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DEVELOPING A SUSTAINABILITY PLAN AT A LARGE U.S. COLLEGE OF EDUCATION

Grinell Smith

San José State University, the United States of America

Abstract

Despite growing awareness of its importance, most sustainability education efforts in tertiary institutions do not significantly impact curricula. This paper details some of the activities and processes used to draft a sustainability strategic plan designed to address sustainability at the curricular level rather than merely the operational level within a large college of education at a large U.S. public university. The plan is also presented. Our goal was not to articulate a fixed policy but rather to produce a coherent plan that (1) fosters awareness and encourage people to join the effort and (2) readily accommodates input as more people become involved. The plan consists of three position statements, five broad recommendations and 20 specific actions aligned with the five recommendations. The hope is that our development processes, analyses and plan will be useful to other teacher education colleges and other groups with similar organisational structures interested in developing sustainability plans.

Key words: sustainability plan, U.S. college of education, SWOT analysis

Introduction

Despite growing awareness of its importance, sustainability education in U.S. schools is rare, in part because many view it as controversial (Curren, 2009). Indeed, most sustainability education efforts in tertiary institutions rarely significantly impact curricula (Everett, 2008). This is certainly true of the university where I teach, a large U.S. public university with an enrolment of about 30,000 students. Our campus boasts several LEED certified buildings, a state-of-the-art central energy plant, a solar PV system and several campus wide sustainability efforts, yet sustainability is a central focus of only a few dozen of thousands of courses offered. However, efforts to address sustainability more fundamentally are underway. At my university, the president recently formed a sustainability advisory board composed of a faculty member from each of the university's seven colleges. Encouraged to apply to the board by my department chair in the college of education, I wrote a synopsis of my qualifications and a statement about why I wanted the position, gathered the requested

signatures of support from the chairman and dean and submitted the application to the president's office. A short time later, I was notified that I had won the position handily, first in a line of one. This paper details some of the activities and processes my colleagues, and I engaged in that were useful in developing a sustainability strategic plan for the college of education. The plan itself is also presented. The hope is that it will be useful to other teacher education colleges as well as to groups with similar organisational structures and missions interested in developing sustainability plans.

Understanding sustainability

At our first meeting, the board chair handed out large 3-ring binders outlining our responsibilities in terms of "deliverables," a delivery timetable, some background reading and a framework for a recommended strategic planning method: the SWOT analysis. SWOT analyses involve identifying strengths, weaknesses, opportunities and threats so that the factors related to project success can be more explicitly managed. As might be expected from a roomful of professors, the handing-out of binders was greeted with immediate critique – from the pedestrian "why paper when you could've emailed?" to the more substantive "we shouldn't use SWOT because it encourages oversimplification". After a brief discussion, we agreed that, yes, emailing documents was usually preferred, and using the SWOT framework would not prevent our use of other tools, and so we agreed to *begin* with SWOT, which, for those of us unfamiliar with the method (three of the seven) meant starting with the basics. The first task of a SWOT analysis is to carefully articulate a project's objective. However, it quickly became clear that although each of us could directly relate sustainability to our work, we could not define the concept broadly enough to capture its essence for everyone in the room without becoming so all encompassing as to be vacuous. Thus, our first task was to define our basic term of reference: what do we mean when we say *sustainable*? For this, we found guidance in the work of the United Nations.

In 1983, amid growing concern about the accelerating deterioration of the environment and the attendant social, cultural and economic consequences, the United Nations General Assembly convened the World Commission on Environment and Development (more commonly known as the Brundtland Commission) to propose long-term environmental strategies for achieving sustainable development. Four years later, the Brundtland Commission published *Our Common Future* (Brundtland, 1987), putting forward a succinct conceptualisation of sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. xiv). Although there was concern among us that the word "development" was problematic and also that the commission's view seemed anthropocentric, we agreed to adopt the Brundtland conceptualisation as our working definition of sustainability.

