

How do Communities Change their Culture Towards more Sustainable Patterns of Living, Working and Learning?

Theory, UBC Vancouver Case Study & Lessons for UBC Okanagan

SEEDS Project

University of British Columbia | Okanagan
Kelowna, BC
August 18, 2006

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Abstract: This investigation has three parts: a literature review of cultural change theory regarding how to move people towards more sustainable ways of living; a case study of the Sustainability Office's efforts to change the culture of sustainability at UBC Vancouver; and recommendations on next steps in changing the culture of UBC Okanagan towards sustainability. The research was done over the summer of 2006 and was presented to Dean Bernard Bauer on August 22, 2006.

Key Words: Culture Change, Sustainability, Community Based Social Marketing, Sustainability Office, Case Study

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INTRODUCTION

“People are as interested in how we achieved unity of direction as they are in the trails we’ve ridden. They come from places where the pockets of competing influence clothe communities in the status quo. They understand the un-met challenge for the sustainability movement spanning the last three decades is a fundamental one - how do you move the ‘masses’ to action?”

Sally Bates, Cowboy Poet¹

This investigation is driven by a Social, Ecological, Economic Development Studies (SEEDS)² research project at the University of British Columbia (UBC). Although credit is the goal of this project for the student researcher the process has been rewarding beyond the credits alone. Researching the abstract, the concrete, the ‘grey’, and the practical aspects of this project has influenced my overall understanding and learning of this topic. The first third of this investigation is the theoretical work around institutional culture change that draws on theories, models and methods researched through a literature review. The second third of this paper is a case study that pulls from the hard work, documented formally and informally, by the UBC Sustainability Office staff members who strive to create a “culture of sustainability”³ at UBC. The final third of this paper is a recommendation section that may aid in the future creation, or endeavor to change, of the institutional culture at the UBC Okanagan campus.

This entire project has been bigger than the sum of these parts, as it is evident that the system, or process, of change is full of relationships that are not easily quantified. Relationships are at the core of change. Building relationships are a function of effort, time, commitment, learning, failure, success, which may result in the formation of trust. Trust and other forms of social capital⁴ are created with hard work, over time, and are influenced by both positive and negative learning cycles. The process of building trust among differing individuals with a goal to agree on some matters, such as the vision of the university, is also a taxing yet rewarding enterprise. Although building consensus is not always easy it seems that following through with actions, after deciding on a common goal, is how real culture change happens. The whole cycle of reflection, action, and evaluation is what seems to really drive change and will ultimately build continued momentum.

"Truth of the matter is - if you do it right, the words are easy. It's the consensus and the doin' that's hard."

Sally Bates, Cowboy Poet

Definition of Terms

Culture: generally refers to patterns of human activity and the symbolic structures that give such activity significance.⁵ Culture has been called "the way of life for an entire society." As such, it includes codes of manners, dress, language, religion, rituals, norms of behaviour and systems of belief⁶. In this paper we will be looking at the culture of the University of British Columbia, both the distinct cultures of the Vancouver and Okanagan campuses.

Sustainability: is a systemic concept, relating to the continuity of economic, social, institutional and environmental aspects of human society, as well as the non-human environment. It is intended to be a means of configuring civilization and human activity so that society, its members and its economies are able to meet their needs and express their greatest potential in the present, while preserving biodiversity and natural ecosystems, and planning and acting for the ability to maintain these ideals in a very long term. Sustainability affects every level of organization, from the local neighborhood to the entire planet.⁷ In the context of the University of British Columbia there are multiple types of sustainability that are being attempted. There is institutional sustainability, economic / financial sustainability, social sustainability as well as ecological sustainability. The interplay of these four types makes for a complex picture and finding the levers and barriers to change within this milieu is challenging.

Change Resistance: the resistance to changes that lead to a more sustainable way of being is a phenomenon that needs careful attention if one desires to overcome these barriers. The forces at play in human's inability to change have been the subject of research from various academia including sociology, psychology, political science, anthropology, history and economics.

Literature Review

The focus of this paper will now turn from scope of the investigations towards what the literature says about institutional culture change and the ways to understand it. This section will look at two theories of change followed by proven methods/tools that aid in culture change towards sustainable living.

Theories

Many organizations attempt to foster change in the culture towards more sustainable practices through the use of large-scale information campaigns. The use of mass media including brochures, newsletters, and flyers support the assumption that increased knowledge about an issue, landfill overload for instance, will foster a change in behaviour towards increased recycling. According to research these campaigns have limited success and prove to be a rather inefficient use of resources.⁸ To find out why let us turn our attention to the relationship between knowledge/attitude and their effects on behaviour.

Attitude / Behaviour Approach: Will behaviours change by enhancing knowledge or altering attitudes? The answer to this question is not as clear-cut as some developmental psychologists would contend. In fact there have been numerous studies that show there is little or no evidence to support that increasing knowledge or altering attitudes has an effect on behaviour. Dr. Doug MacKenzie-Mohr's studies support this statement.

- . High school students who received a six-day workshop that focused on creating awareness of environmental issues were found in a two-month follow-up to be no more likely to have engaged in pro-environmental actions.⁹
- . Households who volunteered to participate in a ten-week study of water use received a state-of-the-art handbook on water efficiency. The handbook described wasteful water use, explained the relationship between water use and energy consumption, and detailed methods for conserving water in the home. Despite great attention being paid to the preparation of the handbook, it was found to have no impact upon consumption.¹⁰

- . A survey of participants in a voluntary auto emissions inspection revealed that they did not differ in their attitudes toward, or knowledge regarding, air pollution compared to a random sample of individuals who had not had their car inspected.¹¹
- . When some 500 people were interviewed and asked about personal responsibility for picking up litter, 94% acknowledged that individuals bore a responsibility for picking up litter. However, when leaving the interview only 2% picked up litter that had been "planted" by the researcher.¹²
- . Two large surveys of Swiss respondents found that environmental information, knowledge and awareness were poorly associated with environmental behavior.¹³
- . In one study, individuals who hold attitudes that are strongly supportive of energy conservation were found to be no more likely to conserve energy.¹⁴
- . An investigation of differences between recyclers and non-recyclers found that they did not differ in their attitudes toward recycling.¹⁵

McKenzie-Mohr summarizes the research with the statement "while environmental attitudes and knowledge have been found to be related to behavior, frequently the relationship is weak or nonexistent. In short, a variety of barriers can deter individuals from engaging in a sustainable behavior. Lack of knowledge and unsupportive attitudes are only two of these barriers."¹⁶

Behaviourists have been looking at the question of culture change from a psycho/social perspective another perspective comes from the realm of economics.

