It's Not Easy Being Green: Green Marketing and Environmental Consumerism in Continuing Higher Education

Cathy Sandeen
UNIVERSITY OF CALIFORNIA LOS ANGELES

ver the last few years, terms such as "carbon neutral," "greenwashing," and "zero impact" have begun to permeate the media. The proliferation and serious use of such terms reflect a significant cultural focus on one of the most crucial issues of our time: sustainability—an effort to reduce our impact on the environment.

Not surprisingly, the current focus on all things "green—greener—greenest" has found its way into the realm of continuing higher education as well through a proliferation of courses and programs. A recent Internet search on the phrase "sustainability certificate" produced over 7,600 results, reflecting a strong perceived or real demand.

This article provides both a working knowledge of the field and practical applications of the concepts and is organized according to the following sections:

- sustainability in the US;
- the corporate response;
- sustainability in higher education and continuing higher education;

^{© 2009} Cathy Sandeen, Dean of Continuing Education and UCLA Extension, University of California Los Angeles, Los Angeles, CA

- green marketing and environmental consumerism (including "greenwashing");
- results from a current original market research survey; and
- practical next steps for continuing higher educators.

Throughout I have provided a number of definitions of commonly accepted and relatively new terms related to sustainability.

BRIEF BACKGROUND AND CONTEXT

Carbon neutral: "Calculating your total climate-damaging carbon emissions, reducing them where possible, and then balancing your remaining emissions, often by purchasing a carbon offset: paying to plant new trees or investing in 'green' technologies such as solar and wind power" (Oxford American Dictionary).

Decarbonize: "To make an area or process environmentally cleaner by removing existing carbon or by reducing the amount of carbon produced" (*Word Spy: The Word Lovers Guide to New Words*, http://wordspy.com).

The origin of the modern environmental movement in the US usually is traced to the first "Earth Day," April 22, 1970, and the annual event has been linked to higher education from the beginning. The original Earth Day was organized as a national "teach in" with major events located on university campuses. Even the date was selected to enable maximum participation by college students (Christofferson, 310). Earth Day continues to be a defining and coalescing event for the environmental/sustainability movement.

We have witnessed evolving labels for the environmental/sustainability movement: the "ecology/ecological" label first changed to "environmental;" then "green" became the dominant label. The broad term "sustainability" eventually has superseded most others. The first application of the word "sustainability" to environmental concerns can be traced to the 1987 report of the World Commission on the Environment and Development (also known as the Brundtland Commission). The definition within this report, "development that meets the needs of the present without compromising the ability of future generations to meet their own needs," is commonly accepted today.

Sustainability has become part of the American lexicon and cultural mindset. According to a recent comprehensive public opinion survey sponsored by two major media outlets, Americans acknowledge environmental problems and are willing to do something about them. Further, 94 percent of respondents were very willing or somewhat willing to change some of the things they do to help improve the environment (Washington Post-ABC News Poll, 5).

Public opinion may be more nuanced than at first glance. According to one survey, 37 percent of American consumers feel highly concerned about environmental issues, 25 percent feel knowledgeable about the environment, and 20 percent feel they can make a difference (California Green Solutions, 1). As pollster Daniel Yankelovich elaborated:

The vast majority of people don't have very well-articulated views of the environment. They can answer an overnight public opinion poll. But that's not an answer they can necessarily talk about in-depth or understand the costs and consequences about those things. Even something like global warming, where there's been a lot of talk, the distribution of opinion is not very firm (Going Green 2 Perspective, 1).

CORPORATE RESPONSE

Natural capitalism: "It's what capitalism might become if its largest category of capital—the 'natural capital' of ecosystem services—were properly valued." Value is estimated at \$33 trillion per year (Lovins).

Triple bottom line: "Essence of sustainability by measuring the impact of an organization's activities on the world—economic, environmental, and social" (Savitz).

