



# UBC Sustainability Education Intensive 2009 Final Report

Sunday, October 11, 2009

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SUSTAINABILITY



## **Overview**

A total of 23 post-secondary educators completed the first ever Sustainability Education Intensive (SEI) this past summer (2009). Offered by the Centre for Teaching and Academic Growth (TAG) and the Sustainability Office (SO), this 2.5 day Intensive was held May 31-June 2, with the first day taking place at UBC Farm. Through participatory and reflective activities, participants developed plans to introduce or enhance aspects of sustainability in their courses, programs or initiatives. From June through November, 2009, they were provided financial and pedagogical support to bring their plans to fruition.

The initial idea for the SEI started after Alice Cassidy and Yona Sipos, TAG, as well as Kristin Orians, Environmental Sciences Program, were invited and hosted by the SO to attend the AASHE (Association for the Advancement of Sustainability in Higher Education) Leadership Workshop, "*Sustainability Across the Curriculum*," hosted by Emory University in Atlanta, Georgia in January, 2007. The workshop introduced participants to the very successful Ponderosa and Piedmont Projects that have helped over 200 faculty in the US adapt their courses and academic programs to include a sustainability focus.

Upon our return, and with the generous offer of \$25,000 from the SO, we designed the UBC program to mirror a unique aspect of our institution, that people in a variety of roles are active leaders in sustainability education. Hence, we welcomed faculty, staff, post-doctoral fellows, graduate students and undergraduates to take part. The Intensive was designed and facilitated by Alice Cassidy, Associate Director; Yona Sipos, Graduate Student Assistant, and Sarah Nyrose, Undergraduate Student, and informed by an advisory group comprised of people in all of these roles.

Participants' final work will be showcased on January 11, 2010.

## **Before**

### **Brainstorming, input, feedback: Help from our colleagues to take the SEI from idea to reality**

Soon after returning from the January 2007 AASHE workshop, Yona and Alice began thinking about how we could adapt it to be a unique and relevant UBC short course. After securing funds, we immediately hired Sarah Nyrose to help plan and implement the SEI. (For a detailed budget breakdown, see Appendix I.) The first step taken was to design a secret handshake (see Appendix II). We are grateful for the involvement of Lorna Seppala, Director of Social Sustainability, Sustainability Office, for ongoing input.

We had many informal conversations with colleagues from the SO, and spoke with members across various Faculties and units as part of our ongoing TAG Sustainability Across the Curriculum Community of Practice events, first developed with a 2006 Teaching and Learning Enhancement Fund project. A networking lunch on October 23, 2008 was the first opportunity to share input and suggestions on our first draft of the SEI. As we wished to have involvement at all levels and to include every Faculty, Associate Deans and Directors were invited to attend or send representatives. In total, colleagues from 23 units took part, including faculty, staff and students and representatives from the UBC Senate and the President's Advisory Committee.

In late 2008, we formed an Advisory Group, comprised of faculty, staff, post-doctoral fellows, undergraduate and graduate students and a community member to help us in finalizing materials the SEI. Material was sent in advance by email, with some input collected electronically. Face-to-face meetings took place on January 22 and May 22, 2009.

At the January meeting, we sought input, feedback, suggestions and questions on our draft material for the

short course, including advertising, learning objectives, application form and promotions plan. At the April meeting, we sought input on our draft lesson plan overview for the short course, including activities and associated resources.

We are grateful to members of the Advisory Group for their valuable role in honing the SEI, and for their assistance in promoting it at UBC and beyond.

Jean Marcus, President's Advisory Council/Committee  
Rob Van Wynsberghe, Assistant Professor, Human Kinetics, Faculty of Education  
Kristin Orians, Associate Professor, Earth and Ocean Sciences  
Susan Nesbit, Senior Instructor, Civil Engineering, Applied Science  
Rosie Pidcock, Undergraduate student  
Nora Timmerman, Ph.D.candidate, Faculty of Education  
Ray Tsu, Post-doctoral fellow, Creative Writing, Faculty of Arts  
Tirtha Dhar, Assistant Professor, Marketing Division, Sauder School of Business  
John McDonald, Community member (BCIT)

### **Advertising and Application**

Our primary goal for advertising was to reach a diverse audience of post-secondary educators that varied in both disciplines and teaching/leadership positions. Faculty, post-doctoral fellows, staff, graduate students and undergraduate students were all encouraged to apply, provided they had an interest in creating a Sustainability Education Plan (SEP) for their course, program or initiative. In attempting to model sustainability throughout the planning for the SEI, a key concern for advertising was to limit the amount of paper used. As a result, we chose to create bookmarks, which provided succinct information about the SEI (including a website address for more detail), and which were easily distributed. We sent bookmarks, accompanied by a more detailed letter, to a majority of department heads both on the UBC Point Grey and Okanagan campuses. In attempt to not only target faculty and post-docs, we also distributed information using a variety of list-serves, including those of undergraduate groups, such as the Student Environment Centre. To reach the broader post-secondary community throughout B.C., we advertised the SEI on [walkingthetalk.bc.ca](http://walkingthetalk.bc.ca) (British Columbia Working Group and Network on Sustainability Education). Future recommendations for advertising would be to utilize a variety of different mediums (*i.e.* list-serves, newspapers, announcements) that would target a more diversified audience both at UBC and in the greater community.

The application form for the SEI included two parts: the first, information on the applicant's background, field/unit, and their involvement in teaching and/or leadership activities. The second part of the form required the applicant to describe an idea for a Sustainability Education Plan (SEP), designed to affect change in their course, program or initiative. This question was asked prior to the Intensive to ensure that all participants were fully committed to developing a SEP, and were prepared with an outline. The application forms could be downloaded off the TAG website, and were submitted electronically.

A total of 28 participants applied for the SEI and four individuals expressed interest after the closing date. A complete summary of the participants, department/unit and interests is included in Appendix III. We were extremely pleased with the response, both in applications and nominations. Although we originally intended to only accept 20 participants, we extended the number to 26, due to the calibre of applications. In the end, we had 23 participants (2 of whom worked as a team), including 7 faculty, 3 staff, 10 graduate students and 4 undergraduate students, representing a variety of backgrounds and experiences.

## **Research project**

We are also undertaking a research project entitled: “Investigating the SEI: Supporting Post-Secondary Educators to Teach for Sustainability.” This research aims to investigate how educators can be supported through the process of integrating or enhancing sustainability in their course, program or initiative. The project was approved by the UBC Behavioural Research Ethics Review Board (BREB) and all participants of the SEI were invited to be involved in the research. An action research approach was chosen, particularly as the SEI planning team also comprised the facilitators and researchers. Through this project, the participants’ input and feedback throughout the SEI and follow-up events will help to provide insight into best practices for the longer term. We plan to present these findings in peer-reviewed publications and conferences.

## **During:**

### **Learning Goals and Objectives**

*In accordance with TREK 2010, this SEI will further assist members of the UBC teaching community “to prepare students to become exceptional global citizens [and] promote the values of a civil and sustainable society.”*

#### **Learning Goals**

##### ***The Intensive will:***

- Foster sustainability leaders within and beyond our own institution
- Strengthen the interdisciplinary network of sustainability educators and leaders at UBC and contribute to the development of a university-wide sustainability learning community
- Develop relationships that enable the integration of sustainability across the curriculum
- Provide participants with the resources and support to implement a project of their choice that is designed to affect change in their course/program
- Create opportunities, incentives and support for integrating sustainability into courses and programs at UBC

#### **Learning Objectives**

##### ***By the end of the Intensive, you will be able to:***

- Describe several sustainability education initiatives at UBC
- Choose from the initiatives at UBC that are directly relevant to your course/program and identify how they may be incorporated
- Identify a sustainability education project of your choosing that is designed to affect change in their course/program
- Create an action plan of implementation to meet your goals for your project

##### ***After the Intensive you will be able to:***

- Apply sustainability into the discipline you teach and how you can further contribute to sustainability education at UBC

### **Lesson Plan and Logistics**

Using the Learning Objectives and Goals as the foundation for the development of the SEI lesson plan, we aimed to design an Intensive that modeled sustainability in all dimensions. The setting, as well as the activities, teaching techniques and use of materials were a crucial aspect in the overall planning. As shown in the lesson plan (Appendix IV), the SEI began at the UBC Farm, allowing participants to engage in a setting that is at the heart of sustainability at UBC. The following two days were held in the TAG space within the Irving K. Barber Learning Centre. We held a field trip around the UBC-Vancouver campus, highlighting its possibilities as a living laboratory .

