cause people to avoid, rather than constructively deal with, the issue" (p. 92). Several participants pointed to the dual nature of enticement as a solution to this problem. For example, Aislinn thought that "some kind of magical combination of frightening [people] and inspiring them" or "some kind of balance of the wake-up call and a measure of hope" might be most enticing. Brower and Leon (1999) express this idea when they suggest, "Strike a balance that suits your conscience and your needs" (p. 83).

Community as the Seat of the Three-Legged Stool

The WCED (1987) talks of "a concern for social equity between generations, a concern that must logically be extended to equity within each generation" (p. 43). One of the concerns I had while scanning the audience during the forum was lack of participation by those aligned with the social pillar (one of the three pillars of sustainable development) of the community. Afterwards, during my interviewing phase, no one could recollect seeing a representative of the social action group, the volunteer registry, the food bank, nor any of the churches.

My concern stemmed from the idea that the integration of all three pillars—environment, economy, and social equity—is a vital principle of sustainable development; if social concerns are not spoken to and considered during the roundtable process, the three-legged stool falls over. The WCED (1987) explains that sustainable development is a process in which economic and environmental changes are "all in harmony and enhance both current and future potential to meet human needs and aspirations" (p. 46).

This lack of social representation remained a concern for me until I began the data analysis and discovery process, and made a visual diagram of my data categories. This diagram conveyed very graphically that almost all the quotes I was attempting to categorize and analyze related somehow to community. Much of what participants had shared with me concerned the social fabric and dynamic of the community. I realized then that the participants, whether they aligned themselves with the environmental pillar or the economic pillar, placed the health and well-being of their community (including their immediate families and future generations) foremost in their considerations, as if community is the all-important seat of the three-legged stool. After all, what use is a stool if you cannot sit or stand on it?

I learned that sustainable development does not necessarily attract people who view themselves as caring for social aspects of the community. I believe that sustainable development still suffers from the misconception (commonly held) that it deals only with the tension inherent in economic versus environmental issues. For example, Aislinn was pleasantly surprised to come to a "closer consciousness that the social inequity/inequality stuff . . . is within the umbrella of sustainable development." But the social pillar was indeed there, represented by concern for the community.

Community, I concluded, is still the frame of reference through which people view economic and environmental issues, reflecting Orr's (1992) notion that "the constituency for global change must be created in local communities, neighborhoods, and households" (p. 31). Suzuki and McConnell (1997) advise citizens to protect the vigour and diversity of local communities. "The social unit that will have the greatest stability and resilience into the future is the local community, which provides individuals and families with a sense of place and belonging, fellowship and support, purpose and meaning" (p. 213). My research concurs with the literature, and I conclude that, with reference to sustainable development, although all three pillars are supposed to be equally considered, the social (human community) pillar provides the site, the reason, and the foundation upon which to discuss the other two.

Including Media Literacy

I asked participants to tell me, from their experience, what barriers keep people and communities from taking environmental action. Although the range of responses was impressive, no one mentioned a major barrier affecting everyone in North America and, increasingly, around the world: media inculcation (Ryan, 1999, p. 4). I was surprised (but perhaps should not have been) that advertising and other media messages were not

suggested by participants as barriers. I was also surprised that although some authors (Orr, 1992; O'Sullivan, 1999) point to the influence of media, specifically television, as a barrier to environmentally friendly behaviour, none of the references I reviewed mentioned the teaching of media literacy, per se, as a possible enticement. The conspicuous absence of media or advertising issues in participants' comments helped me see that media literacy needs to be part of sustainable development education.

Adult Learning Principles Applied

Organizing my facilitation barriers and enticements around Vella's (1994) 12 principles for effective adult learning helped me see how pertinent adult education theory is to sustainable development learning. For example, Vella points out that adult learners "need to see the immediate usefulness of new learning . . . . We want to spend our time studying that which will make a difference now" (p. 16). She calls this the principle of immediacy. Several participants highlighted the barrier of the (inadvertent) lack of immediacy (but did not use that term) when they expressed regret that there was no follow-up after the forum. The youth, however, took follow-up into their own hands and within months had an indoor skateboard park designed, approved, funded, and built. Immediacy for them at the forum was in having their voices heard and their desire for more recreational opportunities validated.

According to Caffarella (1994), program content must be relevant and practical, building on participants' previous experience (p. 111). Participants distinguished between immediacy and relevance. They spoke of wanting more relevant examples of community-based sustainable development in the presentations. (Very few Canadian examples of sustainable development—based on integration of the three pillars as the model for community development—exist; my community can now become an example for other

communities.) Donnica reiterated that local examples are empowering and motivating, and she thought that talking about local issues in the roundtable discussions enticed learning. "When you use something that's really familiar to people, it gets them interested and it keeps them interested because it's about them." Adults want to talk about their own communities and hear about success stories of other, similar communities.

Another aspect of Caffarella's (1994) planning for successful transfer of learning is ensuring that "participants' organizational and community context [is] receptive to change, offering . . . support from key leaders" (p. 111). Forum participants were pleased to see three of four local politicians in attendance; they saw this as one feature of the event that provided a sense of hope.

Describing motivational adult teaching, Wlodkowski (1999) says that adult learners expect success, plus choice, value, and enjoyment. The forum provided most participants a sense of success (again, a definite follow-up strategy could have increased this perception), a choice of topics and group presentation formats, a valuable way to spend an afternoon, and some fun. Wlodkowski also talks of five pillars of effective, motivating instruction (p. 25). Participants indicated that the forum provided all five: expertise (with the keynote speaker); empathy (with the roundtable approach); clarity (with informative introductory presentations); enthusiasm (Ingrid said, "I think the passion of the speakers and the organizers was evident and was contagious"); and responsiveness to diversity (with a wide range of participants there, including babies, youth, and seniors). The key to effective instruction, Wlodkowski explains, is to evoke and encourage the natural inclination to want to be competent, as Aislinn confirmed when she said the forum "simplified some of the information but also still provided a level of detail that was useful . . . some core principles that can be part of the road map to a solution."

Using popular education techniques is another way to infuse sustainable development education with adult learning techniques. According to Clover and her colleagues (2000), environmental adult education weaves together ideas from adult, feminist, indigenous, environmental, and popular education. Popular education "encourages creative expression and collective action for change, links local and global contexts, and is highly participatory" (p. 15). They suggest using humour and passion to help bring about fundamental transformation in human/Earth relations, saying "we are all artists, poets, storytellers, songwriters, dreamers, and more" (p. 23). Amidst laughter and joking, forum participants used drawings, song, and poetry to present their roundtable findings to the whole group. Facilitation that honours mutual learning and the creation of new collective knowledge (Clover et al., p. 15) serves as an enticement.

I conclude that roundtable discussions, facilitated in a way that respects adult learning principles, could be a very viable path to environmental learning and action for adults. Participatory techniques, as recommended by several authors (Clover, Follen, & Hall, 2000; Forester, 1999; Hart, 1997; Slocum, Wichhart, Rocheleau, & Thomas-Slayter, 1995), are an integral part of the sustainable development process. At the forum, participants most enjoyed the roundtable discussions. This preference supports the principle that critical reflection through discussion (dialogue) is central to personal and social transformation (Scott, 1998, p. 103).

Naming Sustainable Development Learning as Adult Education

My review did not reveal literature that named sustainable development learning as an area of adult education, although the term "sustainable" is increasingly used in environmental education literature. However, the authors of environmental education literature who mentioned "learning for a sustainable future" or "education for

sustainability" were writing about the education of children. My study extends the literature by moving sustainable development learning into the realm of adult education.

There has been much (perhaps too much) discourse in the literature (see Jickling, 1994, for example) on the concept of sustainable development, but very little research on how to teach the concept in a way that leads to, well, sustainable development. My experience extends the literature by applying adult learning principles and knowledge of environmental adult education barriers and enticements to sustainable development learning.