Economic Self Interest Approach: This perspective assumes that individuals evaluate choices, such as installing a low-flow toilet, and using their rational abilities choose according to their economic self-interest. This suggests that in order to persuade citizens to change their behaviours a utility, government or conservation group need only provide information about an economic incentive such as rebated furnace installation or preferred interest rates for hybrid cars to get the desired behaviour to flourish. Things are never that easy and despite intense campaigns that included economic incentives to install low-flow shower heads or insulate your home, behaviours did not change significantly. For instance, annually, "California Utilities spent 200 million dollars on media advertising to encourage energy conservation. These advertisements encouraged householders to install energy conserving devices and adopt habits,

such as closing the blinds during the day that will decrease energy use. Despite massive expenditures, these campaigns have had little effect on energy use.”¹⁷

Advertising is the primary vehicle used to increase awareness of the economic incentives for changing to a more sustainable behaviour. The use of advertising has proven to be an inefficient way to change behaviours. It has been shown that advertising works in most cases to change peoples preferences like using Crest instead of Colgate and does not work to change behaviours like stop brushing your teeth or start flossing after each meal. ¹⁸ Making the decision to change behaviour, like cycling to work instead of driving, is a complex decision that takes into account many barriers to and rewards from the new behaviour.

The advertising programs and information based campaigns have been relatively unsuccessful in generating real behaviour changes towards sustainability. In light of the consequences of our unsustainable behaviours, a more efficient and successful way of changing behaviours is needed. If we are to make the transition to a sustainable future, we must concern ourselves with what leads individuals to engage in behaviour that collectively is sustainable, and design our programs accordingly. ¹⁹

Community-Based Social Marketing: (CBSM) is an alternative to information intensive campaigns. In contrast to traditional approaches, CBSM has been shown to be effective at bringing about behavior change. Its effectiveness is due to its pragmatic approach. The CBSM approach involves: identifying barriers to a sustainable behavior, designing a strategy that utilizes behavior change tools, piloting the strategy with a small segment of a community, and finally, evaluating the impact of the program once it has been implemented across a community. ²⁰

Please see Appendix A for a complete explanation of the process. The success of Dr. MacKenzie-Mohr’s CBSM is significant and it has influenced many of the culture changes at UBC Vancouver initiated by the Sustainability Office.

Tools and Methods

Commitment: One of the basic criteria to changing behaviour is commitment. The level of commitment is secondary to the elemental need to get people 'on board' with the change. For example, "Individuals who were asked to wear a lapel pin publicizing the Canadian Cancer Society were nearly twice as likely to subsequently donate than were those who were not asked to wear the pin."²⁶ The skill of obtaining commitment has multiple strategies that prove effective such as: verbal commitments, e.g. to ride the bus at least once a week; written commitments, e.g. The Sustainability Pledge at UBC Vancouver; public commitments such as publishing people's names in a newsletter or annual report; and group commitments including motivating the entire bridge club of a seniors residential complex, to recycle. Moreover, commitment works best with a 'block leader' that models the behaviour, e.g. curbside composting, and actively asks others to join the team. It is important to note that commitment should be voluntary and not be consented under pressure. If a resident is not interested in curbside composting the block leader is better off spending time looking for other volunteers versus pressuring the non-interested neighbour.

Prompts: Prompts are visual or auditory cues to remind people of the behaviour that you are seeking. For example, stickers on every paper towel dispenser that read "Take only what you need: save a tree." The success of prompts or cues has been researched at many universities, for instance, "Prompts have been shown to have a substantial impact upon paper recycling. In one department at Florida State University, a prompt that read "Recyclable Materials" was placed directly above a recycling container. The prompt indicated the types of paper to be recycled, while another prompt over the trash receptacle read "No Paper Products." The addition of these two simple prompts increased the percentage of fine paper captured by 54%, while in another department the same procedure increased the capture rate by 29%."²⁷ Prompts can be used in conjunction with other tools such as norms for encouraging behaviour change.

Norms: Norms are a form of modeling behaviour. Kids learn to walk because walking is the norm modeled by adults. Modeling norms that encourage sustainable behaviour is a powerful way to

influence people. Take for example, former President of UBC Martha Piper, her commitment to sustainability is strong however her influence on others is even stronger. Martha drives a hybrid vehicle, the Toyota Prius, which sends a strong message that she takes sustainability seriously. Geoff Atkins, the Vice President of Building and Lands at UBC is an avid transit rider. He takes the bus/bike/skytrain/seabus to all of his meetings off campus and regularly models a transit friendly lifestyle. These people are setting the norms for the university culture. A different norm would permeate through the culture of UBC Vancouver if the senior Administrators drove Cadillac Escalades to work.

Effective Communication: This is a skill as well as an art and a science. Effectively communicating to your target audience takes the discipline of science, the grace of beautiful art and the practice and patience it takes to acquire any proficiency at a skill. Many culture creators, including Martha Piper, have unique abilities in communication. There are many specific strategies that go into effective communications plan; the following checklist is provided by Dr. Mackenzie-Mohr:

*A Checklist for Effective Communications*²⁸

1. Make sure that your message is vivid, personal and concrete.
2. Explore the attitudes and behavior of your intended audience prior to developing your message.
3. Have your message delivered by an individual or organization who is credible with the audience you are trying to reach.
4. Frame your message to indicate what the individual is losing by not acting, rather than what he/she is saving by acting.
5. If you use a threatening message, make sure that you couple it with specific suggestions regarding what actions an individual can take.
6. Use a one-sided or two-sided message depending upon the knowledge of your audience regarding the particular issue.
7. Make your communication, especially instructions for a desired behavior, clear and specific.
8. Make it easy for people to remember what to do, and how and when to do it.
9. Integrate personal or community goals into the delivery of your program.
10. Model the activities you would like people to engage in.

11. Make sure that your program enhances social diffusion by increasing the likelihood that people will discuss their new activity with others.
12. Where possible, use personal contact to deliver your message.
13. Provide feedback at both the individual and community levels about the impact of sustainable behaviors.

Incentives: There are many ways to use incentives to curb or encourage behaviours. Many incentives for sustainable behaviour exist already for instance: bottle deposits, user fees for garbage, differentiated prices of energy based on consumption, rebates for energy efficiency upgrades, traffic calming, High Occupancy Vehicle (HOV) lanes and preferential parking stalls for carpools. Gerald Gardner and Paul Stern have provided guidelines for creating effective incentives which include: closely pair the incentive and the behavior; use incentives to reward positive behavior, make the incentive visible; be cautious about removing incentives; prepare for people's attempts to avoid the incentive; consider the size of the incentive; and consider non-monetary forms of incentives. (See Gardner & Stern for an in-depth discussion of guidelines for creating effective incentives).²⁹

These tools and methods have proven effective when coupled in a community based social marketing program. Community leaders can employ multiple tools together and different tools for various stakeholders in the community. All together the methods of behaviour change have an aggregated effect on changing the culture towards a more sustainable way of behaving. Now the investigation will turn to the lessons learned from the Sustainability Office's attempt to change the culture of UBC Vancouver towards sustainability.