The SEI included a variety of different sessions that incorporated interactive, collaborative and creative learning. Participants were encouraged and supported throughout the 2.5 days to engage with the group, reflect and develop their personal sustainability education plan. To close the SEI, participants showcased their draft Sustainability Education Plans, which highlighted the progress participants had made and the diversity of ways in which these educators were going to implement or enrich sustainability in their course, program or initiative.

The handouts used for the SEI are listed in Appendix V. As previously mentioned, to model sustainability, we limited the number of hardcopy handouts to minimize our overall consumption and the waste produced. Further, we ordered vegetarian and local food from AMS Catering, provided dishware, and full recycling and composting facilities.

### **Formative Feedback**

We collected and responded to formative feedback throughout the SEI, to address participants' short-term suggestions. In general, the feedback throughout the SEI was very positive. Refer to Appendix VI.

### **After:**

### **Summative Feedback**

We also collected summative feedback at the end of the SEI, as well as during the support studios, to capture longer-term feedback from the participants. As with the formative feedback, we were very encouraged by the overall positive summative feedback we received. Refer to Appendix VI.

### **Professional Development Funds**

When people applied to the SEI, we explained the professional development process. What follows is the overview we gave to participants:

UBC participants may use the funds towards attending training or a conference, purchasing materials, hiring a student, or another use that has been pre-authorized by the SEI facilitators (Sarah, Yona and Alice), in order to meet the goals of your Sustainability Education Plan (SEP). If in doubt, ask us before you spend, to ensure that you can be reimbursed. You must spend the money by November 30, 2009 and return any unused portion by that date.

As the 2.5 day SEI came to a close, we gave participants logistical details of how they could obtain their \$500 professional development funding as well as how to document it along with their final SEP project:

By November 30, email Sarah Nyrose ([sarah.nyrose@ubc.ca](mailto:sarah.nyrose@ubc.ca)) a succinct summary of:

1) How the money helped to meet the outcomes of my Sustainability Education Plan (e.g. in 3 bullet points or sentences); and

2) An itemized list of how the money was spent

As we also invite you to showcase your successes at an early January 2010 event, and wish to include them as web resources for others to learn from, we also ask that you email us a brief (1 page) overview of your project (based on Page 1 of your SEP). If you have any related web resources, please add these to your overview.

### **Support Studios**

Two support studios were held following the SEI to provide further support and networking opportunities for the participants, as they continued work on their SEP. The studios were two hours in length, held at TAG and were optional sessions. Each studio included brief updates from each participant, as well as time



for group discussion and paired or individual work. The contributions, requests for assistance and discussion ranged from sharing a detailed mind map of all the planning and actions on a SEP to date, to 'thinking out loud' about how best to design an exercise, to setting up meetings for the fall to explore next steps with an initiative. On June 15<sup>th</sup>, there were three participants, and on August 11<sup>th</sup>, there were five.

### **Sustaining the Success of the SEI**

We are employing various strategies to maintain the momentum created by the SEI. In addition to growing our Sustainability Across the Curriculum Community of Practice and hosting follow-up events, we are utilizing various technologies to continue supporting participants and sharing the success of the SEI.

#### ***Blog***

The SEI Blog (<http://blogs.ubc.ca/tagsustainability/>) was created to provide participants a central hub for locating resources, obtaining information about the SEI and events offered through TAG. Participants can access resources through the TAG sustainability Refworks, which hosts a variety of resources (*i.e.* journal articles, books, podcasts, websites, *etc.*) centered around Sustainability Education.

#### ***Video***

Sean Devlin from goBEYOND, a youth-led project which works to educate, inspire, engage and support climate action at BC's colleges and universities, generously volunteered to create a video to document the SEI, as well as a related program at BCIT, the Pacific Spirit Project. The goal in producing the video was to share the experiences and lessons learned at UBC and BCIT with other post-secondary institutions within BC. Two of the SEI participants are taking steps to develop a related program at the provincial level. See the video here: <http://www.youtube.com/watch?v=h1y9nhuhLTU>.

#### ***Gaining Ground Conference***

Yona Sipos is co-presenting with John McDonald, BCIT, the experiences of the two programs (SEI and Pacific Spirit Project) at the Gaining Ground Resilient Cities conference in late October, 2009, in the program, Transformative Learning: Building Resilient Communities through Sustainability Education. Their presentation is entitled, "Building Institutional Capacity for Sustainability Education."

#### ***January 11, 2010 follow-up event***

TAG is hosting an SEI Project Showcase Event on January 11, 2010 (9am-4pm), to highlight participants' sustainability education projects. All are welcome to join us in this celebration to hear and see their successes, find out how you can get involved and meet like-minded educators and special guests who are contributing to the move to sustainability in teaching and learning. Registration will be available through the TAG website. For this, and other Sustainability Education events, please check: <http://www.tag.ubc.ca/programs/SustainabilityEI.php>

### ***Conclusion***

We intend to offer the SEI again in 2010. We are exploring funding opportunities, and are open to suggestions and offers. The first SEI was truly a team effort and we thank all those who collaborated and contributed to make this program a success.

## Appendixes

### I. Budget

Budget description	Estimate	Actual
Undergraduate student to help plan the workshop (including research and logistics), compile handouts, record and summarize minutes, prepare a report of how to integrate recommendations into final workshop, and other follow-up/ reporting-back activities	\$6115.20	<b>\$6115.20</b>
Graduate Student to coordinate planning the workshop	\$4158	\$4158 (+ in-kind \$1120) = <b>\$5278</b>
Associate Director, TAG, to oversee and help in planning	\$4312.50	\$4312.50 (+in-kind \$6450) = <b>\$10,762.50</b>
Facilities and materials (photocopying; flip charts paper; supplies)	In-kind (TAG / SO)	TAG in-kind: \$40.67,120 = <b>\$167.60</b>
Workshop cohort honorarium (to develop course materials),	\$10,000	<b>\$11,000</b> (\$3000 paid out; \$8000 committed)
Income: Charge workshop participants who are not at UBC	(\$4000)	<b>(\$750)</b>
Facilitators' fees	\$2475	<b>\$2475</b>
Resource people	\$1600	\$100, (compost bins and produce est \$322) = <b>\$422</b>
Food for workshop	\$339.30	\$42.71,128.63, 1914.95 = <b>\$2086.29</b>
Sustainability Office and Centre for Teaching and Academic Growth administration/coordination assistance	In-kind	In-kind
Total	\$25,000 contributed by SO	<b>\$37,556.69 (\$12,556.59 paid by TAG)</b>

### II. Secret “Sustainability Sista” Handshake

*Please perform the following at your own risk; the sustainability sistas cannot be held responsible for any “pinky” injuries endured.* To perform the secret sustainability handshake, extend both your pinky fingers, keeping your remaining digits in a loose fist. Form a circle with your sustainability gang (this can be performed in groups of 2-341). Cross your arms, extending your pinkies towards the people beside you. Wrap each pinky finger around your neighbour’s pinky, similar to when performing the common “pinky swear”. Once a complete circle has been formed, all pinkies linked, begin to slowly

squat down, as if compressing a spring. Once you’ve reached the “threshold of excitement”, release upward unlocking pinkies and extending towards the sky. What has commonly been observed to follow include “jazzy hands”, “woots of exhilaration”, and “interpretive movements.” Ensure to take a few seconds to both reflect on and recover from the secret handshake.

### III. Summary of Participants

Applicants	Position and Discipline	Project
Maggie Baynham	Former goBeyond Project Manager Grad Student- School for Community and Regional Planning	How faculty will apply sustainability into their curriculum. Continue to work on the goBEYOND Education pillar
Shafik Dharamsi	Assistant Professor- Family Practice/UBC Centre for International Health	framework for sustainable approaches to ISL initiatives
Elizabeth Hendren	Undergraduate Student UBC Global Health Initiative Spiti Valley Project Team Member	Our goal is to leave the village with the tools to increase their own health and deal with problems in the future by implementing a sustainable and appropriate exit strategy.
Roselynn Verwoord	Graduate Student- Educational Studies Instructor (Family and Community Counselling Program)	I would like to combine sustainability into the medicine wheel teachings in order to address sustainability in environmental, economic, and social equity realms.
Cathy Koot	Research Coordinator, R.P.Bio. Faculty of Forestry Alex Fraser Research Forest	I would like to develop a new exercise that will focus on the ecological values of Coarse Woody Debris
Charlene Morton	Senior Instructor Department of Curriculum and Pedagogy	I would like to take a look at how my cohort (and teacher education program) might honour this new (2008) policy (legislated environmental education) with the help and support of like-minded colleagues.
Yael Harlap	Faculty Associate TAG	I would like to develop a sustainability plan around MODELING sustainability in two spheres:- how can we model sustainability when working with the student actors and - In our performances and work with the audiences, how can we model sustainability—both social and ecological?
Minghui Xu	Visiting scholar Department of Educational Studies	I want to know about sustainability and will try to introduce and apply sustainability to China as much as possible.
Ileana Construt	Graduate Student Faculty of Education; Curriculum and Pedagogy Department	I would like to provide students with guiding questions to help them with their personal reflection, and to encourage them to make connections between themselves (as active agents) and the web of dependence they’re situated within locally and globally
Carla Paterson	Sessional Instructor Faculties of Arts & Applied Science	Deepen my understanding of sustainability and related concepts such as global citizenship and service learning,



		I am also interested in developing a History course whose main feature would be environment-related community service learning
Moshe Renert	Doctoral Candidate Curriculum and Pedagogy	ways in which issues of sustainability can be brought into the discipline (mathematics).
☞Zoe Broom (Camosun College)	Camosun College Instructor in the Department of Civil Engineering	Civil 255 – Urban Services: I modified the course from conventional subdivision design to following principles of Arendt's 'Conservation Subdivision Design' where valued site features such as streams and forest trails are identified and preserved- I would like to take this further and teach development more along the lines of a 'new urbanism' approach with higher densities and mixed use.
Jocelyn Much	Graduate Student Curriculum Studies and Pedagogy- Science Education	I would like to discuss the possibility of developing a senior level high school course that encompasses principles of sustainability as outlined by people such as David Orr and John Blewitt.
Leah Rathbun	Graduate Student Faculty of Forestry Treasurer for the Forest Graduate Student	One of our main missions is to create a sustainable conference environment.
Margaret Gardiner	Program Assistant First Nations Languages Program	I would like to find more ways to live and work in a sustainable way. I'd like to develop a plan that could become part of our program at UBC and that we could share with our neighbours in the building and the Faculty of Arts.
Nadine Diner	Education and Outreach Coordinator UBC Botanical Garden and Centre Plant Research	The UBC Botanical Garden plans to increase its delivery of sustainability themes in its educational programming. - implement new sustainability learning opportunities in the garden
Will Valley	MSc in Integrated Studies in Land and Food Systems candidate	using the school garden as a medium for incorporating food system sustainability into the school community, through both the curricula and hands-on garden tasks
Tegan Adams	"Unclassified Student"- graduate student starting September 2009 Team member of Climate Action Partnership (CAP) "Food and Carbon Neutrality" working group	Part of the challenge of this project will lie in communicating the results of our work to the community both as a whole and within the youth population. We hope to accomplish this through a sustainable systems approach that will benefit, work with and engage individuals interested in learning more about food security.
Annette Berndt	Senior Instructor Faculty of Applied Science, Centre for Professional Skills Development	I would like to broaden my understanding of the concept/s of sustainability as they apply to students across all engineering disciplines, especially electrical engineering.

Bronwyn Jarvis	Masters Student (School for Community and Regional Planning) Alma Mater Society (AMS) SUB Coordinator	One of the methods most relevant to this workshop is the proposed UBC Curriculum component of the project. The AMS is hoping to liaison with students and faculty at UBC to develop components to the undergraduate and graduate curriculum in the 2009/2010 school year that will produce 'outputs' that can feed into the various stages of the project.
Angela Willock	Undergraduate Student Faculty of Science Student Executive of Common Energy UBC	Our plan includes creating a conceptual survey/test in order to assess the level of sustainability/climate change knowledge of undergraduate students across all faculties
Naoko Ellis	Assistant Professor Chemical and Biological Engineering	I am planning on integrating the environmental performance evaluation concept and tools to the courses. For each unit studied, material selection, operating conditions, energy consumption, material storage and fugitive sources, and waste generation mechanisms will be considered both theoretically (CHBE 346) and practically (CHBE 362/363).
Carolina Guimaraes	AMS Sustainability Coordinator	I would like to develop a volunteer-leadership model at the AMS where students are able to bring to life course concepts related sustainability. The SUB would ultimately serve as experimentation laboratory for sustainability models. The interested students would be provided training to build on their skills sets and interests in order to deliver tangible results (determined in the beginning of the project). The idea is that students are able to create "guerrilla" groups to solve simple issues, yet that could potentially create a domino effect in fostering positive social behaviour.

#### IV. Lesson Plan

The worksheets and lesson plan for the Sustainability Education Intensive were created by Alice Cassidy, Yona Sipos and Sarah Nyrose, Centre for Teaching and Academic Growth (TAG), University of British Columbia (UBC), for use in workshops through TAG and the UBC Sustainability Education Intensive. Permission is granted for use of this material provided that you contact us beforehand. Please email us at [sarah.nyrose@ubc.ca](mailto:sarah.nyrose@ubc.ca)

[Cassidy, A., Y. Sipos and S. Nyrose © 2009, "Sustainability Education Intensive Lesson Plan" Centre for Teaching and Academic Growth, University of British Columbia].

## IV. Lesson Plan

May 31 (Sunday): (12:30 - 4:30 pm) at UBC Farm			
When and who	What	Materials	Room Set-Up
10:00 am	Alice, Sarah, Yona arrive at Farm to set up	Name tags, pens, flipchart paper, tape. *** Dependent on facilities, we most likely will set-up outside near the learning gardens. TBD when we get there. Juice set-up in the Greenhouse	
12:00-12:15 pm Alice, all	In prep email we suggest participants arrive now to settle in. Collect their consent forms (if got BREB approval in time), and give them name tag. Give out human bingo handouts and get started as people arrive.	Human bingo handout	
12:30-12:45 pm Alice	<b>Official start time. Icebreaker #1</b> to get to know each other and start out very active (human bingo). Give our prizes for first row and first full sheet completed. Move people to a circle and "Move your Butt" - if you 'are' the following, take a step into the middle. Start with one or two from bingo sheet (e.g. this is my first visit to the UBC farm), then invite 2-3 more from the participants. <b>Pair and small group work. Large group active engagement</b>	2 or 3 STLHE green guides for prizes	
12:45-1:00 pm Yona introduce	<b>Welcome and words from the Musqueam Nation. Guest: First Nations Elder Larry Grant</b> For introduction: Larry Grant: Elder, Musqueam Nation; Resident Elder, First Nations House of Learning; teaches in the First Nations Language Program		Have participants in a circle
1:00-1:45 pm <b>Lunch</b> Sarah	<b>Start Icebreaker #2.</b> a) Talk to people at your table about what you teach, organize or lead that brought you here. b) Switch tables (give next category) <b>Lunch</b> c) Switch tables (maybe for dessert/coffee or ?). Take first group picture? <b>Small group discussion</b>		
1:45-2:15 pm Yona lead/Sarah/Alice	<b>Overview of the Intensive and Learning Objectives.</b> Introduce the Bike Rack for questions and topics to 'save' for later. Give out pink rectangle for them to complete for the Collaborative Concept Map - print (large and legibly) the unit(s) you are from; one per slip (give example from each of us, and this can also serve as a way of us briefly introducing ourselves.) <b>Individual engagement</b>	Give out folders. Pink slips and pens.	
2:15-2:45 pm Alice	<b>Introduce the worksheets in the package.</b> Make first notes 'My Sustainability Education Plan (SEP)' - start with the notes you were asked to bring (2-3 sentences to share about your Sustainability Education Plan - this can be taken from your application form). For various parts of the SEI, you will be invited to return to this tool, adding, changing, making lots of notes. In fact, about 5 hours of the total 18 hours of the SEI is dedicated to work on your SEP. It is a way to document your thinking and progress and also notes across the 2.5 days. Later, you will be given a clean copy to transfer 'final notes' - that will form part of what we ask you to email us by the end of November. <b>Individual reflection</b>	Refer to pages in folder	