My study also succeeds in highlighting the significance of sustainable development learning as an enticement to environmental learning and action, a notion not found in the literature on barriers and enticements. My serendipitous finding that learning about sustainable development can serve as an enticement to environmental learning and action opens new possibilities for environmental adult educators, particularly those who lament the lack of interest and dearth of opportunities in environmental education for adults.

Reflections on the Facilitator's Role

I believe that the facilitator's role in sustainable development learning is key to a successful participatory and transformative educational experience. The facilitator can design a learning process that respects the principles and practices of both adult learning and sustainable development, by linking theory to practice, ensuring credibility, highlighting a sense of harmony, developing the three pillars into a mantra or jingle, encouraging small steps, offering a compelling vision of sustainable development, and framing talk as action.

Linking Theory to Practice (Praxis)

I will continue to show the short video on sustainable development in Curitiba, Brazil; participants pointed out that highlighting success stories, even from another culture, is inspiring and enticing. And I am searching for local examples of successful sustainable development initiatives to share with future participants, in order to help them see the relevance to their own communities.

I will also continue to advocate the principles of sustainable development during a theoretical introduction to the topic, and then engage participants in putting theory into practice during the group roundtable discussions. The youth participants, in particular, wished for a second roundtable session so that they could learn more and spread their voices to other table topics; the addition of another session could contribute to participants' opportunities for "doing with built-in reflection" (Vella, 1994, p. 11). As Vella points out, appropriate learning tasks "give people the chance to practice new ideas or skills or attitudes and immediately to reflect on them, making practice praxis" (p. 12). In a future forum or workshop, I will add a reflection component in the closure section, naming again the principles that participants have heard about and used, and have them name the personal and community significance of these principles. To ensure immediacy, I will make time for groups and individuals to decide the next step in their learning process: how to share their findings with others in the community, and whether and how they want to remain involved.

The principle of integration of the three pillars of sustainable development was perhaps the most visible at the forum, because of the hats I had made for each table, to represent each of the pillars. McKenzie-Mohr and Smith (1999) emphasize the importance of communications that are "vivid, personal, and concrete" (p. 156). I will

repeat the three-hats strategy, as I believe it was a big factor in the forum's success. Next time, I will better clarify for both table facilitators (ahead of time) and participants the purposes of the strategy (to maintain harmony in the group; to ensure that discussion integrates all three pillars). To help participants work comfortably within the ambiguity and overlap of the three pillars, I might say something like, "Highlight one hat at a time; you will probably find that there is overlap, but try to focus on and exhaust just one hat in the time allotted before moving on."

Ensuring Credibility

Credibility is an enticing feature of sustainable development learning that I had not thought of. It was merely a hunch of mine that I had better bring in an outsider (and a video, too) to present the why and the how of sustainable development. I presented the who, what, when and where—the "story" of sustainable development. The why and the how are the big ideas, the tough sells, and I did not want to be perceived, due to my connection with the conservation group, as representing only one pillar of sustainable development. McKenzie-Mohr and Smith (1999) explain that using a credible source can have a dramatic impact on how a message is received. "Ensure that whoever delivers your message is seen as credible. Individuals and organizations tend to be viewed as credible when they have expertise, or are seen as trustworthy" (p. 157).

Highlighting a Sense of Harmony

The evening before the forum, I experienced a crisis of conscience, suddenly realizing that I had planned the forum's group activity as an adversarial role-play, which featured participants wearing different hats. One of the goals of sustainable development is conflict reduction. The World Commission on Environment and Development (1987) notes that, "in its broadest sense, the strategy for sustainable development aims to

promote harmony among human beings and between humanity and nature" (p. 65). Yet here I was heading for conflict production. With a quick shift, I determined that each table would get one set of three hats and the table facilitator would choose one hat that all participants would discuss at a time. The three-hats strategy was successful as a collaborative (rather than confrontational) facilitation technique. I believe that because of it, the greatest contribution the forum made in my community was to create a sense of common ground that can act as the backdrop or basis for a rapprochement between individuals, groups, and institutions who have traditionally allied with different pillars of sustainable development.