How has corporate American responded to the subject of sustainability? Joel Makower explained in his most recent book, *Strategies for the Green Economy*:

The past few decades of green business evolution can be represented by three waves of change. It began with a sort of eco-Hippocratic oath—"First, do no harm"—in which companies aimed to get the worst environmental abuses under control. Next came "Doing well by doing good," in which companies found that they could reduce costs—and enhance their reputations—by taking a few proactive steps. And then came "Green is green"

(as coined by General Electric Chairman Jeffrey Immelt), the recognition that environmental thinking can do more than improve the bottom line. It can help to grow the top line through innovation, new markets, and new business opportunities (Makower, 12).

Some examples: Anheuser-Busch developed an aluminum can that is 33 percent lighter than the standard can, resulting in \$200 million savings per year. McDonald's changed its paper napkin design, eliminating embossed golden arches on napkins. This allowed the firm to purchase thinner paper napkins and reduced the volume of supplies by 100 tractor-trailers per year (Makower, 32).

The US consumer market has scored several sustainable product "home runs" in recent years. Toyota's Prius hybrid vehicle is an obvious example. Less obvious, perhaps, but also successful, is the Apple iPod: electronic downloads of music reduce the impacts of manufacturing and shipping CDs and packaging waste. Moving out of the realm of products into services, the online auction service eBay facilitates the reuse and recycling of used items.

But what about a company like Amazon.com? On the surface, the online retailer appears to be sustainable in that it eliminates the carbon impact of bricks-and-mortar retail outlets and consumer travel to and from those outlets. However, maintaining large distribution facilities and shipping goods directly to the consumer may negate the initially recognized carbon savings. The Amazon.com example illustrates the complexity of the issue of sustainability—in this case metrics to measure and describe degrees of carbon neutrality. How sophisticated are consumers in their understanding of issues? How ethical are companies in their descriptions of their efforts? These questions are considered under the topic of "greenwashing" later in this article.

SUSTAINABILITY IN HIGHER EDUCATION

Environmental science: "The branch of biology concerned with the relations between organisms and their environment" (http://www.thefreedictionary.com/environmental+science).

Sustainability efforts on university and college campuses encompass three main areas: academic programs, campus operations, and communication and marketing. Myriad organized responses to sustainability exist and several organizations and initiatives have emerged as leaders.

The American College and University President's Climate Commitment is a grass-roots organization that describes itself on its website as "a high-visibility effort to address global warming by garnering institutional commitments to neutralize greenhouse gas emissions, and to accelerate the research and educational efforts of higher education to equip society to restabilize the earth's climate." Signed by at least 100 college presidents, the goal is to call attention to the issue of climate change and to meet specific milestones for emission reduction on university campuses.

The Association for Advancement of Sustainability in Higher Education (AASHE) also has emerged as a leader. According to its website, the vision of this organization is "to see higher education take a leadership role in preparing students and employees to achieve a just and sustainable society." AASHE developed a rating system to guide campuses in assessing and improving their efforts over time.

Sustainability is becoming important in student recruitment. The Princeton Review's latest "College Hopes and Worries Survey" queried 10,300 applicants and their parents. Findings indicated sustainability was beginning to emerge as a factor in enrollment decisions. Sixty-three percent (63 percent) of respondents indicated they valued receiving information about an institution's sustainability efforts and 23 percent said information would "strongly" or "very much" affect their decision to attend.

The Princeton Review's "Green Honor Roll" is not the only attempt to rate campuses' sustainability programs. The Sierra Club publishes campus ratings, as does the National Wildlife Federation, and AAASHE has its own rating system, STARS (Sustainability, Tracking, Assessment, and Rating System).

Considered the standard, the voluntary self-reporting STARS system was developed through an inclusive and transparent process. An important rationale for the system is the following:

There is currently no standard, comprehensive way to compare the sustainability performance of higher education institutions and to benchmark a single institution's performance over time. This makes it difficult for schools to reap the marketing, recruitment, and fundraising benefits of sustainability leadership (AASHE, 4).

Comprehensive categories assessed within the STARS process include: cocurricular education; curriculum; faculty and staff development; research; buildings and dining services; energy and climate; grounds; material, recycling, and waste minimization; purchasing; transportation; investment; planning; sustainability infrastructure; community relations and partnerships; diversity, access, and affordability; human resources; and trademark licensing.

In the academic realm, traditional degree programs in sustainability-related fields are expanding on university campuses. Just as a search of the term "sustainability certificate" yielded almost 8,000 results, a search on "environmental degrees" yielded over 57,000 results. The Disciplinary Associations Network for Sustainability website identifies and describes 49 environmental studies degrees. *Business as Usual: The 2008 Net Impact Student Guide to Graduate Business Programs* reviewed 60 "Green MBA Programs"—specialized MBA programs with a sustainability orientation.

SUSTAINABILITY IN CONTINUING HIGHER EDUCATION

Green-collar job: "A paid position providing environmentally-friendly products or services; term suggests high standards regarding fair wages, equal opportunity, and healthy working conditions" (Ella Baker Center for Human Rights, Oakland, CA, http://www.ellabakercenter.org).

Programmatic responses to sustainability within continuing higher education encompass four categories. Many units incorporate sustainability topics throughout course offerings. A sustainable design course may appear in a graphic design or interior design program. Sustainability content may be addressed in other courses not devoted entirely to sustainability topics.

A second, less common approach is integrating sustainability throughout the curriculum by asking all instructors and faculty to address sustainability in some way within all classes. A third approach is to design a sustainability program in the same way as other academic programs. Finally, many continuing higher education programs are developing targeted, quick-response classes and programs to assist adult students in making transitions to new green-collar jobs or in direct response to new federal grant programs.

Continuing education units also are integrating sustainability practices into other parts of their operation. Online and web-enhanced courses reduce carbon emissions and paper waste by their very nature. Increased use of e-marketing has a similar effect. Other common operational efforts include sourcing recycled products; waste recycling; transportation mitigation; "greening" meetings through purchasing sustainable supplies and

local food; general waste, energy, and water-use reduction; measuring and reducing the aggregate carbon footprint of the organization; and even organizing volunteer efforts to support environmental causes.

Some continuing higher education units also are promoting or using sustainability in their communication practices. A simple example would be highlighting, framing, or emphasizing the sustainability aspects of current classes or day-to-day activities through regular marketing channels. Some units have developed their own version of "ecolabels" to further highlight sustainability-related programs. In this way, continuing education units are entering the realm of "green marketing."

GREEN MARKETING AND ENVIRONMENTAL CONSUMERISM

Green marketing:

- 1) "The marketing of products that are presumed to be environmentally safe" (American Marketing Association).
- 2) "The process of selling products and/or services based on their environmental benefits" (http://sbinfocanada.about.com).
- 3) "Green marketing incorporates a broad range of activities, including product modification, changes to the production process, packaging changes, as well as modifying advertising" (Polonsky, 1).
- 4) "Green marketing is mostly about making (breakthrough) green stuff seem normal—not about making normal stuff seem green" (Grant, 56).

As the above definitions illustrate, green marketing encompasses a broad range of activities from product design to writing advertising copy. It is increasingly important because US consumers are paying more attention to a product's or service's sustainability features as well as the practices of the provider organization.

A component of green marketing—environmental consumer segmentation based on attitudes toward sustainability—has become somewhat of a cottage industry among market research firms in recent years.

For example, the Natural Marketing Institute established the following labels and the size of the market segments (in percentage): Lifestyle of Health and Sustainability (16 percent); Naturalites (25); Conventionals (23); Drifters (23); Unconcerned (23). A report by the Hartman Group consultants yielded similar results: Radical Engagement (36 percent); Sustained Optimism (27); Divine Faith (20); Cynical Pessimism (9); and Pragmatic

Acceptance (8) describe consumer segments based on sustainability-related attitudes and beliefs.

Marketing experts also have begun to focus on other extremely detailed and specific elements of green marketing. Examples include defining the precise shade of green "most associated with the environment" and "visual images most associated with the environment." For those interested, "trees/forest," followed by "oceans/rivers/waterfalls," and "flowers" top one list (Getty Images Map Report 2—Aspirational Environmentalism).

In a 2009 study of environmental claims in consumer products, Terrachoice Environmental Marketing found a "79 percent average increase in the number of 'green' products among North American stores visited in both 2007 and 2008/2009," and that the use of eco-labels was almost twice as common in 2009 than in 2007 (Terrachoice, 4).

Many current self-report consumer surveys also revealed increased attention to sustainability in purchasing decisions. According to the Hartman Group, 76 percent consider the environment when purchasing; 62 percent say current economic issues do not reduce intention to purchase; 34 percent are willing to pay more for environmental benefit; and 13 percent are buying more sustainable products now. As a 2009 Hartman Group newsletter observed:

During these tough economic times, sustainable products create that "sweet spot" that make consumers more optimistic about the choices they are making (Hartman Group, 1).

Despite consumers' own assessment of the role of environmental/sustainability attributes in their purchasing decisions, analyses of successful product launches and marketing campaigns find that such attributes are secondary. As Jacquelyn Ottman predicted 10 years ago:

Expect these enhanced primary benefits—of performance, convenience, price, and safety, for example, that accompany environmental improvements to continue to propel the market for environmentally preferable products in the years and decades ahead (Ottman 1998, 16-17).

So far, products that have emphasized green attributes alone ether fail or are less successful than products that emphasize other qualities first. Often cited in this regard is the Phillips compact fluorescent light bulb. First branded as "Earth Light," the product used much less energy than conventional bulbs. However, at \$15 versus \$0.75 per bulb, consumers were

not impressed and the product was not successful. Phillips reintroduced the product under the "Marathon" brand, emphasizing long bulb life, cost savings over time, and convenience (fewer bulb changes). Sustainability was the secondary message, and the product re-launch was highly successful.

Marketing experts do not recommend ignoring sustainability attributes completely because these attributes highly influence certain consumer segments, and many consumers are influenced to some degree. Marketing experts offer a few general guidelines for handling communication about sustainability features: precision in making sustainability claims; backing up any claims with verifiable data; providing additional information where possible; providing consistency in messaging, especially visuals and words; avoiding over-exaggeration; and employing a more humble, workin-progress tone in marketing communication (Ottman 1998, 130). Another way to state this is to be aware and wary of "greenwashing."

MISLEADING CLAIMS

Greenwashing: "The act of misleading consumers regarding the environmental practices of a company of the environmental benefits of a product or service" (TerraChoice 2007, 1).

Consumer protection against misleading marketing claims is nothing new. The Federal Trade Commission first established guidelines on the use of environmental marketing claims in 1992, updating those in 1998. Many states have additional regulations.

Consumers are increasingly concerned about being misled. In the 2008 Green Gap survey, 73 percent of respondents agreed that "companies that communicate about the environment are just trying to sell more products and services;" 52 percent agreed that "I am overwhelmed by the amount of environmental messages I hear;" and 45 percent said that "I believe companies are accurately communicating information about their impact on the environment."

A number of grassroots, consumer-driven efforts to monitor and expose greenwashing have emerged recently, including Greenwashingindex.com and two TerraChoice studies of environmental claims in North America: "The Six Sins of Greenwashing 2007" and "The Seven Sins of Greenwashing 2009."

RESULTS FROM RECENT GREEN MARKETING SURVEY

Adapting ideas from many of the current green marketing research studies cited, UCLA Extension surveyed a sample of UCLA Extension students and non-students to measure awareness and perceptions of sustainability concerns and of green marketing within our current student population. The overarching goal of the survey was to guide program development and marketing efforts, and to provide a baseline to measure changes over time.

A number of assumptions informed this study. At a basic level, I assumed our students were concerned about sustainability to some degree and that they were aware of UCLA Extension sustainability programs and practices. Based on previous research, I assumed sustainability features would be secondary to other attributes of continuing education programs, such as convenience and quality. I assumed sustainable operational practices within a continuing education organization would be a basic expectation for students (e.g., recycling, energy use reduction, etc.). I also assumed students would be somewhat wary of green marketing tactics.

Method: The survey was designed as a web-based survey with specific questions adapted from many current market-research and public-opinion surveys. Distributed via an e-mail link, the survey was sent to 14,923 randomly selected current and former students from the past year (90 percent of the total), as well as individuals who had inquired about a UCLA Extension or who had requested information but who had not yet enrolled in UCLA Extension courses. We accepted responses for a two-week period in March 2009 and offered an incentive for completing the survey: the option of entering a random drawing for a free UCLA Extension class.

We received 2,087 surveys, an overall response rate of 14 percent. (This is a solid response rate for a market research survey where a .05 to 2 percent response rate is considered acceptable.) Although the main purpose of the survey was to assist UCLA Extension program developers in making program and marketing decisions, the survey also solicited more generic information that would be of value to other continuing education organizations.

Respondent profile: Survey respondents included a majority of current and past students: 42 percent currently enrolled in a class; 41 percent enrolled within one year; 6 percent enrolled more than one year ago. A total of 10 percent of respondents had never enrolled in a class.

Relatively few respondents reported completing a class related to environmental studies: 77 percent of respondents stated they had never enrolled in one. Nineteen percent had completed a class related to environmental studies and only four percent stated they had completed a class related to sustainability at UCLA Extension.

Survey respondents were similar overall to UCLA Extension student demographics in terms of their generational breakdown: 30 percent boomers; 40 percent generation X; 27 percent millennials; 4 percent silent generation. The gender breakdown was: 66 percent female; 33 percent male. Eighty-two percent of survey respondents were employed full or parttime, and reported relatively high incomes: 24 percent earned less than \$50,000, 33 percent earned \$50,000 to \$99,000, 27 percent earned \$100,000 to \$149,000, 12 percent earned in excess of \$150,000 per year, and 15 percent of respondents declined to state their income.

Findings: Survey respondents indicated a high degree of concern when presented a list of common environmental/sustainability issues. The percentage selecting "very important" or "extremely important" for each issue is depicted in Chart 1.

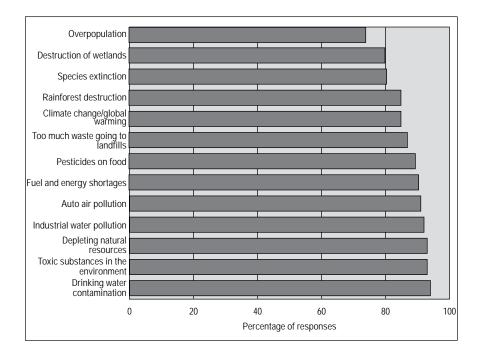


Chart 1. Most important environmental issues (in percentages)

Not only were respondents generally concerned with environmental/sustainability issues, they also indicated a degree of willingness to change their behavior because of environmental concerns. The percentages here refer to the number of respondents who selected "frequently" or "very frequently" to the following survey items:

84 percent: I am willing to change my behavior if it will improve the environment

47 percent: I make it a point to discuss environmental concerns

8 percent: I ignore discussions and information about the environment

We also asked about the sources that respondents consulted for information regarding environmental/sustainability concerns. Chart 2 shows the percentages of respondents who consulted sources "frequently" or "very frequently."

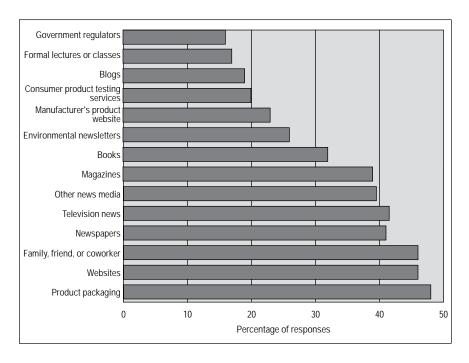


Chart 2. Sources of information about environmental/sustainability concerns

The higher relative percentage indicating they seek information from "family, friend, or coworker" (46 percent) is noteworthy, as is the low percentage for "formal lectures or classes" (18 percent). It is difficult to determine whether the relatively low response for "formal lecture or classes" is due

mainly to the respondents' choice or to the lack of availability of such programs. More detailed exploration is needed.

Survey respondents indicated a willingness to practice environmental consumerism, e.g., to alter purchasing decisions based on information about sustainability-related attributes of products or services. Chart 3 shows the percentage selecting "strongly agree" or "agree" to statements reflecting attitudes influencing their decisions.

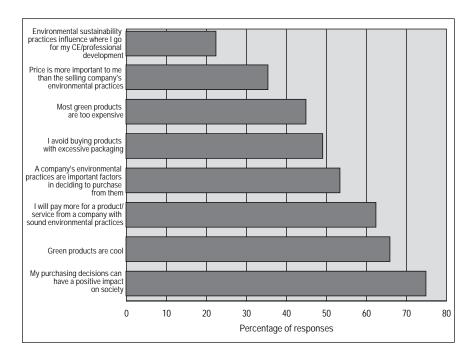


Chart 3. Attitudes toward environmental consumerism

The lower relative percentages of respondents selecting "strongly agree" or "agree" on the following statements, compared to other survey statements, suggest that students may need more information about environmental/sustainability issues:

- 43 percent: I'm sure I understand what makes an organization "sustainable."
- 39 percent: I feel I know a lot about environmental issues.
- 31 percent: I have the information I need to make sound decisions about green/sustainable products and services.
- 29 percent: I am overwhelmed by the environmental messages I see and hear.

Survey respondents also indicated universities should play a role in providing such information. Eighty-five percent strongly agreed or agreed that universities should play a role in improving the environment, and 81 percent felt universities should teach students about environmental issues. These two findings present opportunities for continuing educators. Students indicate they lack information and they look to universities to help them fill the gaps.

Similar to other recent market research, our survey respondents seem to have mixed impressions of green marketing messages based on the percentage responding "strongly agree" or "agree" to the following statements:

- 51 percent: I understand the environmental terms companies use in their marketing to me.
- 57 percent: I trust third-party rating systems for green/sustainable products (like Energy Star appliances, USDA Certified Organic food, or LEED building practices).
- 10 percent: Most companies accurately communicate information about their impact on the environment.

Also similar to other market research surveys, our respondents indicated that sustainability attributes are secondary to other attributes in making purchasing decisions. Forty-six percent strongly agreed or agreed with the statement, "In deciding to purchase a product, product features and quality are more important to me than the selling company's environmental practices."

This also was true with regard to decisions to enroll in a UCLA Extension class: 81 percent selected strongly agreed or agreed that program content and instructor quality were more important than UCLA Extension's environmental practices, and 62 percent said that convenience was more important.

Like many organizations, UCLA Extension has been focusing attention on improving its own sustainability efforts in the areas of facilities, operations, and marketing, though we have not yet actively promoted these efforts to our students. Still, the survey showed respondents had some awareness of operational efforts and improvements. The percentage responding "strongly agree" or "agree" is shown in Chart 4.

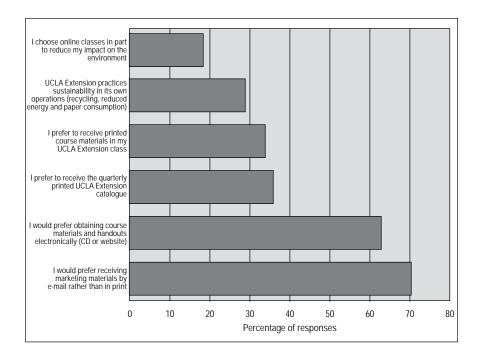


Chart 4. Concern for UCLA Extension sustainability efforts

The survey reinforced our assumption that students care about our sustainability efforts. Asked in a reverse manner, only 14 percent of respondents indicated they "strongly agree" or "agree" with the statement: "I do not care about UCLA Extension's environmental sustainability practices." They also indicated that UCLA Extension could both improve its practices and/or do a better job communicating about existing sustainability efforts. Only 22 percent of respondents indicated they "strongly agree" or "agree" with the statement: "I associate UCLA Extension with sound environmental practices."

Additional survey items further addressed our marketing communication efforts, highlighting areas to improve. Percentages again refer those responding "strongly agree" or "agree":

- 60 percent: UCLA Extension could do a better job communicating its environmental sustainability practices to students.
- 28 percent: I am aware of classes on environmental sustainability topics offered by UCLA Extension.
- 28 percent: I know where to find information about UCLA Extension's sustainability classes and programs.

- 14 percent: UCLA Extension offers cutting-edge information on environmental sustainability issues.
- 12 percent: UCLA Extension accurately communicates to me about its environmental programs and practices.

MAIN INSIGHTS

Several key insights emerged from this research that should help guide continuing educators to incorporate sustainability into their operations and programs more effectively. Despite our current economic and social challenges, sustainability will become an even more solid fixture of American values and day-to-day life. Though a truly sustainable lifestyle is limited to innovators and early adopters, the mainstream accepts sustainability on a conceptual level and only a small percentage reject it.

In addition, as our market research survey indicated, continuing education students look to universities for information on sustainability and for sound practices. As such, continuing higher educators may consider adopting a more assertive and proactive position on sustainability beyond developing and marketing a few sustainability-related academic programs.

In our case we found our students were not well aware of all our various existing sustainability initiatives. We have not wanted to overstate our efforts and risk being accused of arrogance or "greenwashing." However, based on our survey results, we see an opportunity to better communicate what we have accomplished and what we plan to do within the realm of sustainability (specific examples cited in the following section). We will follow the suggestions of environmental marketing experts and only make sustainability claims based on adequate data.

Continuing education students report practicing environmental consumerism in purchasing decisions in general, but based on our survey, we cannot say decisively they practice environmental consumerism in choosing to enroll in a class. Perhaps over time and with access to more information they will report some influence of our overall sustainability practices over their decisions to enroll with us rather than other providers. This study has raised our awareness of the potential impacts of environmental consumerism, and it is an area to be studied further.

Based on the review of other survey research and our own survey here, continuing educators should continue to view sustainability features of academic programs as secondary to other features and attributes. However, we should not avoid communicating the sustainability features of

our organizations and programs entirely. One example in particular stands out. Online programs, a mainstay of most continuing higher education programs, drastically reduce transportation impacts, yet few of us point this out. Again, other features of online courses—principally convenience and access—should be emphasized in marketing messages to students. But perhaps we should grasp the opportunity to communicate the reduced transportation-related environmental impact of online classes as a secondary message. In the market research reported here, only 18 percent of respondents indicated they agreed or strongly agreed that they chose online classes in part to reduce their impact on the environment. Perhaps we can increase this percentage over time.

PRACTICAL NEXT STEPS

UCLA Extension has identified a number of practical next steps designed to better communicate its sustainability initiatives and to position itself as a leader in sustainability. These measures are in addition to continuing to design and offer academic programs in sustainability and doing all we can to improve the sustainability of our operations. Additional practical action and communication-related steps include:

- identifying programs with sustainability content;
- identifying programs with sustainable practices (online, webenhanced);
- integrating sustainability throughout the curriculum by asking all instructors to address sustainability to some degree within all classes;
- consistently mentioning sustainability in some way in marketing messages, including media relations, blogs, and presentations;
- emphasizing data when commenting on sustainability;
- featuring students with green jobs when using student testimonials;
- organizing group teambuilding activities for staff and instructors that involve volunteering for sustainable causes (e.g., beach cleanup, tree planting, recycling efforts, etc.);
- displaying more prominent sustainability signage (e.g., recycling containers, etc.);
- monitoring, reducing, and communicating our carbon impact;
- participating in a rating process, like STARS; and
- repeating the survey in 12-18 months.

I hope this article helps raise the awareness of continuing education leaders and practitioners to the various nuances of sustainability from the student perspective. Though we have taken many steps as a profession to help prepare students for careers in sustainability fields, I am convinced we can do more to shift attitudes.

Students are aware of and concerned about a broad spectrum of environmental issues. They also state they are confused or need more information. This, perhaps, represents our greatest opportunity to do what we do best: to place such issues on the public agenda, to convene experts and resources from our campuses and communities, and to foster broad discussion and debate about sustainability and the future of our planet.

REFERENCES AND ADDITIONAL BIBLIOGRAPHY

Glossaries

Brown Flynn Consulting. *Dictionary of Corporate Responsibility and Sustainability Terms*. 2008 http://www.brownflynn.com/RESOURCECENTER/Glossary.aspx

National Resources Defense Council. *Glossary of Environmental Terms*. 2009 http://www.nrdc.org/reference/glossary/a.asp

Re:modern Sustainable Modern Living. *Green Modern Glossary of Terms*. 2009 http://www.re-modern.com/glossary.asp

US Environmental Protection Agency. *Terms of Environment: Glossary, Abbreviations, and Acronyms*. October 2, 2006 http://www.epa.gov/OCEPAterms

Green Marketing/Environmental Consumerism

California Green Solutions. "Green Consumer Research Outlines the Challenge." Aug. 2007. http://www.californiagreensolutions.com/cgi-bin/gt/tpl.h,content=688

Gainor, Dan. "Going Green: The Media Reveal a Major Color Scheme." 20 Jun. 2007. The Business and Media Institute. http://www.businessandmedia.org/printer/commentary/2007/20070620155029.aspx

Grant, John. The Green Marketing Manifesto. Chichester, UK: John Wiley & Sons, 2007.

GfK Group. Green Gauge Report. New York: GfK Consulting, 2007.

Hanas, Jim. "A World Gone Green." *Advertising Age*. 8 Jun. 2007. http://adage.com/ecomarketing/article?article_id=117113

The Hartman Group. "Economic downturn? The 'Green' Turnaround." 21 Jan. 2009. http://www.hartman-group.com/hartbeat/economic-downturn-the-green-turnaround>

- ----. "The Green Bottom Line: This Time It's Personal." 18 Jun. 2008. http://www.hartmangroup.com/hartbeat/the-green-bottom-line-this-time-it-personal
- ----. Report on Sustainability: Understanding the Consumer Perspective. http://www.hartman-group.com/publications/reports/the-hartman-report-on-sustainability-understanding-the-consumer-perspective
- ----. "Sustainability: The Corporate Tie-breaker. 23 May 2007. < http://www.hartman-group. com/hartbeat/sustainability-the-corporate-tie-breaker>
- ----. "Sustainability: Pathways to a Brand Halo." 24 May 2007. http://www.hartman-group.com/hartbeat/sustainability-pathways-to-a-brand-halo
- ----. "Sustainability: The Rise of Consumer Responsibility, Executive Summary." http://www.hartman-group.com/publications/view/81>

- Hunt, Mary. "Cone Green Gap Survey on What Green Consumers Want." Sustainable Products. 15Apr. 2008. http://www.sustainableproductsblog.com/mts/2008/04/cone-report-on.html
- Jedicka, Wendy and Jacquelyn Ottman. "Design: Green—Green Means Go." Package Design Magazine. 2006. http://www.packagedesignmag.com/issues/2006.11/special.green.green.means.go.shtml
- Leopold Center for Sustainable Agriculture. *Ecolabel Value Assessment Report: Consumer and Food Business Perceptions of Local Foods*. Nov. 2003. http://www.leopold.iastate.edu/pubs/staff/ecolabels/summary.htm
- Ottman, Jacquelyn A. Green Marketing: Opportunity for Innovation. 2nd ed. New York: Book-Surge, 1998.
- ---. "The 5 Simple Rules of Green Marketing." Sustainable Life Media. 2007. http://www.greenmarketing.com/files/articles/The5SimpleRules.pdf
- ---, Edwin R. Stafford, and Cathy L. Hartman. "Avoiding Green Marketing Myopia." *Environment*. 48.5 (2006): 22-36.
- ---. "Eco-logos: A Double Edged Sword." Sustainable Life Media. http://www.greenmar-keting.com >
- ---. "Lessons From the Green Graveyard." *The Green Business Letter*. J. Ottman Consulting, Inc. May 2002. http://www.greenmarketing.com
- ---. "Marketers, Follow That Prius." Advertising Age. 28 May 2008. http://www.greenmarketing.com
- ---. "Next-Generation Green Marketing: Beyond Billboards." Sustainable Life Media. 27 Sept. 2007. http://www.greenmarketing.com >
- ---. "Power of Green Lies in Marketers' Hands." J. Ottman Consulting, Inc. 9 Sept. 2008. http://www.greenmarketing.com
- ---. "The Real News about Green Consuming." *The Green Business Letter.* J. Ottman Consulting, