

Sustainability Education: Three activities you might use or adapt to help educators

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Abstract:

While there is growing interest by post-secondary educators in bringing aspects of sustainability into courses and programs, very few training opportunities exist. We designed and led a two and a half day Sustainability Education Intensive (SEI) in 2009 and 2010 at the University of British Columbia as a pilot project. This paper focuses on three activities that were part of our SEI – ‘sustainability literacy’, ‘sustainability artifact’ and ‘give one, get one’ that we have presented at conferences. We also provide a brief overview of the workshop, along with steps and templates to allow people to use or adapt them at their own institution.

Key Words:

sustainability education, sustainability leadership, workshop design.

¹ This paper is based on a workshop and related programs designed by the authors when employed at the Centre for Teaching and Academic Growth (TAG) at the University of British Columbia, Vancouver, BC, Canada as Associate Director (Alice Cassidy), Graduate Academic Assistant (Yona Sipos) and Undergraduate Assistant (Sarah Nyrose).

Introduction

Many post-secondary institutions have expressed their commitment to sustainability education through signing declarations such as the Talloires Declaration of University Presidents for a Sustainable Future (1990), the Halifax Declaration (International Association of Universities, 1991) and the more recent Earth Charter (2000).

The term ‘sustainability’ is common, and is of growing interest in post-secondary settings (see UN Decade of Education for Sustainable Development (2005-2014; <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-sustainable-development/about-us/>) Armstrong (2011) highlights that to implement education for sustainable development, educators must be committed to this new paradigm, as well as be skilled as “facilitator, collaborator, and fellow learner on the journey toward sustainability” (p. 5).

While there is a growing need to train and support campus sustainability educators to actualize such commitments (Hocking et al., 2006; Brinkhurst et al., 2011; Cassidy et al., 2014), we know of only a handful of initiatives that focus on this expressed goal. Programs such as the Ponderosa and Piedmont projects in the US and the Pacific Spirit project in Canada are two such examples, and even these are designed only for faculty members, to the exclusion of other members of the university teaching community and leadership. In brief, Ponderosa, which started in 1994, is an interdisciplinary faculty group effort to incorporate environmental sustainability issues into university courses with the ultimate goal of providing future citizens the education and skills necessary to achieve sustainable communities and societies (<http://www2.nau.edu/~ponder-p/>). Piedmont, based on Ponderosa, began in 2001 and works with faculty members in a four-part program to help strengthen engagement around environmental issues and sustainability in the curriculum (<http://piedmont.emory.edu/>).

We designed and led the Sustainability Education Intensive (SEI) at the University of British Columbia (UBC) in 2009 and 2010 as a pilot project. Mirroring a unique aspect of UBC, namely that people in a variety of roles are active leaders in sustainability education, we involved faculty, graduate and undergraduate students, staff members, post-doctoral fellows and community members in planning and fine-tuning this program. We invited people in all of these roles to apply to take part in the SEI. Modeling these activities in two sessions at the annual conference of the Society for Teaching and Learning in Higher Education (STLHE; Cassidy, 2013; Cassidy, Sipos and Nyrose, 2012). Through the conference sessions we offered and this paper, we also invite you to explore and be involved in parts of the SEI, a short course that we feel is unique and has shown itself to “walk the talk” of being sustainable at several levels.

This paper focuses on three activities that were part of our SEI – ‘*sustainability literacy*’, ‘*sustainability artifact*’ and ‘*give one, get one*’. We also provide an overview of the major components of the course, a SEP (Sustainability Education Plan) to guide participants throughout the two and a half day SEI, and link to an online document describing the steps we took in its planning, design, promotion and delivery. We invite you to use or adapt these materials as you develop sustainability education and leadership at your own institution.

The Sustainability Education Intensive (SEI): Overview of major components

The two and a half day Intensive provides tools, resources and time for participants to develop a SEP to integrate or enhance sustainability in their course, program or initiative. During the eight months following the workshop, we provided studio support sessions for all participants and financial support for UBC colleagues to culminate in a Showcase Event to share the successes with the broader UBC community (Cassidy, 2011).

We incorporated place-based learning into the SEI, including a full day at the UBC Farm and a field trip around campus. Participants were involved in individual, pair, small group and whole group activities that included collaborative learning, self-reflection, brainstorming and creativity. We modeled sustainable practice through minimum use of printed materials, an emphasis on local and vegetarian food provided by a student-run campus caterer, and full recycling and composting facilities.

We conducted formative feedback at the end of the first two days, fine-tuning the SEI to reflect responses. Summative feedback at the end of Day 3, as well as feedback one year after participants had completed the workshop, gave us valuable input on the transformative nature of the SEI regarding the teaching and facilitation practices of the 36 workshop graduates. Results of these surveys will be the basis of an upcoming paper (Cassidy and Sipos, in preparation). Full details of the SEI, including steps in planning and delivery have been described elsewhere (Cassidy, 2012; Cassidy et al., 2014). Visit <https://cassidyinview.wordpress.com/teaching-and-learning-workshops/sustainability-education-intensive-a-workshop-for-post-secondary-teachers/> to view or download a more detailed description about planning and delivery, the SEP that participants used during the workshop and other key materials used in the SEI, such as the Sustainability Literacy Definitions and a related chart used in the session.

Details of Three Workshop Activities

Sustainability artifact:

In brainstorming ways to make the SEI as relevant, practical and connected to peoples' lives as possible, it occurred to us that each of us was wearing or using items we had owned for a long time. We were all dedicated to "reduce, reuse, recycle" that thought we might focus on the reuse aspect, related to the idea of "keeping items as long as possible" to avoid landfills. We also acknowledged that artifacts could take on other forms, such as an item, photo or memory that reminds people of how they became interested in sustainability.

We used the "Sustainability Artifact" activity to cap the first day, just before participants completed formative feedback; it could work equally well as an icebreaker activity or as a 'reflect and share' activity at any point in the SEI. We prepared participants before they arrived, explaining the activity and inviting them to bring an actual item, or to have something to talk about, such as a memory or event, that represented sustainability from their perspective.

Participants formed pairs and, as they had already met, got started on the activity. We invited them to “Show or tell your ‘sustainability artifact’ to your partner, taking a few minutes each. Explain how it represents sustainability to you.” After giving about 10 minutes for this part of the activity, we asked for some examples, including what they showed and/or talked about. Lively discussion ensued. Some people brought items they had owned and used for a long time (in my case a small penknife in a favourite shade of blue that I bought at the local hardware store about 43 years ago; then there are my 20+ year-old Dr. Martens shoes), or photos or memories of places that represented sustainability to them, such as by doing volunteer community work. Other examples included books and items made from re-cycled or up-cycled materials including jewelry or clothing.

The sustainability artifact was a great way to show the diversity of ways that people interpret sustainability – including environmental, social and economic dimensions of this complex theme. It also allowed people to get to know each other a bit better, a precursor to some of the activities we planned for later in the workshop.

Sustainability literacy:

There is often vivid discussion over “the definition of sustainability”. Though it can be helpful to explain what one means, we also acknowledge that there is no one definition that will appeal to everyone. In the SEI, we wanted to give participants a range of definitions and have them work with them in meaningful ways, thereby exploring and developing sustainability literacy. The term ‘sustainability literacy’ follows in the footsteps firstly of ‘environmental literacy’ and then ‘ecological literacy’ (Stibbe, 2008).

On large pieces of paper spread around the work area, we presented nine definitions. These came from publications, a doctoral dissertation, reports, books and websites. We aimed to have a variety of views, and also to show some local examples, created by people at our own institution. The full set of definitions and references is found at <https://cassidyinview.wordpress.com/teaching-and-learning-workshops/sustainability-education-intensive-a-workshop-for-post-secondary-teachers/>

On the space below each definition, we asked each participant to identify the embedded values, assumptions and foci, as well as the present or future focus. Following this activity, we invited participants to create their own definition of sustainability, using a chart we provided to prompt their thinking about and inclusion of potential elements. These self-created definitions had a variety of applications, including to help them to design or fine-tune a course, or an activity or assignment within one; to post to their website biography and/or as part of their teaching philosophy statement; and to help them brainstorm for resources they wished to explore after the workshop as they worked on their Sustainability Education Plan (SEP). The definitions, literacy chart and SEP can be found in Cassidy (2012).

Give one, get one:

In the two years of the SEI, we adjusted the format and name of this activity, but the intended outcome remained the same. We wanted participants, who represented a variety of roles, backgrounds, disciplines and interests, to share resources they knew about and to ask for items they needed. And we wanted them to do so in very dynamic

and interactive ways, as this was a key principle of our SEI (to not only share our knowledge and find ways for participants to do so, but to model ways of engaging learners.)

In 2009, a session called Classroom Carnivale included stations set up around the room. We were fortunate to have special guests at each station, each with particular specialties such as active engagement, inclusivity, appreciate inquiry, reflection, use of problems and cases. In another activity, a large wall poster was set up, with participants adding details of programs, initiatives and resources that they were involved in or knew about. The completed 'resource wall' was then shared with everyone.

In 2010 a session called Living Library included three choices – Institutionalizing sustainability, Diversity in learning environments and Community-based Learning. Participants were invited to visit two of those three, where a variety of written and electronic material was displayed, with facilitators to help participants. We also held the E-Olympics, with teams of participants going online to a blog we had set up, to find the material of most interest and relevance to them and their SEPs.

Other informal ways of sharing resources including bringing a favourite book related to an aspect of sustainability and talking about it over morning coffee or at lunch breaks.

For each of these styles of 'give one, get one', we invited participants to make personal notes on what they would do with the information, and how they might incorporate it into their SEP. We varied the format of 'give one, get one' to ensure that in each year of the SEI, we were making the most of guest we had lined up, which vary over time, and also addressing the kinds of projects taken on and interests expressed by participants in the registration process.

Contributions from participants and workshop facilitators lives on in an online resource <https://cassidyinview.wordpress.com/publications-and-other-resources/sustainability-education-and-leadership/>, funded by the Educational Developers Caucus of the Society for Teaching and Learning in Higher Education. This repository offers over 300 examples, including web links, to programs, organizations, journals, articles and books, some of them annotated by SEI participants on aspects of sustainability education and leadership.

Conclusion

Sustainability education and leadership is an important topic that we have not seen presented often at conferences, in the published literature or in other contexts. Aiming to model aspects of our successful Sustainability Education Intensive workshop, we described how we involved participants, in two conference sessions, in three activities from the workshop. We invite you to explore, use or adapt materials for use in your own teaching practice: <http://cassidyinview.wordpress.com/workshop-topics/sustainability-education-intensive-a-workshop-for-post-secondary-teachers/>

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