CASE STUDY: UBC VANCOUVER SUSTAINABILITY OFFICE

“Institutional change in higher education remains a most challenging endeavor. There is comfort in knowing that none of us is alone.”³⁰

“If culture change were easy, it would be done by now.”³¹

The Sustainability Story

Introduction: UBC Vancouver embarked and continues on a journey for sustainability in order to fill, what they believe is, “a critical need in society”.³² Providing opportunities for the UBC community to become engaged in participatory projects and initiatives including the education of future leaders, reduction of green house gases, and birthing important “global breakthroughs in sustainability”³³ continues to be the mandate orchestrated by the Sustainability Office.

Outlined in the May 2006 UBC Sustainability Office annual report is a series of highlights including the UBC SEEDS projects, the Sustainability Strategy, and the results of quantitative measurements to communicate that sustainability is not only practiced but proven effective at the UBC Vancouver campus.

Background: After signing the Halifax Declaration in 1991, Professors John Robinson and William Rees initiated the process for UBC to adopt a sustainable development policy at the highest level. In 1997, UBC became Canada's first university to implement a sustainable development policy; a year later the Sustainability Office at UBC was established. This office is wholly funded by savings from initiatives such as the energy reduction program, including the salary of Freda Pagani the first Director of Sustainability in Canada. Freda has been the head of the Sustainability Office since its inception but retired from this position in July of 2006

In order to receive the cost savings from wasted resources, Jorge Marques, Energy Manager was hired to perform Canada's largest energy and water retrofit. In 1998 the office was saving \$276,00 per year. The Sustainability Coordinators (SC) program was created in 1998 with the goal of creating easy savings in energy, materials and transportation among staff and faculty as well as creating a sustainability ‘buzz’ through word of mouth marketing. After a strategic vision

and mission process the Sustainability Office embarked on a journey to earn the respect of future generations by the social, ecological and economic legacies they leave and to create a culture of sustainability on campus.

In 1999, Brenda Sawada, Manager of the SEEDS program was contracted to refine the Sustainability Coordinators program and in 2000 to initiate the UBC SEEDS program to begin the engagement of the students, staff and teams. Another program, TrekStep 1, which gave students the responsibility of giving green building tours on campus was created in 1999. Also in 1999 Laura Madera, Coordinator, Design and Communications was added to the team to design websites and publications. The office began paper reduction campaigns and liaising with supply management to create a culture of post consumer paper. It was observed by the Sustainability Office staff that the early marketing messages were not that effective as they tended toward the negative and threatening.

Ruth Abramson, Manager Communications was hired in 2002 to put some more skill into the communication campaigns. Her first task was to find a story which was UBC is Canada's leader in sustainability. Next she worked hard to get her modest colleagues to share that story in an effective way when presenting to stakeholders. Students became more involved and began creating the Residence Sustainable Coordinators program as well as a Tri-Mentoring program with alumni, business, faculty and students forming a mentoring community.

In 2003, Heather Scholefield, Manager of Strategy was hired to complete a campus wide sustainability strategy in a collaborative and inclusive way. More on this process later in the lessons learned section. In 2004 Brigid MacAulay, Coordinator, Programs and Administration was hired to assist in managing the Sustainability Coordinators program and in addition to writing and editing grant proposals and look after the running of the office.

One might find it hard to believe that this small office of four full-time and three part-time staff could motivate the campus to annually: generate up to \$3 million in savings; the amount of energy used on campus was reduced by 30 percent; carbon dioxide emissions reduced by 15,000 tonnes; and the core facilities water use was also reduced by 30 percent, despite a 27% increase in students since 1998-99. These committed people as well as others on campus

worked hard to place sustainability firmly in the vision of the university – TREK 2010. The list of achievements is long and can be accessed by reading the series of annual reports on the Sustainability Office website.

The UBC Sustainability Office is committed to advancing the UBC Vancouver campus as an “environmentally responsible campus that is economically viable and reflects the values of campus community members.”³⁴ They are assisting UBC in becoming a world leader in sustainability through the practice of sustainability operationally, academically, and culturally. The overall mission is that these practices will establish an institutional change towards a sustainability culture within the staff, faculty, students, and others in the UBC community.

UBC’s vision as outlined in TREK 2010 outlines a clear vision for UBC “...to prepare students to become exceptional global citizens, promote the values of a civil and sustainable society”³⁵. The Sustainability Office is working to fulfill that vision over time by designing systems and strategies that reinforce, in a measurable capacity, UBC’s commitment to ‘promote a sustainable society’ in the academic, operational, and cultural aspects of the entire UBC internal and external community.

Lessons Learned Along the Journey: This part of the paper draws from conversations with the staff at the Sustainability Office and highlights some of the lessons that they have learned through hard work, failures and reflections.

Hire the right people to the sustainability portfolio. When hiring a commitment to sustainability may not be enough to be an effective change agent and team member. Look at the skills of the applicant and analyse them against the skills required for the job. The passion for sustainability can come with the job but the core skills have to match what is needed.

Use strategic target marketing with effective communication. Ruth Abramson’s story is packed full of tidbits of wisdom in trying to achieve the mission of the Sustainability Office to create a culture of sustainability at UBC Vancouver. She presented at the Greening the Campus conference in Ball State Indiana a hilarious account of her first few years at the Sustainability Office. For the complete transcript of this address that has many points highlighting the culture change process

at UBC see Appendix C. One point that I would like to reiterate here is the need to be strategic in the market you choose to initiate change on campus.

“Our priority target market became UBC’s cultural creatives. By uniting them we would strengthen their potential to serve as early adopters and to set new social norms for the campus to follow. One of the ways we’ve been uniting them is through our Sustainability Coordinator program. It has 150 staff and faculty volunteers. These people inspire sustainable choices in their departments. They focus on helping their colleagues reduce energy and consumption, plus encourage them to use alternative transportation.”³⁶

Use positive messaging. The negative campaign of “Climate Change with Kill You!” did not work in affecting change. Give messages of hope and solutions which was found to be more easily accepted by people that want to make a difference and not disregarded as another ‘sky is falling’ message.