The responsibility of educators regarding sustainability

Although I shared some of my colleagues' hesitation about the historically anti-environmental signifiers that travel with the word "development" and the apparent anthropocentrism of the Brundtland conceptualisation, as a professor of education I found the commission's work particularly interesting because of the heightened responsibility it placed on educators. The commission purposefully defined the report's terms of reference very broadly: as Brundtland wrote in the chairman's forward, the "environment" is where we all live; and "development" is what we all do in attempting to improve our lot within that abode" (Brundtland, 1987, p. xiv). This broad conception of sustainability (and the report's title) makes it clear that although the report was written for us all, it addressed the young in particular and noted that "the world's teachers have a crucial role to play in bringing this report to them" (Brundtland, 1987, p. xiv). The implied logic is simple: education must precede wise action.

Seeking to advance the recommendations of *Our Common Future*, the UNGA declared the decade from 2005–2014 as the United Nations Decade of Education for Sustainable Development with a goal "to integrate the principles, values and practices of sustainable development into all aspects of education and learning, in order to address the social, economic, cultural and environmental problems we face in the 21st century" (UNESCO, 2005, paragraph 4). Recognizing that teacher education institutions are well positioned as key change agents, in early 2005, UNESCO published a set of guidelines for reorienting teacher education towards sustainability (Guidelines and Recommendations for Reorienting Teacher Education to Address Sustainability, 2005).

Sustainability and the college of education

Like the authors of the Brundtland Report and the UNESCO guidelines, my faculty-in-residence colleagues expected that the college of education might immediately assume a lead role in university sustainability efforts, given our position as key change agents who, by educating one teacher about sustainability, might reach hundreds of children. It seems a reasonable expectation; however, I was not as sanguine, being more intimately familiar with the historical, institutional and programmatic constraints that often impede reform in colleges of education. My less-than-optimistic views notwithstanding, I began the college SWOT analysis. Data from two main sources informed the analysis: lengthy discussions with each of the seven department chairs and two brown-bag lunches where faculty and staff discussed sustainability. To the extent possible without overly disrupting discussion, I took notes during each of the meetings and at both brown-bag lunches and then reviewed my notes immediately after each gathering. The resulting nine documents do not offer verbatim accounts of conversations, but rather represent an attempt to capture the essence of what was said.

Analysis of these documents followed Creswell's (1998) guidelines for categorical aggregation, interpretation and generalisation. Each document was read a minimum of four times, with at least two days between subsequent readings. Line by line coding was con-

ducted using an unmarked copy of the text for each reading, with provisional codes applied to phrases, sentences and segments of text that appeared to be related to any aspect of sustainability infusion into the work of the college. During this initial stage of data analysis, a very broad interpretation of the construct “infusing sustainability into the work of the college” was used, resulting a relatively large code list. After each document was coded four times, the four resulting code lists were compared and an attempt was made to form a single internally consistent code list for each document by revisiting the document once more specifically to re-examine areas of differences in the four code lists. The process was repeated with each document, resulting in a set of both etic and emic codes representing the data from all nine documents.

This code list was then arranged using the four SWOT categories in order to locate emerging themes within these categories (Adcock & Collier, 2001). These themes were identified using a process of direct interpretation: the presence of a given code was considered as representing a single instance of a construct without attempting to look for multiple instances or to divine the context in which the construct was situated (Creswell, 1998). Thus, each individual code was assigned to one or more category directly, without further examination of the data, and the resulting categories were then examined to identify underlying themes. The data was then examined once again with these themes in mind in order to make what Creswell (1998) refers to as “naturalistic generalizations”. Thus, themes in evidence in one document were cross-referenced with themes from other documents in an attempt to gauge the significance of the themes and the characteristic of a theme’s relationship to other themes. Themes that emerged as particularly important in relation to infusing sustainability into the work of the college informed the initial draft of the SWOT analysis.