2:45-3:30 pm Yona	<b>Icebreaker/Warm-up #3.</b> Describe your object/artifact in terms of your feelings about sustainability. <b>Intro to sustainability literacy</b> (aspects of a workshop Yona has led - Is there only one definition or many? Participants will view a number of sustainability definitions from a variety of sources. They will identify key aspects of the definitions through a reflection and analysis activity and can be invited to write their own operational definition or philosophy or mission statement about sustainability. <b>Work in pairs.</b>	Laminated quotes (10 printed out; flipchart paper, pens, tape).  Refer to 10 principles of sustainability education (BCWGSE)	Flip chart paper attached to greenhouse walls, farmhouse walls or picnic tables
3:30-4:00 pm	<b>Walk and talk; introduction to the Farm</b> as a resource for sustainability at UBC. Overview of programs to date. Potential for involvement. <b>Guest: Mark Bomford, UBC Farm</b>		
4:00-4:10 pm Alice	<b>Logistics for tomorrow</b> - where to meet etc.		
4:10-4:20pm Sarah	<b>Perky closing:</b> to set the stage for the next two days. Play the student voices podcast by Danny Gruner?		
4:20-4:30pm Yona	<b>Formative feedback form.</b> <b>Individual engagement</b>	FB form - creative oval	
<b>June 1 (Monday): 8:15am - 5:00 pm at TAG</b>			
<b>When and who</b>	<b>What</b>	<b>Materials and room set up</b>	
7:15 am	The three sustainability sistas arrive to set up		
8:15 am Alice	Coffee, tea, fruit, muffins; <b>Address feedback from yesterday</b> (done as a path they go along as they have their breakfast). <b>Walk and view</b>	Kitchen Area- table with fruit, snacks, coffee and tea. <b>*** Remember to make coffee!</b>	
8:15-8:45 am	<b>Modeling an example of integrating sustainability into a course.</b> Mention the conference going to tomorrow (ASLE - Association for Literature and the Environment). <b>Guest: Laurie Ricou, English</b> (he may arrive at 8am for breakfast)	<b>Seminar room.</b> This room needs to be set up with the tables in a horseshoe shape, with the opening facing the south wall. There needs to be 30 chairs fit around the tables. (Diagram on last page) The LCD projector should be set-up for the presentation that follows Laurie's	
9:00-9:30 am	<b>An overview of current, global social, environmental and economic trends followed by a call to action-</b> overview of UBC's Sustainability Academic Strategy <b>Guest - Charlene Easton, Director, SO</b>	LCD projector and laptop	Seminar room- chairs set-up same as for the last presentation
9:30-9:45 am Alice -5 min break-	<b>Logistics of the space</b> - washrooms, emergency exit, etc. Re-introduce bike rack idea and re-post agenda/overview/learning objectives. Use the magic colouring book as metaphor for our SEI journey	Flipchart and paper, pens tape. Colouring book.	
9:45-10:15 am Sarah and Yona	<b>Setting broad SEP goals:</b> Participants will be asked to set 2 learning goals for the end of the SEI, and 2 goals to be accomplished by the end of November. These will be written on yellow squares (short term) and green squares (long term) and added to the overall concept map.	Yellow and green post-it squares. Sarah supplies a copy of their application forms in case they 'forgot'	Seminar Room

10:30-11:15 am Alice	<p><b>"All sustainability education is good education": Effective Learning and Planning Triangle:</b> clear interconnections across Learning Objectives, Class or Learning Activities, and Assessment (whether it be a grade, or assessing how well the program is working). The triangle will link to transformative learning in other parts of the Intensive.</p> <p>Short reflective piece - perhaps using the Covey 'Areas of Concern'?</p> <p>Individual work; work in pairs</p>	Refer to Chickering and Gamson: 7 Principles of Effective Undergraduate Education, Bloom's verb list for learning objectives; Dee Fink article (in Refworks). Handout: Bloom's taxonomy?	<b>Seminar Room-</b> we will have the participants move the tables and chairs to accommodate group work and discussion. *** Need four pieces of paper taped together on the wall for the SEI Concept Map
11:30 am-12:00 pm	<b>Case study</b> of their course (and overview of it being a SEEDS course) focusing on syllabus, assignment and reflection. <b>Guests:</b> Lorna Seppala, Associate Director, Social Sustainability, SO and Sally Hermansen, Instructor, Geography and Warren Scheske	LCD projector and laptop	Seminar Room- room set-up in horse shoe format
12:00-12:30 pm Lunch	<b>Lunch</b> with <b>guests</b> Lorna, Sally and Jean Marcus, President's Advisory Council (PAC), Rosie Pidcock, student guest	<b>Fraser River Room-</b> The food will be on the tables along the "east facing" window. Other tables will be spaced individually around the room to allow people to eat in small groups and chat. If there are not enough tables to accommodate 30 people- not to worry. We will also be having people sit in the kitchen, and seminar room.*** <b>Note to S-Team: Could you please remove the cookies from the lunch and put them in Alice's office. We will serve these during the afternoon break!</b>	
12:30-1:30 pm Sarah, <b>guest Jean Marcus and maybe Rosie Pidcock</b>	<p><b>Overview of sustainability-related programs, initiatives</b> at UBC, such as Sust. pledge and sust ambassadors, SEC, etc. Jean will talk about SAS and PAC. Participants will work collaboratively to create 4 UBC Sustainability Concept Maps. There will be groups discussions to share knowledge of the different initiatives and programs. (Each participant will add a slip of paper (on white oval) to the "SEI Concept Map": what initiative/ program or group can you see as being a useful resource or connection for your SEP? What would you further like to explore?)</p> <p><b>Presentation on the PACS and SAS</b></p> <p><b>Guests:</b> Jean Marcus, President's Advisory Council/Committee</p>	White oval slips and pens, 4 large pies of paper (2 flipchart paper pieces) taped on each wall.	Seminar room- with tables and chairs pushed in, allowing participants to move along the edge.
1:45-2:30 pm	<b>Community service-learning and community connections</b> - the transformative tool that it offers students, the university and the community. Brainstorm with participants on how to bring, or refine CSL in their teaching practice. Finish session with an introduction to value of reflection. <b>Guests:</b> Margo Fryer, Director, Learning Exchange and community guest, Nancy Cameron	LCD projector and laptop	Seminar room- horseshoe shape