Start with SEEDS and the SC Program. The Sustainability Coordinators programs as well as the SEEDS program, of which this paper is the first at UBC Okanagan, have proven to be effective programs to gradually change the culture at UBC Vancouver over the past nine years. The change has been great or gradual depending on how modest the Sustainability Office staff are being. Ruth mentioned that on their own scorecard they are a four out of ten but if you compare UBC to other institutions they are leading the pack. For a sample of the SEEDS projects completed at UBC please view the project library on the website at http://www.sustain.ubc.ca/matrix/seedsindex/a_zseeds.htm

When building buy in use collaboration and consensus. Formulating the document *Inspirations and Inspirations: The Sustainable Strategy*³⁷ is the newest jewel in the sustainability crown at UBC Vancouver. This collaborative process took over three years and was by many accounts a more difficult process than formulating the university wide *Trek 2010: A Global Journey*³⁸ vision document. Heather Scholefield, Manager Sustainable Strategy, was the social architect who crafted the strategy and guided the process of collaboration with the over three hundred key departments/units on campus. Because there is often resistance to change in highly independent departments within larger institutions, the strategy adopted by UBC is to celebrate the accomplishments of the departments towards sustainability and to ask the individual departments to come up with their own targets and timelines. This process can be very lengthy, involved, and requires a lot of building consensus. In the end, *The Sustainability Strategy* was a collaborative, consultative and committee written charter with targets and timelines that held their weight. The commitments made were realistic and individuals within departments had taken responsibility to meet the targets. This process was extremely difficult, with over thirty editions were drafted during the committee writing process, however the final piece has substance, relevance, commitment and accountability.

Learn to let go. Another lesson the Sustainability Office learned during the process of building a sustainability strategy is at one point they had to let go of the control put the power on the individual departments. They fought to maintain some kind of quality control on the criteria in order to make SMART (Specific, Measurable, Action-Oriented, Realistic & Timely) targets however, the departments were not going to let someone else tell them what they HAD to do. The process of getting 'home grown' targets would not have happened with out letting go of some of the control measures. The process can be repeated in a few years to take each department to the next level defined by the grass roots stakeholders once again.

Be creative with your measurements of social sustainability. The measures of social sustainability are always hard to quantify but use valuation techniques in the social sciences to record and measure progress. A survey of courses and research that involves sustainability is one way of

getting a baseline. Furthermore, the university can count the commitment to sustainability by analyzing the number of students that take the sustainability pledge. In terms of procurement, it is not that difficult to measure the 'buying green' preferences when it comes to paper, office equipment and office furniture. The UBC Human Resources policy called *The People Plan*⁴⁰ has multiple ways of measuring employee satisfaction, total remuneration, equity amount other indicators of social development. The number of staff, faculty and students living on campus is another macro measurement of the social side of sustainable communities. On the academic side, one could measure the number of courses that incorporate service learning where students volunteer their time to help others in the community. Volunteerism is another measure of social cohesion and giving.

The lessons from UBC Vancouver's experience over the past decade are vast and UBC Okanagan could look to this wisdom as it creates and develops its own version of a sustainable institutional culture that will act as a role-model for people of the Central Okanagan. The final section of this work will look at specific recommendations to make this transition happen.

Recommendations for Creating a Culture of Sustainability at UBC Okanagan

When considering embracing institutional change there are various first steps, or low hanging fruit, that can be implemented. The following recommendations can be debated for their strategic merits as well as the order of delivery.

Strategic hiring of a full time Sustainability Office representative at UBC Okanagan. In order to get things off the ground in a more systematic and strategic way a staff full time staff member has to be hired at UBC Okanagan. The current budget of a .2 position earmarked in the Vice President, Operations office is insufficient and unsatisfactory. The reporting structure for this position should be combined with the Sustainability Office as to create a bridge for learning and evaluation. The position should be a locally administered position coming from the budget of UBC Okanagan. The opportunity for collaboration between the Sustainability Office and a Sustainability Desk in the Okanagan are plentiful but the position should be locally managed.

Follow up and gap analysis of the Sustainability Survey. The Sustainability Survey was sent out the week of September 10th 2006. Follow up will be easy with the survey monkey software. After a month of follow up a gap analysis should be performed by Dr. Bernie Bauer, Dr. Bob Belton or some senior administrator that can identify the gaps in the data. Further follow up with the missing individuals should be undertaken in the winter of 2006/07.

Complete a Campus Sustainability Audit. If any progress in sustainability is to be observed a campus audit is needed. The Sierra Club and others have spent the last decade refining sustainability audits for campuses across North America. Not having an audit is a weakness of UBC Okanagan. In the not so distant future students may look at sustainability measures as an indicator of institutional commitment to their values and make their school choice accordingly. UBC Vancouver has developed its own audit and this could be easily adapted to UBC Okanagan. This would be beneficial for system wide statistics as well as systems integration. It is recommended that UBC Okanagan follows a similar audit process as UBC Vancouver in order to enable meaningful statistics and comparable benchmarks.

Start a Sustainability Coordinators Program. Using the list of sustainability advocates that identifies staff members at UBC Okanagan that are open to begin the process of saving

resources in their departments, a SC program should be started over the Winter 2006 term. Heather Scholefield holds this list of people eager to become involved.

Expand the SEEDS program on Campus. Using the same list of advocates including staff, faculty and students and under the guidance of Brenda Sawada, the SEEDS program should take hold at UBC Okanagan over the winter 2006/07 term.

Create partnerships with the sustainability initiatives already underway at UBC Okanagan. There are many innovative projects happening or in the planning stages for a Sustainability Coordinator to become involved with. For instance, the Faculty of Education has created a Learning Garden on campus with intention of planting and maintaining a 900 square foot garden. Paul Johnson, Manager of Food Services from Aramark is open to developing an organics composting system in the cafeteria. This project could be a SEEDS project and an Education student could get three credits for their research and development efforts. For an extended list of projects underway or in the works please see Heather Scholefield.

Assist the Dean of Arts and Science in creating the Okanagan Sustainability Institute (OSI). One of the most exciting developments since the transition to UBC Okanagan is the inception of the OSI. The function of the OSI is twofold. Using the convening power of the University the OSI will bring together multiple stakeholders to discuss issues of sustainability in the Okanagan. The second function is to leverage the expertise of the academics of UBC Okanagan towards solving some of the problems regarding sustainability. The Okanagan Valley, now more than ever needs some policy guidance on its development and a rethinking of the pressures and problems facing the quality of life. The Dean is courageously managing the largest faculty of campus at the same time trying to create the OSI.

Conclusion

This SEEDS project has attempted to combine the theoretical and the practical about how communities change their culture towards sustainability. Surveying the literature proved useful to find current theories, such as community based social marketing. Furthermore, a discovery of effective tools and methods of behaviour change was useful. In the second section, a case study of how the Sustainability Office is attempting to create a culture of sustainability at UBC Vancouver was helpful in identifying pitfalls and recognizing successful strategies. The lessons learned from the past decade of work and research will benefit UBC Okanagan, which with this

learning, can leapfrog pitfalls and red herrings. The final portion of this paper gave some pragmatic recommendations for those serious about living up to the vision of the University and the direction set by the academic plan at UBC Okanagan. It goes without saying that UBC Okanagan has been through a challenging ride in its rookie year. The staff and faculty are starting to settle their anxiety and get rooted in the new system. If any people know about change it is the long time staff and faculty at UBC Okanagan. However, this is not a time to become complacent and change resistant, instead it is a golden opportunity to realize the vision of Trek 2010 and create a campus that cultivates the values of a civil and sustainable society.

REFERENCES

¹ <http://www.okotoks.ca/sustainable/thestoryof.asp>

² <http://www.sustain.ubc.ca/seeds.html>

SEEDS or Social, Ecological, Economic and Developmental Studies is an academic program that brings together students, faculty, and staff in projects that address sustainability issues. To date SEEDS has saved the university hundreds of thousands of dollars and attracted more than 1,000 participants.

³ <http://www.sustain.ubc.ca/index.html>

⁴ http://en.wikipedia.org/wiki/Social_capital

⁵ http://en.wikipedia.org/wiki/Culture#_note-1

⁶ Jary, D. and J. Jary. 1991. *The Harper Collins Dictionary of Sociology*, p. 101.

⁷ <http://en.wikipedia.org/wiki/Sustainability>

⁸ <http://www.cbsm.com/Chapters/introduction.lasso>

⁹ Jordan, J. R., Hungerford, H. R., & Tomera, A. N. (1986). Effects of two residential environmental workshops on high school students. *Journal of Environmental Education*, 18, 15-22.

¹⁰ Geller, E. S., Erickson, J. B., & Buttram, B. A. (1983). Attempts to promote residential water conservation with educational, behavioral and engineering strategies. *Population and Environment*, 6, 96-112.

¹¹ Tedeschi, R. G., Cann, A., & Siegfried, W. D. (1982). Participation in voluntary auto emissions inspection. *Journal of Social Psychology*, 117, 309-310.

¹² Bickman, L. (1972). Environmental attitudes and actions. *Journal of Social Psychology*, 87, 323-324.

¹³ Finger, M. (1994). From knowledge to action? Exploring the relationships between environmental experiences, learning, and behavior. *Journal of Social Issues*, 50, 141-160.

¹⁴ Archer, D., Pettigrew, T., Costanzo, M., Iritani, B., Walker, I. & White, L. (1987). Energy conservation and public policy: The mediation of individual behavior. *Energy Efficiency: Perspectives on Individual Behavior*, 69-92.

¹⁵ De Young, R. (1989). Exploring the difference between recyclers and non-recyclers: The role of information. *Journal of Environmental Systems*, 18, 341-351.

¹⁶ <http://www.cbsm.com/Chapters/introduction.lasso>

¹⁷ <http://www.cbsm.com/Chapters/introduction.lasso>

¹⁸ Costanzo, M., Archer, D., Aronson, E., & Pettigrew, T. (1986). Energy conservation behavior:

The difficult path from information to action. *American Psychologist*, 41, 521-528.

¹⁹ McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society.

²⁰ McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society.

²¹ <http://www.okotoks.ca/sustainable/thestoryof.asp>

²² <http://www.okotoks.ca/sustainable/thestoryof.asp>

²³ <http://www.okotoks.ca/sustainable/thestoryof.asp>

²⁴ <http://www.okotoks.ca/sustainable/thestoryof.asp>

²⁵ <http://www.okotoks.ca/sustainable/thestoryof.asp>

²⁶ Pliner, P., Hart, H., Kohl, J., & Saari, D. (1974). Compliance without pressure: Some further data on the foot-in-the-door technique. *Journal of Experimental Social Psychology*, 10, 17-22

²⁷ Austin, J., Hatfield, D. B., Grindle, A. C. & Bailey, J. S. (1993). Increasing recycling in office environments: The effects of specific, informative cues. *Journal of Applied Behavior Analysis*, 26, 247-253.

²⁸ <http://www.cbsm.com/Chapters/communication.lasso>

²⁹ Gardner, G. T. & Stern, P.C. (1996). *Environmental problems and human behavior*. Boston: Allyn and Bacon.

³⁰ http://www.sustain.ubc.ca/pdfs/ar/2006sust_ar.pdf (page 1)

³¹ http://www.sustain.ubc.ca/pdfs/ar/2006sust_ar.pdf (page 4)

³² <http://www.sustain.ubc.ca/about.html>

³³ <http://www.sustain.ubc.ca/about.html>

³⁴ <http://www.sustain.ubc.ca/about.html>

³⁵ <http://www.trek2000.ubc.ca/index.html>

³⁶ Ambramson, Ruth (2005) Targeting Marketing Sustainability at UBC Greening the Campus Conference Presentation, Ball State University, Muncie, Indiana

³⁷ http://www.sustain.ubc.ca/pdfs/ia/51059_iatarg_april3_rv2.pdf

³⁸ <http://www.trek2000.ubc.ca/index.html>

³⁹ <http://www.peopleplan.ubc.ca/>

Appendix A – The process of community-based social marketing. *

Identifying Barriers: If any form of sustainable behavior is to be widely adopted by the public, barriers to engaging in the activity must first be identified. Community-based social marketers begin, then, by identifying these barriers. They do so using a combination of literature reviews, focus groups, and survey research. The barriers they identify may be internal to the individual, such as lack of knowledge regarding how to carry out an activity (e.g., composting), or external, as in structural changes that need to be made in order for the behavior to be more convenient (e.g., providing curbside organic collection).¹ Community-based social marketers recognize that there may be multiple internal and external barriers to widespread public participation in any form of sustainable behavior and that these barriers will vary for different individuals. For example, personal safety is more likely to be a concern to women as they consider using mass transit than it is for men. In contrast to the two perspectives just discussed, community-based social marketers attempt to remove as many of these barriers as possible. Practitioners of community-based social marketing further appreciate that a different constellation of barriers will exist for different activities (e.g., recycling, composting, alternative transportation). Social science research indicates that the barriers that prevent individuals from engaging in one form of sustainable behavior, such as adding insulation to an attic, often have little in common with the barriers that keep individuals from engaging in other forms of sustainable behavior, such as recycling.² Further, this research demonstrates that even within a class of sustainable activities, such as waste reduction, very different barriers emerge as being important.³ That is, different barriers exist for recycling, composting, or source reduction. Since the barriers that prevent individuals from engaging in sustainable behavior are activity specific, community-based social marketers begin to develop a strategy only after they have identified a particular activity's barriers. Once these barriers have been identified, they develop a social marketing strategy to remove them.

Behavior Change Tools: Social science research has identified a variety of "tools" that are effective in changing behavior. These tools include such approaches as gaining a commitment from an individual that they will try a new activity, such as taking household hazardous waste to a collection depot, or developing community norms that encourage people to behave more sustainably. The techniques that are used by community-based social marketers are carried out at the community level and frequently involve direct personal contact. Personal contact is emphasized because social science research indicates that we are most likely to change our behavior in response to direct appeals from others.

Piloting: Prior to implementing a community-based social marketing strategy it is piloted in a small portion of a community. Given the high cost of implementing many programs, it is essential to know that a strategy will work before it is implemented on a large scale. Conducting a pilot allows a program to be refined until it is effective. Further, a pilot allows alternative methods for carrying out a project to be tested against one another and the most cost-effective method to be determined. Finally, conducting a pilot can be a crucial step in demonstrating to funders the worthiness of implementing a program on a broad scale.

Evaluation: The final step of community-based social marketing involves ongoing evaluation of a program once it has been implemented in a community. In conducting an evaluation, community-based social marketers emphasize the direct measurement of behavior change over less direct measures such as self reports or increases in awareness. The information gleaned from evaluation can be used to further refine the marketing strategy as well as provide evidence that a project should receive further funding.

References

* McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society

¹ Stern, P.C., & Oskamp, S. (1987). Managing scarce environmental resources. In D. Stokols, & I. Altman (Eds.), *Handbook of environmental psychology* (pp. 1043-1088). New York: Wiley.

² McKenzie-Mohr, D., Nemiroff, L. S., Beers, L., & Desmarais, S. (1995). Determinants of responsible environmental behavior. *Journal of Social Issues*, 51, 139-156.

³ Oskamp, S., Harrington, M.J., Edwards, T.C., Sherwood, D.L., Okuda, S.M., & Swanson, D.C. (1991). Factors influencing household recycling behavior. *Environment and Behavior*, 23, 494-519; and Tracy, A.P., & Oskamp, S. (1983-84). Relationships among ecologically responsible behaviors. *Journal of Environmental Systems*, 13, 115-126.

Appendix B: The Okotoks Sustainability Model

Sustainable Okotoks

*"My little talk from the "throne" is unconventional - but it's a reminder that creatin' change does not wear the right clothes nor seek "business as usual" - it comes from a place of risk, a daring to challenge the status quo, a fearlessness of jumping off a cliff into the unknown to discover a new reality, with honesty, curiosity, and inclusiveness the only guide for the way forward. Well - wearin' Kevlar underwear don't hurt either."*²¹

Sally Bates, Cowboy Poet

The little country town of Okotoks Alberta serves as an illustration of a community that recognized they had a choice in the future of their space and then built processes of collaboration, active citizenship and consensus to change the direction of their community's culture. With the threat of becoming a sprawling bedroom town of Calgary and growing past the ecological limits of the Sheep River watershed the community broke free from conventional processes to determine a culture that is authentic and home grown. Okotoks serves as a beacon of hope for other communities that are struggling with change or lack of change in the status quo. When we look at the theoretical underpinnings of change in Okotoks we see a very pragmatic approach with much effort going into a public process of consultation including surveys, town halls, feedback from multiple stakeholders and policy debates. The foundational principles of environmental stewardship, social conscience, economic prosperity and financial responsibility were drafted from months of consultation and written into policies that citizens could buy into. The learning from this consultation process was immense including the fact that consensus built momentum and learning by action keeps the momentum alive. *"A community is only as big as the dream it dares to live. Success is not in the end but in the journey. We don't have all the answers - just some guideposts to follow as we learn lessons from doin'."*²² Sally Bates

The other key learning from the Okotoks model is change happens only when people want it to. Sally Bates writes, "Sustainable Okotoks is built of people, by people, and for people - who expressed desires simply... a small town atmosphere - a safe place, with a pristine river valley, quality education, with good reliable water, a place of modest size."²³ Change happens when

people get involved, committed and can see their efforts paying off. The challenge of working with people to change their behaviours is that many come from various cultures, backgrounds and perspectives. The people of Okotoks found wisdom in looking at the watershed and hydrology cycle to inspire their change. *“Water reminds us there's no boundaries from space...between places and people. Our differences lie in cultural context. The way we do things, the way we think about the future. But be always mindful of our global connectivity. When we don't see the connections between things - the threads in the fabric, it is a failure of imagination that fails our humanity.”*²⁴ Finally, with the process of change a decade along the curve Sally Bates has become aware of the following lessons:

“Life is simpler when you plow around the stump.

Avoid the special interests. Pursue the common interest.

Every path has a few puddles. Don't be afraid to walk through 'em

If you get to thinkin' you're a person of some influence, try orderin' somebody else's dog around.

*Build consensus to achieve momentum.”*²⁵

This wisdom has specific meaning to the Okotoks case but can also be applied to other communities who are struggling with culture change towards sustainability. Okotoks serves as a model for a courageous community that has defined its culture, values, and norms and committed to becoming a place that lives more sustainably. There are certain tools and methods that have been proven to be effective in changing culture.



FOUNDATIONS

ENVIRONMENTAL STEWARDSHIP

"Leave the world equal or better than you found it, try not to harm life or the environment, take no more than you need, and make amends if you do take more than you need."

SOCIAL CONSCIENCE

Range of housing stock for full demographic (w/ "commuter" demographics), full spectrum of education and employment opportunities.

ECONOMIC PROSPERITY

An economic vision and larger business community provides local employment, with associated positive environment, social, and fiscal impact.

FISCAL RESPONSIBILITY

Affordable infrastructure, balanced (commercial/residential) assessment base.

Source: <http://www.okotoks.ca/images/sustainable/sustcircle.jpg>

Appendix C - Target Marketing Sustainability at UBC*

Exposing the Story

The day I arrived at UBC's Sustainability Office my first reaction was to Get the Heck Outta There. FAST. I was to be their first communications manager ever. And since 1998 (when the office first opened) the staff, so it seemed, had been waiting to tell somebody—anybody—a TONNE of incredibly important things. Immediately. As a serious introvert, I was rather overwhelmed by their passion, excitement, and sense of urgency.

My new boss—architect Freda Pagani wanted to go first. She spoke rapidly as she described this thing on campus called a “green building.” The Choi, she announced, had high performance glazing, trickle vents, and no VOCs. As a long time “artsy” I already spoke several languages. But not this one. I had no idea what language my new boss was speaking. So I began to get sweaty. Then I heard her say the words “fly ash.” I was so relieved. I finally understood that she must be talking about a new kind of locally grown marijuana. Then I started to worry again because, was this normal?

Next, our energy manager—an engineer—spoke of new HVACs, T12s, and T8s. Clearly, he was talking about a miracle West Coast greens and vitamins beverage. Our program manager wanted her turn too. She waved her arms around as she told me about UBC's Social, Ecological, Economic Development Studies. I immediately felt exhausted and decided this was one of those highly academic courses that I was NOT about to take.

I wondered how I ended up surrounded by these hyper energetic people who spoke in such strange tongues—and possibly partook of the West Coast lifestyle a little too much. I worried about working with them because the only thing I could understand was their daily lunchtime chit chat—and even that was hyper. (It always consisted of an incredibly heated debate over farmed versus wild salmon.) I believed deeply in sustainability. But still, I was concerned about landing the wrong job.

As a former journalist, I'd had lots of experience with “normal” people. Obviously, the Sustainability Office staff weren't that. I also knew behind passionate strangeness, always a good story lurks. So I set out to decipher the cryptic acronyms, academic lingo, and technical jargon. To see things their way, I would even sample their vitamin drink and “fly ash”. I vowed not to give up until I exposed the UBC Sustainability Office Story.

First, I interrogated each of my new colleagues and asked for grade-five level answers to my questions. Yes, they thought I was incredibly stupid. Next, I researched what other campuses were doing in the field. It didn't take long to expose the truth—that UBC was Canada's leader in campus sustainability.

And thankfully, I had misunderstood a few things earlier. This so-called “fly-ash” was actually a sustainable form of concrete used in buildings. The Social Ecological, Economic Development Studies was actually Western Canada's first program to bring students, staff and faculty together to work on sustainability problems on campus.

The high performance glazing, trickle vents, and no VOCs were features in a building that had set new sustainability benchmarks for the world and won a slew of awards. The T8s, T12s and HVACs were part of an energy infrastructure upgrade that would save UBC \$2.5 million annually in energy costs. It would also make the university achieve it's Kyoto Protocol targets ahead of time by reducing CO₂ emissions by 15,000 metric tonnes per year, reduce energy use by 20 percent and water use by 30 percent.

There were other accomplishments too—ranging from innovative behaviour change initiatives for staff and faculty to alternative transportation programs. Now my reaction was Let's Get This Story Out—and FAST. So we branded UBC as Canada's leader in campus sustainability. Next, we started telling the rest of the campus—and the world—about what UBC was doing.

That, it turns out, was the easy part. We started getting more and more attention, both off and on campus. The hard part was dealing with the vehemence of the naysayers. You'd imagine the types: professors, who are experts in critiquing, rebellious students, even disgruntled staff. But no. Those people all seemed quite inspired to do even more sustainability initiatives when they heard that we were Canada's leader in campus sustainability. That was good, because that was the plan.

The vehement naysayers turned out to be none other than my now friends and colleagues at the Sustainability Office. “We can’t call ourselves leaders,” asserted my boss, “until every student here understands complex adaptive systems theory.” The energy manager said: “The T12s in the ancillaries haven’t even been replaced yet.” The program manager added, “Yah, and what’s even worse is that we haven’t finished our sustainable food system principles.”

So not only were they perfectionists, they were also like most in the sustainability movement—extremely modest. It actually took three more years for the vehement naysayers to accept that, despite all the things we still needed to do, UBC was indeed Canada’s leader.

Finding the target market

UBC has a population of about 50,000 students, faculty and staff. Of course, targeting each of those people would be a nightmare. This is where a couple of theories have been handy. Paul H. Ray and Sherry Ruth Anderson’s theory of the cultural creatives states that there are three main tribes in America. (I’m assuming the same exist in Canada too, though I don’t know about distribution).

The first group are the “Moderns”. They constitute 48 percent of the population—about 93 million Americans. Moderns believe in making and having lots of money, looking good and being stylish, shopping, economic and technological progress. They reject the values of native people, rural people, traditionalists, new agers, and mystics. Moderns dominate and are reflected everywhere in mainstream culture.

Next, the “Traditionalists” constitute 24.5 percent—about 48 million Americans. Generally, they believe in patriarchy and that feminism is a swearword. They tend to hold conservative religious views, are often pro-environment and anti big business. They believe that small town life is more virtuous than the city, and that one should have the freedom to bear arms.

The last group are 26 percent of the population or 50 million Americans. They are the “Cultural Creatives.” These people are into personal authenticity, idealism, activism, the big picture, interconnections, ecology, women’s issues, and social conscience. They reject materialism, inequalities of race and class. They are critical of almost every big institution in modern society, including corporations and government. They want things to change. Cultural Creatives form a coherent subculture, except for the fact that they have no collective sense of identity. Still, they read the same books, share the same values, and come to similar conclusions. Despite that, they feel alone because what they believe is not generally reflected in the larger culture.

Our priority target market became UBC’s cultural creatives. By uniting them we would strengthen their potential to serve as early adopters and to set new social norms for the campus to follow. One of the ways we’ve been uniting them is through our Sustainability Coordinator program. It has 150 staff and faculty volunteers. These people inspire sustainable choices in their departments. They focus on helping their colleagues reduce energy and consumption, plus encourage them to use alternative transportation.

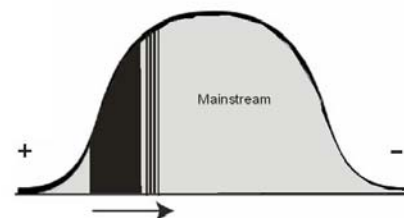
We originally designed this program to promote environmental conservation. But it has yielded some unexpected benefits. We’re saving \$75,000 yearly getting the sustainability coordinators to get their colleagues to turn off lights and computers when not in use. On a social level the coordinators report that they love having the chance to put their sustainability values into practice at work and to meet other like-minded people.

The so-called Bell Curve of Advocacy has also been useful for deciphering target markets.

To the far left are the core—those people in society who are active in sustainability. They are members of sustainability and affiliated groups and/or loyal donors. They support special events and take political and personal action.

On the far right are the naysayers—those who will never support the idea of sustainability no matter what we try. These people may also be saboteurs. Unless we’re doing some kind of damage control, we don’t target these people.

Somewhere in the middle lies the percentage of the mainstream population who care about sustainability. They may be more prone to paying particular attention to issues in their own backyards, or when something interferes



with their lives. They consider themselves too busy and/or preoccupied with other things to take action. Some of them can be easily moved to action when an issue impacts them directly or attracts their attention.

Reaching the mainstream doesn't mean reaching and engaging all of those people. It means reaching those that are already closest to the far left side of the bell. It means consistently broadening that core. Theoretically then, we're moving more and more people from the centre of the bell to the left. As more and more people move left, the more the social norm changes, and the more people keep moving to the left.

The strategy seems to be working. Over the past two years, we've noticed a huge snowball effect as sustainability becomes more and more deeply engrained in the UBC culture. Just about every day, we see new initiatives all over the campus that have nothing to do with our office. Recently, for instance, our HR department put its annual training catalogue online rather than printing out a multi-paged document and sending it to staff. They sent out this card saying they did it in the spirit of sustainability. We no longer have to nag our planners about building green buildings. They just build them automatically now. We no longer have to ask utilities to fix leaks. They just do that automatically. Student groups and faculty are taking on their own projects.

Even our president and senior administration are now keen. We used to wonder how to get them on board. But last year, they undertook a strategic visioning process for the community. The result is a document that sets out goals and objectives for the university. The pillars of sustainability and global citizenship underpin the whole thing.

Appealing to the Moderns and Traditionals

Still, there are challenges. One of our biggest is convincing people that sustainability doesn't mean going back to the dark ages. It doesn't mean taking cold showers, producing no waste, or being a hippie. To appeal to the more modern and traditional types, we use a strategy of highlighting economic sustainability achievements first, then noting the ecological and social benefits. When it comes to green buildings, for instance, we show how they are being built for the same budget as regular buildings and that they reduce ongoing maintenance costs due to less mechanical systems and energy use. We then throw in the fact that people find them more comfortable and quiet, and how the building's footprint on the ecosystem is friendlier than regular buildings.

We also began congratulating the community on what it's doing well. So we don't tell people that doomsday is on the horizon and they'd better do way more, and really fast, or else the world will end. (Though we did do some of that to no avail in the olden days.)

With the positive reinforcement approach, in 2004 we created a catalogue. It covers more than 100 sustainability initiatives taking place in all faculties and departments. It was the first step towards a comprehensive sustainable development strategy. *Inspirations and Aspirations: The Campus Strategy* is a draft five-year plan that outlines UBC's goals, objectives, and action plans for improving the institution's economic, social, and ecological performance.

In preparing *Inspirations and Aspirations: The Campus Strategy*, we held a stakeholder consultation process with 20 departments, all of UBC's faculties, and all major student organizations. Together, these groups developed a framework and identified seven major goals for sustainability at UBC: Improve human health and safety; make UBC a model sustainable community; expand community connections; reduce pollution; conserve resources; protect biodiversity; and ensure economic viability.

These groups then identified objectives and set specific targets. The result is that every target listed in *Inspirations and Aspirations: The Campus Strategy* has at least one UBC department, faculty, or organization that has assumed responsibility for achieving it. And once the document is finalized, the campus community as a whole will be completely dedicated to achieving these goals.

Inspirations and Aspirations became a great way to unite the cultural creatives, moderns, and traditionals at the senior administration levels. They are now committed to working towards the common goal of sustainability. The next step is to get a broader commitment from the rest of the university community.

Targeting Students

The whole goal in creating a culture of sustainability at UBC is to give students not only an understanding, but also the means to lead the way to change. So our most recent initiative was to find out how we were doing on that front. Over the spring of 2005 we held focus groups and surveyed 450 undergraduates.

The focus groups revealed an interesting trend. First years reported that they often act in a sustainable manner out of habit. They compost, turn off lights and computers, use the bus, and reduce paper use without even thinking about it—much in the same way that they would brush their teeth. They seemed keen and committed to the idea of sustainability and were eager to do as much as they could on a personal level.

The fourth year students, however, seemed to suffer from analysis paralysis. One student reported he couldn't drink fair trade coffee because, although the theory behind it sounded good, he wasn't sure how it would effect a country's economy as a whole. Others said they'd studied sustainability in a variety of disciplines such as fisheries management, economics, and geography. They had a high level understanding of the concept, yet these same students were perplexed as to how they might translate the notion into everyday personal actions.

The graduate student group was predominantly critical of the word and suspicious of the institution's use of it. They believed the university should not be telling students to think about sustainability or how to behave in sustainable ways.

My conclusion was that as students climb the academic ladder, the less they seem able or even open to changing their behaviours. Unfortunately, we didn't test that in the survey. Still, it made me conclude that marketing efforts would probably be most effective on the first year students.

From the survey that followed, we discovered that 92 percent of UBC students have an awareness of the sustainability concept. The greatest number associated sustainability with the environment or earth (29 percent). The next highest categories were materials and consumption reduction (24 percent). Finally, energy, water, transportation, plus the Reduce, Reuse, Recycle mantra constituted 24 percent. Interestingly, 74 percent of students indicated they believed UBC students were concerned about sustainability.

So, while they aren't yet able to explain complex adaptive systems theory, the idea of sustainability is at least important to most UBC undergraduates. This means that many are open to learning more and doing more. That, along with other information gleaned from our survey, is being translated into a variety of programs for students including: a huge joint recruitment campaign for incoming first year students; a residence student awareness-raising initiative; a mentorship service and a broader general awareness-raising campaign.

Inspiring Change

There's one surprise outcome in UBC's journey towards sustainability that has overwhelmingly benefited all groups on campus from the students to staff and faculty; cultural creatives to moderns and traditionalists; mainstream to the core dedicated group. That outcome is the fact that our programs are nurturing the most important yet basic thing in the world: happiness. Many UBC community members (myself included) report moving from feeling depressed about environmental degradation and social injustice around the world, to feeling hopeful because we now see how things can be done differently.

According to positive psychology guru Martin Seligman, three keys to improving happiness include: growing optimism about the future; increasing the use of personal virtues and strengths; and finding meaning. When it comes to the latter: "A meaningful life is one that joins with something larger than we are—and the larger that something is, the more meaning our lives have," says Seligman.

At UBC, we feel optimistic because whether we're students, faculty, or staff, we're working towards something hugely meaningful—the sustainability of the campus and planet. We can also feel authentic because we're finding ways to do this by using our personal virtues and strengths in our work. Finally, our successes are allowing us to feel optimistic about our future.

This explains why my Sustainability Office colleagues seemed so oddly passionate and excited a few years back. It also explains the scores of people on campus who now seem just as hyper and strange as they did. And finally, it explains how I too became just as strange as the rest of them.

* Abramson, Ruth (2005) *Targeting Marketing Sustainability at UBC* Greening the Campus Conference Presentation, Ball State University, Muncie, Indiana