The three-hats strategy was not seen as playful, as I had hoped, but it did seem a compelling and, from my experience, innovative departure from some typical roundtable situations. It helped participants avoid the conflict that comes from entrenching oneself in one perspective or aligning oneself with one pillar, and feeling the need to defend it. The three-hats strategy achieved this by allowing all participants to reflect and comment on all three pillars, together, in turn. Vella (1994) says that "nonjudgmental discussion, like open dialogue, is not easy to design and implement" (p. 72). But learning about sustainable development showed several participants that it can serve as an integrated framework for ensuring that all views are heard and considered. And I believe the revised three-hats strategy moved the roundtable activity to a process more in keeping with the spirit of integration of the three pillars of sustainable development. My sense is that this strategy went a long way toward ensuring nonjudgmental discussion, and a sense of harmony within each group.

Developing the Three Pillars into a Mantra or Jingle

When interviewed some participants were able to name the three pillars of sustainable development, although several more needed prompting to remember them. The integration of the social, economic, and environmental pillars seems to be the most inviting principle of sustainable development, in terms of attracting people with different views and goals to meet and talk. For this reason—to ensure that all three pillars are always included in sustainable development considerations—I want to reinforce the integration principle and the pillars of sustainable development by turning the pillars into a mantra or jingle that will be easier for participants to remember. McKenzie-Mohr and Smith (1999) point out that communicated messages should be clear, specific, and easy to remember. They suggest using prompts to assist people in remembering (p. 157). "People can create a simple memory device, or heuristic, to guide them in remembering . . . ." (p. 94). The mantra or jingle of the three pillars could serve as that memory device.

At the forum, the pillars were highlighted by the three-hats strategy and by a labeled three-legged stool that was used as a prop. I want to experiment with having future participants perhaps chant the three pillars—"social equity, economics, our environment" or "people, planet, profits"—perhaps in different rhythms, as a fun mini-break during the forum and again as part of the closure. In addition, I wonder if the hats strategy might have greater impact if I make more of the hats-as-identity metaphor, akin to the metaphor of walking in another person's shoes. Integration of the three pillars can be a gift to many consultations, deliberations, and proceedings, hence it is a gift I want to be sure participants receive from me. Also, I might put the three pillars on a refrigerator magnet to go home with participants.

Encouraging Small Steps

None of the participants expressed a sense of sacrifice. Of interest, however, is the word "little" used in four examples of post-forum environmental action. Ingrid said, "Just getting together, without any clear action, can . . . inspire people to go ahead and bother to take little actions they may have been thinking about anyway." She added that she has "started to get a little bit more in tune with what she believes by buying more organic food and driving less. Neil said that the forum made people aware that "if I just take that little extra step, it's not going to be too much for me to do." He is "a little more conscious now at home of the recycling and making sure we're not leaving the water running." Aislinn said, "I'm going a little further out of my way" to reuse and recycle. And Norah told me that several influences since the forum have contributed to making her feel that "every little thing" she does will be helpful. Perhaps this signifies that I should point out to future learners that little steps are what we all start with, that little steps can lead to bigger steps, and that little steps are nothing to be ashamed of.

McKenzie-Mohr and Smith (1999) explain the potential impact of small steps: "The adoption of new behaviors . . . frequently occurs as a result of friends, family members, or colleagues introducing us to them" (p. 96). This process of social diffusion means that everyone's little steps could add up to some major improvements in individuals' collective environmental impacts, and might bring community members greater social harmony and economic prosperity at the same time. As Donnica explained, the forum showed that small steps can make sustainable development happen, that "even the subtlest stuff can make an enormous difference."

Offering a Compelling Vision

Participants noted that coming to see how sustainable development relates to their

own lives was enticing. For example, Ingrid discovered that "it's not just an abstract thing . . . it's going somewhere, [and] people have made positive steps." The more practical a concept seems to learners, the more compelling it becomes for them. This notion adds to the suggestion that it is easier to motivate people by presenting a compelling vision of the future (Dauncey & Mazza, 2001). Whereas Wlodkowski (1999) explains that "most people's motivation to learn is released by a vision of a hopeful future" (p. 60), forum participants point out that this hopeful vision must include practical applications and connection to their own lives.

Framing Talk as Action

Does attending a forum on sustainable development constitute learning or does it constitute action? The answer is, both. Vella (1994) subtitled her book The Power of Dialogue in Educating Adults. "One basic assumption in all this is that adult learning is best achieved in dialogue," she explains (p. 3). McKenzie-Mohr and Smith (1999) coach social marketers to emphasize personal contact: "The major influence on our attitudes and behaviors is . . . our contact with other people" (p. 95), they assert. Making the effort to voluntarily attend a learning event can be viewed—and acknowledged—as a positive action. Coming away with any amount of new knowledge, skill or appreciation is learning. Participating in the forum's activities is praxis, or learning in action. Because by definition a forum is a venue for discussion, perhaps the true question is: Can talk lead to learning and action? As participants pointed out to me, the answer is yes. Although talk can be used as a way to put off action, dialogue in the roundtable process was seen by most participants as an effective way to learn about sustainable development principles and processes, and as a prelude to environmental action. Talk. As a community, can we get to action without it?

Conclusions and Implications for the Field of Adult Education

There is an important place for sustainable development learning for adults under the umbrella of environmental adult education. I discovered that learning about sustainable development, especially in an informative and well-facilitated community-based forum, can serve as an enticement to environmental learning, and can sometimes serve to catalyze action by raising awareness and consciousness, and by linking up community members of like mind and heart. Three other conclusions, explained below, flow from this significant insight.

A Path to Reconnecting with Nature

I concluded at the end of the literature review that the most important (but certainly not the easiest) barrier for environmental adult educators to take on is probably the Western belief that humanity is separate from the rest of nature. If so, the challenge remains to entice adults who are not normally drawn to environmentalism or environmental learning to reconnect with the natural world. Sustainable development learning can help achieve this feat in several ways: decorating the meeting venue with nature art; facilitating a nonthreatening and fun nature break activity; emphasizing and ensuring the integration of all three pillars (not leaving environmental concerns out of the presentations and discussions); and, honouring the principle of intergenerational equity. This last strategy, by definition, could naturally nudge people to consider nature, because human beings cannot ensure a healthy legacy for our descendants without considering the health of the Earth and its ecosystems.

A Path to Harmony and Conflict Reduction

Since the forum, I have noticed the beginning of a sense of rapprochement in dealings with local politicians and others who used to see the conservation group as "the

other side." I realize that the forum was only a moment in the life of this community, but, nevertheless, I believe that through the three-hats strategy and the roundtable process used at the forum, participants came to share the view that the well-being of our families and our community is the common good. I see a possibility that sustainable development learning could, just as it did in my small community, lead to peace and accord elsewhere. At a time clouded by the spectre of war, I can think of no greater contribution to the field of adult education than to offer up what I have learned about how to facilitate sustainable development learning in a way that opens a door to rapprochement and harmony. For the sake of all the children, of all species, for all time.

Operationalizing the Principles of Sustainable Development

Because of my fascination with, respect for, and commitment to the principles of sustainable development as outlined in Our Common Future (WCED, 1987)—my policy is, why reinvent the wheel?—my contribution to the field is my experience of operationalizing these principles in adult education practice. For example, the term intergenerational equity might sound like "policy wonk" to some people. But hearing that the forum included participants from 6 months to 86 years of age—with youth especially invited to attend—and specific table discussions for youth concerns and seniors' issues, clarifies what the principle of intergenerational equity can look like in practice.

Furthermore, I predict that this model is replicable with few resources if organizers and facilitators keep in mind that the story of sustainable development is compelling in itself. The highlight of the forum then is simply giving people a chance to talk with their neighbours and fellow community members in a focused way. We were able to provide this forum (including all expenses) for $6.00 per participant, a cost covered by donations at the door.

Recommendations for Environmental Adult Educators

As I move into a career of consulting in environmental and sustainable development education for adults (and children), I am coming up with many ways to integrate learnings from this research into my practice. (These are aside from remembering to be completely organized and ready for any number of attendees, with audiovisual equipment and a visible agenda—which includes a nature break activity—suitable for groups of any size.)

1. Ensure "principled dialogue" (a term I have coined to mean dialogue based on the most important principles of sustainable development) by topic group.

2. Ensure integration of the three pillars during roundtable discussions. Use an integrating facilitation technique, such as the three-hats strategy. Use the three pillars (social equity, economy, environment) as a framework to guide discussion, not as interests to defend.

3. Reinforce intergenerational equity. Explain the definition of sustainable development (development that meets the needs of the present without compromising the ability of future generations to meet their own needs). Ensure that table facilitators keep the future in focus during the roundtable discussions. Make a deliberate effort to invite participants of all ages (youth through to seniors, with childminding for the very young). Entice them with promises that their interests and concerns will be dealt with. (Youth might be interested in recreational opportunities in the community, seniors with health or other issues.) Respect their need for safety, for fun, for adequate heat, light, and sound levels. Listen, and ensure that their voices are heard.

4. Introduce the concept of intragenerational equity. Show participants the plight, and the strengths, of people in other parts of the world through audiovisual media. A

video on the successful implementation of sustainable development strategies in a less advantaged country can be both moving and motivating. Stress this principle with examples of global interconnectedness, in order to help participants see the consequences of their actions in other parts of the world.

5. Facilitate a roundtable approach. Rent, borrow, buy, or make tables that are round. (In North America, many patio tables are round, and can be covered with table cloths.) Help participants feel the sense of equity and equality that a circle can serve to create. Find a way to meet and brief the roundtable facilitators beforehand to ensure their comfort with the three-hats strategy and the roundtable process.

6. Credibility is an enticing feature for adult learners. If at all possible, invite a reputable keynote speaker. Someone representing a government agency or non-governmental organization will not charge a large speaker's fee. Or invite someone from a neighbouring community that has gone through a sustainable development process.

7. Choose a venue with a "good vibe" and positive symbolic value for the community. Find a way to bring nature into the venue, so that the natural world has a place at the forum.

8. Promote the idea of a simple community lunch (brown bag, or soup with bread and fruit) before sitting down to talk. Organizing a community potluck dinner, open mike event, and Earth dance for the same day as the forum is too much work for one person. Support efforts of other people to organize celebratory events.

9. For better promotion, make a point of sending out personalized invitations (instead of deliberately not inviting anyone specific). Specifically invite social agencies to send participants. Ask everyone who registers to entice and register one other person. Use the words of past participants to promote sustainable development learning events

as "feel good" opportunities to be involved and to have a say in community sustainable development.

My original research question was whether I could create short, transformative adult education experiences that lead to environmental action. Operationalizing the principles of sustainable development through a simple and inexpensive learning and sharing forum helped me answer my question. Whether in a government consultation, a community development process, or an environmental education event for adults, sustainable development can be viewed and facilitated as a consultative process of learning together through principled dialogue—roundtable discussion focused on the important principles of sustainable development.

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APPENDIX

SUSTAINABLE DEVELOPMENT FORUM INTERVIEW SCHEDULE

1. Before the forum, where would you have placed your attitude toward sustainable development on this scale?
•unawareness? •awareness? •interest? •acceptance? •conviction? •commitment?
Now after the forum, where would you place your attitude toward SD?
•unawareness? •awareness? •interest? •acceptance? •conviction? •commitment?

2. What motivated you to attend the Community Forum on Sustainable Development?
Did your motivation for attending have anything to do with:
•the reputation of the host organization? •promotion and advertising of the forum?
•the influence of other people? •the timing of the forum?
•the name or format of the event? •concern for social issues?
•concern for economic issues? •concern for environmental issues?
•your knowledge of or relationship to the organizer?
Do you think you influenced anyone else to attend?
Would you come to another Community Forum on SD? Why or why not?

3. What was the highlight of the forum for you? •What was your favourite activity?
With respect to your learning about SD, how did you feel about
•the introduction and keynote presentations? •the video?
•the table discussions? •any other aspect?
Would you say the forum offered you as a learner and participant
•expertise? •enthusiasm? •empathy? •clarity?
•responsiveness to diversity in the participants?
For the next time we do a community forum on SD, do you have ideas about what would add to your learning?

4. What did you learn about sustainable development at the forum?
•What was the most memorable thing you heard or learned at the forum?

5. Would you say that what you learned from the forum contributed in some way towards a transformation or shift in consciousness for you? •Why or why not?

6. Speaking from your own experience, what do you think entices or would entice people and communities to learn about sustainable development?
•How did this forum entice learning about SD?

7. Again from your own experience, what barriers do you think keep people and communities from learning about sustainable development?
•How did this forum overcome barriers to learning about SD?
•Did this forum present any barriers to learning?

8. In what ways did the forum have an influence on your learning about SD?

9. From your experience, what entices or would entice people and communities to take environmental action?
•How did this forum entice environmental action?

10. Again from your experience, what barriers keep people and communities from taking environmental action?
•How did this forum overcome barriers to environmental action?
•Did this forum present any barriers to environmental action?

11. How can we keep our community focused on sustainable development?

12. Is there anything else you'd like to add that would help me understand the barriers and enticements to sustainable development?

13. In what ways did the forum affect your attitude toward sustainable development?

14. Have you made any changes in your life or in how you see your community because of the forum? •Why or why not?

15. Did you feel you were knowledgeable about sustainable development before the forum? •Why or why not? •If yes, where had you learned about SD?

16. How has your definition or understanding of sustainable development changed because of the forum?

17. From what you learned at the forum, please name three important aspects or principles of sustainable development.
•Can you name the three pillars of SD?

18. From what you picked up at the forum, what do you think is the most attractive aspect of sustainable development, and why?

19. From what you picked up at the forum, what do you think is the least attractive aspect of sustainable development, and why?

20. Did any of the language of sustainable development used at the forum excite you or bother you? •What language sticks in your memory from the forum?

21. Following the forum, what would you like to see happen in this community with respect to sustainable development?

22. From what you learned or experienced at the forum, what would be the single best step the community could take toward sustainable development?

23. How would you like to be involved?

24. SD was designed to remove barriers to environmental action by integrating social and economic concerns with environmental concerns.
•In theory, does that make sense to you? Why or why not?
•Was that notion in evidence at the forum?
•In practice, did you get a sense from your roundtable discussion at the forum that this integration might successfully remove barriers to environmental action? Why or why not?

25. Is the idea of sustainable development enticing to you? Why or why not?
•Is the roundtable technique appealing to you? Why or why not?

26. From your experience at the forum, do you think that the community roundtable sustainable development process has value by
•bringing together people of diverse backgrounds?
To what extent did the forum meet this aim?
Do you think that this process has value by
•bringing people together in a way that avoids political agendas?
To what extent did the forum meet this aim?

27. A fundamental principle of SD is intergenerational equity. In what ways was this evident at the forum?

28. From what you experienced at the forum, do you think sustainable development can contribute to conflict reduction or resolution in the community?

29. What about the ambiance of the forum?

30. What impact or influence do you think the forum has had or will have on the community?