2:30-3:00 pm Alice	<b>Reflective activity around SEP, with visual tools.</b> Using the card in front of you (celebrate life, creativity) if it is helpful, consider: Where do you see yourself now? Where are you in the future? How do you get there? How will you know? Though the card may not seem directly related to your SEP, also consider if might connect in some way to an activity or assignment for your teaching/leading/facilitating. Work on/think about your chart, silently for 15-20 minutes (can go outside or stay here). Create a slip for the concept map with a few words or image representing your reflection. Return by 2:50 pm and complete an index card including a 'reflection on your reflection' to share with others. <b>Individual reflection and engagement</b>	Small pieces of flipchart paper, pens, crayons.	Seminar Room, resource room, library- have the participants use the entire space
3:00-4:00 pm Yona (lead), Alice and <b>guests (Judy, Hanae) and TAG</b>	<p><b>"*Classroom Carnivale" - array/showcase of teaching techniques related to sustainability education.</b> *classroom is defined broadly to mean whatever your context is - the world!</p> <p>Participants choose 3 out of 4 stations (no more than 8 per station at any one time), each for 15 minutes. Each station was designed from your application forms and has a resource person and resources (3 minutes for them to present to you, and 10 min for questions/discussion). Bell will sound time to switch stations. All material will be available to you after. Techniques: Active engagement and participatory approaches; Appreciative inquiry and reflection; Use of problems and cases; Inclusivity in learning environments. <b>Living librarian activity</b></p> <p>Note: some topics listed by less than 2-3, such as ethical implications, technology, critical thinking, promoting sustainability, designing unit operations) we invite people to explain and explore on graffiti posters, during lunch, after the SEI via the blog, or ??</p> <p><b>-break-</b></p>	<p>Each 'station' needs a table and 7 chairs.</p> <p>On table: flipchart and markers.</p> <p>Each facilitator to bring resources.</p>	<p><b>Seminar Room- 2 stations</b> <b>Resource room 1 station</b></p> <p><b>Fraser River Room – 1 station</b></p> <p><b>*** Set the cookies out in the Kitchen area for a short break. Have more coffee prepared This short break allows time for the room to be rearranged for the following session</b></p>
4:00-4:45 pm Alice/Sarah	<p><b>Sustainability Speed-dating:</b> A quick way to share your concerns/ideas with a large number of people and get their feedback/suggested solutions. <b>Work in pairs, use of narrative.</b></p> <p>After several rounds of this, meet in small groups to <b>identify possible support systems</b> - might relate to integrating the overviews of sustainability initiatives, resources, community connections and pedagogies, or.... focus on what you are going to add next to your SEP steps, as you will be doing that on your own next. If it helps, you can go up to the concept map and add lines.</p> <p>Focus mainly on what you need to do tomorrow, our last day, in order to be ready to implement the plan through the summer.</p>		Seminar Room- have the tables moved to the side and two rows of chairs must be set-up, with pairs facing each other- a total of 28 chairs (14 on each side).
4:45-5:00 pm Yona	<b>Formative feedback and closing</b> , including revisiting bike rack and summarizing the day	FB form, based on ISW	Seminar Room
<b>June 2 (8:15 am - 5:00 pm), TAG</b>			
<b>When and who</b>	<b>What</b>	<b>Materials and other notes</b>	
7:30am	The three sustainability sistas arrive to set up		



8:15 am	<b>Coffee, tea, breakfasty things</b>		Kitchen Area- table with fruit, snacks, coffee and tea. *** <b>Make coffee!</b>
8:30-8:45 am Sarah	<b>Address feedback</b> from yesterday		
8:45-9:30 am Yona	<b>Resource exchange.</b> (A chance to reflect on the book they were asked to bring, look at other resources we lay out, share ideas, discuss, ??). At the end, add one favourite resource to the blue triangle slip of paper and add it to the concept map.	Various resources. Blue triangles and pens.	Seminar Room- have the tables slightly separated so that participants can form groups of four at a table and share the resources.
9:30-10:00 am Alice	<b>Continue work on SEP</b> , augmented by the resource session.		
10:00-11:30 am Yona/Sarah	<b>Transformative Education</b>  <b>Leading/moving into Issues Discussion:</b> any remaining issues, brought up in this session and from bike rack: if a lot of topics, narrow down by voting. Place flipchart for each issue on wall and break into groups, one per flip. Talk in your group and add your ideas/solutions. time for one more move/flip. We can add the summaries to the blog? <b>Think/pair/share.</b> <b>Individual reflection. Brainstorming. Small group work.</b>	Handouts with quotes  Flipchart, markers	Seminar Room- have the tables moved slightly away from the walls to allow for movement around the perimeter of the room.
11:45 am - 12:45 pm	<b>Lunch.</b> <b>Guests:</b> Kathy (representing PAC); Kristin Orians, EOS; Shona? Alejandro? If there is time, talk a bit about the Support Studios, the January event etc.		Tables in the Fraser River Room and Seminar room will be used for lunch
1:15-2:15 pm	<b>Field trip</b> - led by Shona Ellis and Alice - Show what sustainability means in a tangible way and how we have each brought our students into the 'real world' in our courses. <b>Guest:</b> Shona Ellis, Botany (with Alice). <b>Walk and observe. Pair and large group work.</b>		Out side!
2:30-3:15 pm Sarah/Yona /Alice	<b>More SEP work, including:</b> show and tell - in small groups to get feedback then some way to have each person quickly or efficiently share? (mini-poster? presentation? commercial?) Might use a cubing writing activity here for peer feedback.		<b>Seminar Room:</b> Tables should be placed around the room to allow participants to sit in small groups around individual tables.
3:15-4:00 pm Sarah	<b>Share where you are at now with your plan, and what you need to do next</b>		
4:00-4:30 pm Yona and Alice	<b>Closing:</b> 1) <b>Short Snapper Activity - "Non-astounding teaching and learning techniques"</b> (NATLT) - in whole group, with two soft balls tossing around the room to share 'something I do'. One round related to last 2.5 day's activities; one round related to broader 'things I do'. (show off the collaboratively created concept map, have them anticipate the next phases of the work and look forward to it!); 2) <b>Show off the collaboratively created concept map.</b>		Seminar Room
4:30-5:00 pm Sarah	<b>Recap the 'after the workshop stuff'.</b> Summarize the day. <b>Final Feedback form</b>	Yona is making the form from BREB post-program inquiry and other general questions	

## V. Handouts

*The following is a list of the handouts used for the SEI. Upon request, we can provide these handouts electronically.*

- “Why Sustainability Education?” Sustainability Education Principles for British Columbia
- “What is Education For?” David Orr. 1991 One of the Articles in The Learning Revolution (pg. 52)
- Commencement Address to the Class of 2009, University of Portland, May 3<sup>rd</sup>, 2009 by Paul Hawken
- SEI Learning Objectives and Agenda
- Developing Sustainability Literacy: Exploring definitions and considering integration~ *handout*
- Sustainability Education Plan Worksheets
- Project timeline
- Lesson Plan worksheet
- Classroom Carnivale worksheet
- Hierarchical Steps in the Cognitive, Psychomotor & Affective Domains. Source: Ford, C.W (1978) Clinical education for the allied health professions
- Sustainability Human Bingo
- Moore, J. 2005 Is Higher Education Ready for Transformative Learning? A Question Explored in the Study of Sustainability and Transformation in Higher Education. *Journal of Transformative Education*. 3: 76-91

## VI. Summative Feedback for the Sustainability Education Intensive Summer 2009

# Individuals that agreed to the statement	What did we do that helped you learn?
20	Becoming par of a face to face network of educators interested in sustainability education;
14	Introducing a variety of definitions for, and perspectives about sustainability and sustainability education;
18	Having structured space and time to work on enhancing your course, program or initiative;
16	Having structures time for reflection -Although I don't like reflecting, it was necessary
16	Experiencing and reviewing various tools and techniques that contribute to sustainability education
16	Accessing resources related to sustainability education - would like more time
18	Having guest speakers and resource visitors - Too many? - Well done.
3	Other... - Visit to farm and field trip around UBC - Fieldtrip! - Spending time outdoors – at the farm, on a field trip – opportunity to connect with (and spend time in the) natural world.

***Why was this aspect/were these aspects valuable?***

- It would have been interesting to focus more on the variety of definitions in a more analytical way to develop a firm working for ourselves on an individual basis
- Everything contributed to a bigger picture. Having people from different backgrounds/initiatives/perspectives really helped me see things in new ways and also just learn from others experiences. Having time to reflect and develop SEP here and there helped tie in lessons to my own project, in allowing no loss of info!
- Meetings and networking with like-minded peers was the most energizing part. Field trips (include. Farm visit) provided opportunities to think/reflect in different space and to come up with new ideas.
- Subdividing into groups of folks that were working on similar initiatives/programs/courses and could make more specific and meaningful contributions to my work was so helpful. It was also great to get a slice of lots of other similar projects and to share my ideas with others.
- I loved the diversity of activities in the SEI as they helped me access my tacit knowledge as well as create new knowledge/ think differently about things related to sustainability
- Getting energy and ideas from others was the most valuable aspect of the SEI. The theoretical background - & exploration of assumptions related to definitions – was also helpful. I enjoyed contributing idea to other's learning.
- Going for the walk around campus was eye-opening in terms of how t engages others into the place, species and stories they live among.
- Equipped me with passion, tools and collaborative partners to help me make my project a reality
- Meeting others working on similar projects from different perspectives is a great way to address challenges.
- Yes
- Structured time to “force” me to act on what I tend to put off. Inspiration and ideas from “real” people from campus... Knowledge and experience gained from others.
- Information is very useful to me. It was informative. Lots of god ideas.
- I really appreciate the opportunity to share my idea with creative and innovative educators and develop partnerships.
- The tools were helpful because so many times people have the intention of integrating sustainability but just don't know how.
- Was great to see what was going on in the university. Was able to see how people thought about sustainability issues. Was able to learn about different ways of teaching (reflective Praxis!). Was able to sit down and really work on my plan.
- I was unaware of many of these initiatives.
- I loved that you mixed teaching with learning technique. Eg. Jigsaw and transformative. It maximized the use of everyone's time as well as giving a concrete example of the method
- Provided opportunities to meet people, learn about initiatives, and resources in 2.5 days that would have taken much longer if done on my own. I would never have been able to network/connect to this degree on my own.

***What aspect(s) of the program was least helpful or most challenging to your learning? Why?***

- Although a good idea, the speed-dating activity (too superficial but then this may just be personal preferences)
- Reflection using visual tools. It kind of indirectly helped me as far as nourishing my personal life, but I found it challenging to tie it to my initiative and thus, least helpful in developing ideas for it. It was fun, though. Yay crayons!
- Day 3 PM – my energy level was low – quite saturated.
- Speed dating: too fast → 2 min. not enough to get a meaningful answer to a very complex problem, especially if you have to give context/background of your project first. Also, very noisy and hard to hear what the other person was saying.
- Although I appreciated the diversity of the participants, I would have loved to have more course instructors/educators in higher ed. In the program as participants. This would have

helped me with developing my SEP. I loved how many of the activities intentionally had a worksheet/space for reflection and/or connection to our SEP – this helped me connect my learning from the activity to my SEP in a meaningful way. Some of the guest, speakers/presenters were not as helpful for me in developing my SEP, as they were institutional-focused and not course-focused.

- Actually I found the music jarring and distracting sometimes – harder to think. Similarly, sometimes sidebar conversations by participants made it difficult to hear what was being said/presented, etc. Quick activities tended to be less useful than ones we could really sink our teeth into (e.g.: Carnavale vs. transformative article). More cultural diversity in presenters.
- It would have been useful to have more of my ideas challenged. A debate where ppl disagree is a powerful way in which I can become more aware of my lenses, which can be difficult if I only think about them.
- It was all great!
- It was a format which was quite uncomfortable for me (not highly structured). Quite challenging for me to get past that
- Sorry if this is not useful reflection but I thought it was all relevant and useful.
- I found general sustainability info and guest lecturers least helpful because it was nothing I hadn't heard before.
- The gap between learning and practice
- Challenging → trying to define the scope of my project yet I was very appreciative about the time to share with others and grateful that in the end of 3 days I had a better understanding of my project.
- Lack of dialogue or clarification about social, economic, env. Sust. as presented by sust. Office.
- I was so drained by the end I couldn't fit it in my head but it's great to know they're there when I'm ready.
- I guess not having a specialist assist me at this point to help me fine tune certain aspects of my project. I think now, however, I can go to my supervisor with a well laid-out plan.
- I am not challenged by how to apply these ideas, but optimistic that a way/ways will be revealed.
- I don't feel my SEP is as well defined as the other's so sometimes the parts where we had to work on our SEPs were lost on me.
- None. This was the best educational experience I have ever participated in.

## **How did you learn as a sustainability educator?**

***Looking back, what aspects of your participation in the program stand out as most valuable to your learning as a person interested and engaged in sustainability education?***

- Being exposed to novel ideas, different experiences, intellectually and spiritually challenging issues, "transformative education" → I found what I was looking for!
- To transform my passion + ideas on sustainability into (approaches + plans) actions.
- Transformative learning/jigsaw exercise was so helpful. The article was inspiring and perception altering.
- Hands-on activities (farm visit, field trip, drawing reflective activity) -> these engaged the head, heart and body
- Connecting with other participants; getting to see the farm; Laurie Ricou's visit; writing up the SEP at a few different concentrated points in time.
- Having the comments of other sust. Educators to draw on and ask questions, guidance, and support from.
- Connecting with like-minded peers and mentors gave me inspiration to fully incorporate my life.
- Activities involving writing on flipchart paper
- Aspects of different forms of learning. (e.g.: Cooperative vs. collaborative)
- Participation – often I spend time doing these things alone. More creativity with others.
- Conversations with other participants!
- Guest speech. Field trip on UBC Farm and on campus.

- Understanding and learning through texts, exercises, and conversations what others think and feel about sustainability
- Help from science ed. To supplement my lack of scientific literacy. Connections with educators in humanities and interdisciplinary ideas.
- Talking to faculty about their challenge in integrating sust. education. Absorbing facilitation strategies and ideas for my own SEP.
- Transformative learning. Class activities – “I will use them to teach”
- Great resources/tools shown that I was not aware of
- It’s all a blur at the moment! Learning from my classmates was/will be very valuable.
- The opportunity to meet so many interesting ppl involved in various initiatives, programs, etc having to do with sustainability. Seeing so many teaching strategies modeled.

***Do you think you have changed as a sustainability educator through your participation in this program? If so, How?***

- Will address more elements of sustainability
- Yes, The SEI made me realize the tie between sustainability and education and the way it should be integrated. (TRANSFORMATIVE) I had tunnel vision before and now I can view things more holistically.
- Yes, I feel I have gained various tools for sustainability education – focusing more on processes
- Absolutely. I’m not a teacher by training, and so it was an aspect of my life I hadn’t given enough thought to until this workshop I need to be more cautious about the things that come out of my mouth, and about how I structure my plans to achieve my goals.
- YES – I think I will be more conscious about incorporating sustainability in my course.
- I don’t know yet. Maybe; I think I’ll think more about the environmental sustainability aspect & how to enhance that.
- I have more of a clear idea of where to start. My SEP is a small step but a necessary one to get me more oriented.
- I think I am more mature in my sustainability views.
- I enjoyed learning more about the time components of transformative learning
- Not sure as of yet. Need to process how this fits into my research
- I think it is a great boost towards something in the right direction
- Nope (I’m not an educator now) but, I appreciate the difficulties more.
- Yes! I have more awareness about sustainability
- I feel more empowered after this program and believe change is possible
- More positive. More familiar with old and new resources.
- Not sure – one of those things that trickles in I think! More than changed. I think it reaffirmed the approach to learning/teaching. I think it’s important.
- Yes, b/c it has helped me to connect with many different people broadening my understanding and giving me more resources to draw on for future.
- Yes, I am more aware of my potential contribution
- Yes, I have a broader sense of what sustainability is.
- Perhaps by expanding my repertoire of resources and strategies.

***Do you think you have changed as an educator through your participation in this program? If so, how?***

- Will try out new pedagogical techniques (e.g.: jigsaw readings).
- I care more for HOW than WHAT. I care more for PERSONAL than COLLECTIVE GOALS.
- I have learned that change takes various forms + time frames. Slow + reflective thoughts may last longer ... I need to allow myself + my students to absorb at one’s own pace Concepts, thoughts, lessons, etc.
- I enjoyed the collaborative aspects of this teaching/learning process and plan to think more profoundly about how to incorporate some of the activities into my own work in the future.
- I think it has allowed me to reaffirm some of my abilities as an educator, and allowed me to celebrate some of the things I do!

- I don't know. If anything, I've been thinking about the value of having pre-established learning goals vs. not (& co-constructing them with participants).
- I will always try to ask myself what my assumption are when I design a course and what my points of view are.
- It's hard to say until I go back to teach.
- ?
- Not sure as of yet. Need to process how this fits into my research
- Maybe not change but keeps me focused and motivated
- Yes!
- Yes, I feel better equipped to teach creatively and that there is lots of collaboration I could seek from others.
- see above: "Not sure – one of those things that trickles in I think! More than changed. I think it reaffirmed the approach to learning/teaching. I think it's important"
- I see this and the question above as the same, I don't think one can ever separate these 2. "Yes, I am more aware of my potential contribution"
- Yes, I will use more varied techniques and be better able to tap onto affective domain.
- I have been encouraged by seeing and working with so many inspiring people

## Supporting implementation of your SEP

*Please comment on the support you received for the development of your Sustainability Education Plan. What worked? What could be better?*

- Not sure – Overall, although it seems to shaped up quite a bit, it still seemed a little vague. (Also, it would be interesting to address the critique on lesson plan. Students tend to be so goal-focused in our education system that reflective criticism on worldviews/assumptions tends to suffer. At what point are goals met?) Maybe more time needed?
- I like how there will be support studies, and a way to come back after brewing and building my plan more, where I will undoubtedly uncover more questions and concerns> I really enjoyed being able to talk to like-minded, similarly-doing people who could give me constructive feedback on my ideas. Having Maggie here, who I am actually kind of working with (Go Beyond) was super helpful since were pretty much nearly doing the same things and she gave me a more direct + relevant perspective & tie in. I would have liked to be able to learn about what everyone else was doing more thoroughly because my project involves a high level of collaboration.
- In developing the goal for SEP, I was able to work on my working definition on sustainability education. Having peers with similar interests is helpful in developing SEP (Sharing resources, reflecting, etc). It may be interesting to have a gathering with educators across the board that may or may not have bought into the sustainability education. Trying to discuss + build consensus may be an interesting exercise – where is higher education going? How can we be inclusive working together when we have differences in beliefs, approach, etc?
- I made some excellent contacts that will be integral to building my critical mass. That is what was most valuable. Being in a room with like-minded, conscious people is so gratifying and inspiring.
- I would have liked more time to develop my SEP, particularly longer blocks of time! I sometimes found that with the short periods of time to work on my SEP that I couldn't get deep enough into redeveloping m course/program. Longer periods of time would have been helpful. I loved getting feedback on my SEP through structured activities that allowed other participants to give feedback. It would have been helpful to get feedback throughout from other people who were working on a similar course/project, rather than just "general" feedback from people who had sometimes not been in a similar context.
- Worked: Having a few chunks of time with guiding questions (esp. in a) the initial writing of the goals and b) creating the posters. Could be better: More input ideas – Laurie Ricou's session, for example, was REALLY imagination-expanding. Other sessions that were more talking heads OR really rushed (Carnavale) could only skim the surface, so weren't as provocative.
- What really worked was bouncing ideas with the other ppl in the course. My idea changed



<p>from my initial intention, no having more time to discuss our ideas with others would have been more helpful.</p> <ul style="list-style-type: none"> <li>- Funding (good). Resources from the conference and from TAG teaching centre; time to reference was great!</li> <li>- It might be nice to share some more examples of programs that have been successful in terms of sustainability and education</li> <li>- Would have liked to directly learn more techniques + explored (identified) the different types of learning</li> <li>- More time to work individually</li> <li>- More time for “dating” thing where ppl help + problems.</li> <li>- Great! It’s a very supportive environment. Lots of useful feedback</li> <li>- I received the support of participants, material suggested or delivered at the workshop and time to do alone thinking. I’m pretty pleased with the support I got.</li> <li>- As helpful as working with people <u>NOT</u> in my field, also glad to have worked on my plan with 2 people in my field.</li> <li>- It was good – having an opportunity to share concerns early on &amp; the times for self-reflection was great. A bit more one-on-one support would be great, though I understand there are only 3 of you!</li> <li>- Would like to have had time to work with some of the presenters to help me with my SEP. Loved collaborating with others. Loved group work and reflection activities.</li> <li>- It was great to see what others are doing. I think I need more direction from my unit to clarify what is doable.</li> <li>- The speed dating was helpful as well as chatting with others @ lunch</li> <li>- The structures opportunities to develop + reflect on plan. The introduction to so many resources, etc.</li> </ul>	<p><b><i>What additional skill development and support, if any, do you need to successfully implement the SEP that you developed in the SEI?</i></b></p> <ul style="list-style-type: none"> <li>- Not sure</li> <li>- People to talk to (studios would be great); access to resources (I will use site as well as TAG)</li> <li>- Sustainability resources specific to my field</li> <li>- Better training as a researcher</li> <li>- More support on course design/re-design. Check-in session re: development of SEP</li> <li>- I’d like to have support from the Sust. Coordinators at TAG to get started with mapping and reducing our impact</li> <li>- I look forward to brining a draft of my article and to get feedback on it.</li> <li>- None really. We’ll see when I get back in September for phase 2.</li> <li>- Not sure</li> <li>- Specifies in program &amp; curriculum structure.</li> <li>- A greater understanding of the facilitation techniques for different teaching styles (such as PBL or even field trips). Space for discussing the pros, cons, opportunities and challenges.</li> <li>- Learn more about critical thinking and environmental learning</li> <li>- I plan on dropping in to get feedback in June,</li> <li>- Can’t think of anything now</li> </ul>
<p><b>Evaluating the SEI for the future</b></p>	
<p><b><i>What would you suggest that we change in the program (e.g.: program content, group process, facilitation, etc.) for future groups? What should we keep the same?</i></b></p> <ul style="list-style-type: none"> <li>- Perhaps a little more theoretical input (disciplines/ frameworks) would have been useful Also maybe some more guidance could be given on the ethics of sustainability ed. → the Moore article was a good place to start</li> <li>- Really important to keep TRANSFORMATIVE piece. Maybe develop it more by sharing stories of how it has actually been used in education. I liked going through styles of activities by doing it ourselves (i.e.: Jigsaw) It really helps you understand the dynamics and potential</li> </ul>	

<p>outcomes.</p> <ul style="list-style-type: none"> <li>- Bring in a guest who may challenge us + make us feel uncomfortable... to see if learning occurs in us. → Push boundaries.</li> <li>- Bring in more UBC Profs, educators from diverse faculties and backgrounds, particularly culturally diverse educators and, to share how they are bringing in sustainability in their courses. (i.e. An aboriginal educator, some are from SCARP, etc). Hearing more about individuals participants backgrounds and Seep's (there were some people that I did not have a chance to connect with and would have liked to have known what they are doing (this would have also helped in developing connections outside of the SEI).</li> <li>- <u>Suggest to change</u>: Slightly shorter days. Fewer talking heads. More diverse presenters (cultural diversity broadly defined). A little more emphasis on what social sustainability is and what it means for teaching and learning – it always is a bit of an afterthought. <u>Suggest to leave the same</u>: Farm, lots of ice breakers and community building, guests like Laurie Ricoh, First Nations welcome, time to work on SEP, open and flexible approach to SEP</li> <li>- I cannot stress the fact that more time is necessary. Many activities were done in a rush and didn't allow for enough reflection after each. At the same time, I loved all the activities. It didn't seem long at all. ☺</li> <li>- End or begin one/each day with a brief act of gratefulness. E.g.: "I am grateful to have clean water coming out of my tap." Good for humility. Good equalizer. Non-religious. Feels good</li> <li>- It was great. Maybe a wee bit shorter days ☺</li> <li>- Food was great. Perhaps expand to 3 full days of shorter duration. More outdoors activities.</li> <li>- I still found I talked to a lot of similar people, but maybe that's because the co. was so small. Also, can we get ppl to write name of project on their name tag?</li> <li>- Pad the schedule (allocate more time than you need, and put less activities), so if people run over (talking) it's not a problem and if they don't run over, you can just go home early ☺ (though I don't think that could happen).</li> <li>- <u>Incorporate</u>: Ways to get help from the university to incorporate innovative programs. Get more edgy topics/taboo conversations happening? Invite more high up employees at the university that deals with curriculum/education. <u>Keep the same</u>: guest speakers. Time for dialogue.</li> <li>- Not just 2.5 days programme weather could become an ongoing programme. Having the regular meeting per month with constant support.</li> <li>- 1) Notion of "sustainable campus" was off-putting; so, without opportunity to agree on some common understanding of what sustainable education means to all of us up front, it was difficult to challenge institutional spin. 2) Integrate a "habit of mind" activity or story time to complement J. Moore article.</li> <li>- I can't think of much to change. Maybe bring in more experts to help us work on our SEP. Maybe more one-on-one time for work on our SEP.</li> <li>- Perhaps a little more "pre" SEI reading would have helped me, but I'm not sure.</li> <li>- Rather than a black folder I think we should be told to bring a binder with x number of tabs and the handouts be hole punched.</li> <li>- I can't think of any changes – the program ran so well.</li> </ul>	<p><b>Other comments and concerns</b></p>
<ul style="list-style-type: none"> <li>- Overall, a memorable experience that was enriched personally + professionally with lasting community impact. I look forward to the showcase in Jan and am sure I will stay in touch with people. I think you have successfully facilitated a sustainable Cop. Exceeded my expectations! Thank you!</li> <li>- How can we be inclusive working together when we have differences in beliefs, approach, etc.</li> <li>- Thank you!</li> <li>- Thank you so much, It was awesome!!!</li> <li>- Thank you for a great 3 days – your commitment really showed and I'm really grateful that you're doing this work!</li> <li>- The SEI rocked! Thanks so much!</li> </ul>	

## - Additional Feedback form for the Centre for Teaching and Academic Growth -

ADMINISTRATIVE	1	2	3	4	5
Application			3	4	11
Information provided prior to workshop			3	5	10
Facilities				2	17

Please comment specifically on any of the above:

- Wonderful articles for pre-reading (and ones I will copy for 2 high school graduates in my circle of family and friends)
- Would have loved to see the agenda ahead of time. Application was great for thinking about how to apply ahead of time
- Two prep articles appealed to different audiences. TAG is housed sustainable building?
- Very nice to spend first afternoon at farm.
- The details about the event were fine, but the two audiences were addressed so late in the SEI that it was hard to retrieve opinions and recall details. → possibly better near the beginning or used as the jigsaw exercise.
- I was completely curious as to the content/schedule but I suppose not knowing made it more exciting? I don't think it really matters actually
- Having the option to go outdoors for lunch was reinvigorating, and beginning with the farm was a therapeutic experience.
- The farm visit was amazing! A great place to learn.
- The Farm!
- Sorry, I think you're asking about the application form. It was a bit vague for me and I felt a bit unclear.
- Very clear and well-organized. Supportive and accommodating.
- A bit cold.

FACILITATION	1	2	3	4	5	6
Visual aids, handouts, and other materials			1	6.5	10	
Modeling of teaching techniques by facilitators				4	13	1 (top notch!)
Teamwork among facilitators					18	1" "
Flow of the workshop				5	13	1" "

Please comment specifically on any of the above:

- Fantastic pace! We were engaged with lots of information + insight without feeling overwhelmed.
- Maybe time debriefing the techniques shared by the facilitators would be helpful. Also to do the pedagogy earlier in the intensive.
- Would prefer discussions on articles before hearing Charlene + SAS so we could have drawn on this discussion (+ support from classmates) to question UBC discourse.
- I would enjoy more of "modeling of teaching techniques (implementing them and their purposes)
- I found all my papers/handouts tended to be jumbled. Next time it might be helpful to provide participants with 3-ring binders (used?) to organize material as it was distributed.
- Handouts were great but numerous and chaotic/hard to keep track of. Loved enthusiasm and charisma of facilitators ☺
- Somewhat heavy on handouts (notes are scattered and not organized (my fault)). Modeling by facilitators was excellent.
- Responded well to comments. Thank you for being flexible!
- I liked how there was plenty of flexibility in the schedule throughout the intensive. Day 2 was a bit too full with guest speakers.

- Handouts could have been posted online, I didn't use all of them but I would like to have access to them or look them over for ideas.
- Outstanding. Well-timed, organized and excellent transitions. Activities such as presentations were not too long. Would like more reflection time.
- Good balance between keeping a schedule and allowing for extended conversations between activities

OTHER:	1	2	3	4	5
Food		1		1	17
Room set-up				2	17

Please comment specifically on any of the above:

- Great food!
- Too much sugar, "foreign fruits"
- Food was wonderful
- Food was EXCELLENT. Maybe avoid meat. Nanaimo bars aren't sustainable. Would have liked maybe more work outside. The room was nice, though ,very spacious and lively.
- Would have preferred to work on SEP than to work on posters during the day. Perhaps it can be homework to bring a short poster on day 2 and then to share over coffee break?
- I loved how the food was vegetarian and healthy! The snacks were nutritious – muffins (bran) and fresh fruit were great!
- On the lat day in the morning, more mixing of groups would be nice.
- Mexican was great!
- Food was amazing and accommodating of eating styles and needs.
- Good use of rooms. I liked the way the tables and chairs were in constant motion to give an atmosphere of change

ANOTHER ASPECT NOT MENTIONED	1	2	3	4	5
Discussion Groups					X
On Moore, book resources, and Orr/Hawke articles well-received.					
Guest lecturers (university contacts, etc)					X
Time				X	
- Lengthening time spent thinking and discussing things should give guest speakers more presentation time.					
Guest speakers and presenters				X	
- I liked the diversity of the guest speakers, but would have appreciated hearing from more instructors who have integrated sustainability into their courses, as this would have been most relevant to me.					
Good Energy!					X

I found out about this workshop from:

- |   |   |
|---|---|
| - E-mail list                               | - The Environmental Education Caucus (Faculty of Ed.) |
| - Yona                                      | - Director of my unit                                 |
| - TAG e-mail                                | - Alice   |
| - TAG e-mail                                | - Yona  |
| - The TAG website                           | - A facilitator.                                      |
| - Via e-mail from a colleague at the garden | - TAG Website.  |
| - Sarah Nyrose, Common Energy               | - A friend  |
| - Shafik Dharamsi                           |   |
| - The TAG website                           |   |
| - Yona, Alice and Sarah                     |   |

I would also like to say:

- This was a wonderful, inspiring experience that cut across faculties, programs, institutions with instructors, students, and administrators. The cross-section made this an especially rich program.
- Thank you for opportunity to mix with env. Ed.
- You guys are AWESOME! Love, love, love!
- Thank you for your dedication, enthusiasm, and flexibility!
- Thank you!
- Thanks for all the positive enthusiastic effort you've all put into this.
- I have learned so much from others about sustainability, about teaching and have connected with a diverse group of people. This process has been invaluable.
- Thanks! Congratulations on a job well done!
- Thanks for all the effort
- Thanks for our facilitators very much.
- Thank you so much for this opportunity