In the spirit of action research and to increase the likelihood that the initial draft of the analysis was representative of the range of ideas and perspectives offered by the original discussants (Lewin, 1958), the draft was shared with a number of them, chosen for their availability and their stated willingness to offer feedback, and the draft was revised based on their comments. These comments required only minimal revision of the draft. To ensure the draft represented reasonable conceptualisations of the various concepts underpinning sustainability, the resulting draft was shared with the six other university sustainability board members, each of whom have expertise about various aspects of sustainability and sustainability education. Again, minimal revision was required and lead to the final draft of the analysis. Table 1 presents a summary of the primary findings in each SWOT category.

Table 1. Summary of SWOT analysis of the college of education

Strengths:
<ul style="list-style-type: none">• a strong alignment between college mission and vision statements and sustainability goals• a belief that sustainability will be of increasing importance• an awareness regarding potential cost-savings of implementing sustainable practices (for instance, paperwork reduction, virtual field supervision, etc.)

Sequel to Table 1 see on p. 9.

*Sequel to Table 1.***Weaknesses:**

- currently, virtually no explicit sustainability-centred instruction in any courses
- a perception that courses are too constrained by the requirements of certification to modify to address sustainability
- a lack of knowledge about the relationship between sustainability and the subject areas in which the faculty teach
- an absence of external incentives to pursue sustainability (for instance, retention, tenure, or promotion incentives)
- a perception that sustainability efforts would add to workload
- a perceived lack of time for the collegial interaction critical to plan and implement sustainability projects
- a perceived lack of interest from college and university administration

Opportunities:

- strong faculty and staff interest to learn more about sustainability
- a perception that focusing on sustainability might imbue work with new meaning and significance
- increasing mention of sustainability by accrediting agencies in programme assessment
- increased opportunities for external support and sponsorship from organisations that focus on the environment
- an interest in sustainability professed by many students

Threats:

- base budget allocations for sustainability difficult to obtain
- other colleges of education in our recruitment area perceived as “greener” and therefore can more readily recruit “green” students
- the prevalence of traditional disciplinary curriculum frameworks makes incorporating sustainability, which is trans-disciplinary, arduous
- many students discouraged by lack of attention to sustainability
- an ever-narrowing K-12 curriculum constrains teacher preparation programmes

Drafting the sustainability strategic plan

With the SWOT analysis in hand, a sustainability strategic plan was drafted using a public wiki to allow direct input from all who wanted to be involved. As the UNESCO guidelines point out, education for sustainable development must accommodate evolving views, even the evolving nature of the concept of sustainability itself. Thus, our goal was not to articulate a fixed policy but rather to produce a coherent plan to (1) foster awareness and encourage people to join the effort and (2) readily accommodate input as more people became involved. The sustainability plan consists of three position statements, followed by five broad recommendations aligned with those statements and 20 specific actions aligned with the five recommendations.

Position statement 1: Sustainability serves our students

When we incorporate sustainability into the core mission of the college, we serve students in their personal lives by encouraging them to become more deeply involved in issues that will profoundly shape their futures. Increasingly, sustainability is moving to the fore: in

2008, Ecuador became the first country on the planet to recognise the inalienable rights of nature (Community Environmental Legal Defense Fund, 2008); U.S. law schools are rearranging their curriculum to address environmental law (Kingsolver, 2010); environmental issues are increasingly central to getting elected to public office; sustainability is being folded into K-12 schools, from early childhood education to secondary school (Spring, 2008; Pearson & Degotardi, 2009). By helping our students understand and critically examine complex issues that defy simple solutions, they will be better able to participate purposefully in actions that will increasingly define their personal and professional environments. Perhaps more importantly, incorporating sustainability into our core mission leverages our role as key change agents (UNESCO, 2005) by positioning our students to assume leadership roles in their professional endeavours. When we help them view sustainability as a worthwhile and necessary goal and when we help them grapple with the challenges of adopting sustainable practices in K-12 schools, we enable them to teach their students about these issues as well.

Position statement 2: Sustainability serves our instruction

When we incorporate sustainability into the core mission of the college, we avail ourselves of an anchoring concept that can bring cohesion, enhanced relevance and a broader context to our work. Many instructors do not immediately connect sustainability to the concepts that lie at the heart of their various courses; however, an increased awareness of sustainability will make those connections increasingly visible. Sustainability is inextricably and deeply related to issues of social justice, equity, democracy and education (Orr, 2004, 2009; Hawken, 2007), and it is a rare course that does not intersect significantly with sustainability. Notably, when instructors make these connections and share them with each other, opportunities for cross-course experiences open, leading students to view coursework as more cohesive and relevant not only in terms of the jobs they hope to land but also in terms of their roles as responsible and empowered citizens. In the current political environment, in which colleges of education find themselves under attack by critics who claim they are becoming increasingly irrelevant (Duncan, 2009), positioning sustainability as a core component of what we teach elevates our purpose and offers a way to resist the current trends that seek to commodify educational outputs and will help to ensure that our curriculum is “rooted in the best that has been produced by human beings and designed to both stir the imagination and empower young people with a sense of integrity, justice and hope for the future” (Giroux, 2010, Para 13).

Position statement 3: Sustainability serves our operational efficiency

Operational efficiency resulting from sustainable practices promises sizable – and often immediate – cost savings to the college in three major areas: instruction and supervision, resource usage and personal awareness. First, most of the college’s courses are face-to-face. However, when appropriate, moving some instruction online will reduce travel to and from

campus as well as on-campus energy usage. Given the proper technological and pedagogical support, many instructors may find that some components of their classes can be conducted equally well (or perhaps better) online (Tallent-Runnels, Thomas, Lan, Ahern, Shaw, & Liu, 2006). Moving portions of field supervision online also promises significant cost and time savings. Second, a sustainability focus encourages development of policies and practices to reduce the staggering volume of paper use, which reaches several hundred sheets of paper per student per year (from admission procedures, to coursework, to summative assessments, to credentialing and graduation processes and beyond). Digital movement and storage of records could cut this volume by orders of magnitude. Third, reorienting the college to address sustainability encourages personal awareness of our ecological impact. Turning off power strips at day's end, closing windows after evening classes, sharing refrigerators, using natural light, reusing water bottles and eating more sustainably while we are on campus will result in cost savings from decreased energy usage. Of greater potential value is the deeper understanding about sustainability we may gain and the connections to areas of influence we may more readily see.

Recommendations for the college of education

Below are five recommendations. Following each recommendation is a short explanation of the rationale behind it. Each recommendation is followed by several proposed courses of action the college might elect to pursue to align itself with the recommendation.

Recommendation 1: Members of the college should work to build consensus for incorporating sustainability into the core mission of the college.

Top-down initiatives often fail because of insufficient buy-in, particularly when those initiatives rely heavily on volunteer effort. A key to overcoming these potential barriers is to make recommendations broad enough to include a wide range of activities, but detailed enough to suggest concrete opportunities for contribution. Ideally, these actions should align with existing activities and interests of college members to encourage people to become involved according to their own priorities.

Proposed actions are the following:

- 1a. develop a formal and democratic system of participation, such as convening a college-level sustainability committee;
- 1b. explicitly include sustainability in the college vision and mission statements;
- 1c. support discussion by launching a college-wide sustainability reading programme;
- 1d. continually refine this strategic plan to reflect growing consensus.

Recommendation 2: Members of the college should explicitly incorporate sustainability in all aspects of college activity

Often, the contents of vision and mission statements are not easily visible in the day-to-day operations of an organisation, which can undermine its credibility and relevance. As the UNESCO guidelines point out, students “will notice our hypocrisies...and are very aware of the difference between what is said in class and what is practiced by individuals, the institution, and the community” (p. 41). To encourage the full embrace of sustainability, education should centre on communities and how they are connected. Helping students understand how the college community impacts the environment can be a powerful model for thinking about other communities, and making explicit connections between actions and environmental consequences can orient us to assume responsibility.

Proposed actions are the following:

- 2a. launch an awareness campaign that provides information about sustainability at various choice points in the college;
- 2b. develop guidelines to minimise the use of paper for application, admissions, credentialing, communication and long-term record storage;
- 2c. develop guidelines to purchase environmentally sustainable supplies and materials;
- 2d. incentivise those with relevant expertise to help instructors analyse their courses to explore how to address sustainability;
- 2e. include instruction that encourages students’ input into course revision (for instance, students in a foundations class might discuss connections between sustainability and poverty; students in a methods class might analyse district curricula to identify sustainability related topics; students in a field placement might be encouraged to teach lessons with a sustainability focus, etc.;
- 2f. initiate a sustainability pledge asking college members to reduce their ecological footprint, for instance, the Harvard Sustainability Pledge (n.d.).

Recommendation 3: Members of the college should seek to work within our individual spheres of influence to bring about change in areas under our authority.

With any attempt to reorient a large, diverse and complex organisation, some will act as pioneers and early adopters of progressive ideas while others will lag far behind or resist change altogether. Pioneers will experience setbacks, false starts and failures, and so it is critical that they find ways to support each other to overcome the challenges. The guiding principle behind this recommendation is captured eloquently by Margaret Mead’s remark – “Never doubt that a small, group of thoughtful, committed citizens can change the world. Indeed, it is the only thing that ever has”.

Proposed actions:

- 3a. develop partnerships with colleagues on specific sustainability-related projects;
- 3b. read sustainability education in common with a colleague(s) and set aside time to discuss it;
- 3c. find ways to connect sustainability to existing duties and responsibilities by forming synergistic partnerships;
- 3d. develop avenues to communicate with colleagues about sustainability efforts (Recommendation 5).

Recommendation 4: Members of the college should develop sources of funding and other mechanisms to support our efforts to incorporate sustainability into our core mission.

Although efforts at other teacher education institutions have demonstrated that progress is not entirely dependent on funding, finding money to pay for actions with up-front costs and to pay for faculty release time will allow for more rapid progress. One promising mechanism is to create a system to leverage future savings to pay for present work. Many institutions (for instance, Harvard University) have complex and well-funded programmes that fund sweeping initiatives. Others (for instance, Macalester College) use more modest mechanisms to support smaller scale efforts. Whether large or small, these mechanisms all operate using the same general principle: reinvest the savings that result from sustainability efforts to fund further efforts. Other mechanisms to fund sustainability efforts include finding grants and donors to support the work. Sustainability efforts can also be supported in ways that do not require funding, such as creating policy to formally recognise service to the college.

Proposed actions:

- 4a. Apply for grants to pay for faculty release time to support college sustainability efforts.
- 4b. Establish mechanisms to recoup the money the college saves on utilities, supplies, travel reimbursements and online course offerings that accrue as a result of sustainability efforts and direct this money to fund future sustainability efforts.
- 4c. Establish mechanisms that recognise service to the college in the area of sustainability in terms of retention, tenure and promotion.

Recommendation 5: Members of the college should strive to communicate effectively and extensively regarding sustainability

Sustainability is a complex issue that contains many diverse perspectives and many diverging opinions. The UNESCO guidelines point out that the way sustainability issues are

communicated can often have a profound effect on the success of sustainability efforts. As one contributor wrote, sustainability:

... is often presented as a large unifying approach that over generalises and diminishes the importance of specific concerns. As well, in popular usage, the language of sustainability either trivialises or undermines the concept of ESD, as we understand it. A more productive approach in this context might be to highlight an analysis that focuses on the interrelatedness of the society, environment, and economy. Deemphasising the language of sustainability and focusing on this analysis may do much to further the goals of ESD.

It is important to recognise that legitimate differences exist and can be expected to arise about sustainability between people who are equally dedicated to equity and excellence in education. The guiding principle behind this recommendation is to recognise the commonalities and realise that while we may have different strengths, skills, passions and approaches, as a college, we do share a common vision and a common mission that is consistent with the goals of sustainability.

Projected actions:

- 5a. create a website dedicated to communicating about sustainability efforts;
- 5b. create a college-level award that recognises individuals who put forth significant effort or display leadership, especially when it is voluntary or goes beyond normal expectations;
- 5c. describe efforts, progress and successes and communicate them via all appropriate channels (for instance, submissions to appropriate journals, newsletter briefs, conference presentations, etc.).

Conclusion

The development of a sustainability strategic plan, of course, represents only the first step along what is sure to be a long and difficult road towards sustainability in our college. Next steps, however, are beginning to take shape. For instance, a proposal to form an officially recognised college-level ad-hoc committee on sustainability (recommendation 1a.) was recently put before the dean and the seven department chairs and was approved for a period of two years, with the possibility of an extended charter based on an assessment of continued need. This committee, whose membership is drawn from all faculty ranks, staff and students in the college, is charged with (1) drafting recommendations in support of official college-wide adoption of the strategic plan, (2) spearheading implementation of the plan by recommending a time-line for adoption and articulating a sequence of related concrete actions aligned with that timeline, (3) assessing the effectiveness of the above sustainability efforts and (4) developing further recommendations based on that assessment. The formation of this committee represents the first administratively sanctioned college-wide collaborative effort to infuse sustainability into all aspects of the work of our college, and, as such,

it holds promise as an important bellwether of a systemic movement towards sustainability in our college.

Notably, although the plan presented here was developed in the context of a particular institution, it seems likely that other teacher education institutions as well as other institutions of similar size and complexity or with similar missions might find the approach presented here useful in the development of strategic plans appropriate for their contexts. Two features of the approach that seems particularly important to preserve regardless of institutional context and that are consistent with Lewin's (1958) social change model, are inclusiveness and transparency. For instance, drafts of the SWOT analyses were shared widely with anyone who expressed an interest in providing feedback, and the strategic plan based on that analysis was written using a public wiki to encourage and support collaboration.

As we approach the end of the UN Decade of Education for Sustainable Development, many of us, educators and non-educators alike, are becoming increasingly aware of the importance of living sustainably, yet are not moved to take concrete actions to meet that goal. Even those among us who are quite well educated about the importance of sustainable living often pursue unsustainable lifestyles. The average per-capita ecological footprint of my university community, for instance, is significantly smaller than the U.S. average: slightly more than four Earths as compared to 6.35 Earths (source: a university-wide Ecological Footprint Challenge survey). Clearly, however, four Earths is three too many. All too often, the challenge we face is how to bridge the gap between what we profess to believe and how we act. This plan seeks to address that challenge by attempting to build solidarity, suggesting actions framed in terms of individuals' commitments to act, yet couched in the context of the larger organisation. The hope, of course, is that if each of us operates cooperatively, yet within our own spheres of influence to encourage action consistent with sustainability principles, we may avoid the worst of what scientists warn may soon befall us. On the other hand, if we ignore these issues, we become accomplices, aiding and abetting those who plunder Earth's ecological systems. The choice is stark, and the consequences of our choices will likely echo for generations. We simply cannot afford to choose unsustainability, and until *all* of us are living within our means, we all have work to do. Pierre de Coubertin, founder of the International Olympic Committee, once quipped that the important thing in life is not the triumph but the struggle. In the context of the Olympics, perhaps he was right. With the health of the biosphere on the line, however, triumph seems equally important.

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Correspondence:

Grinell Smith, PhD, Connie L. Lurie College of Education, San José State University, 1 Washington Square, San José, California, 95192, the United States of America. Tel: 2052395607. Email: grinell.smith@sjsu.edu; grinell@gmail.com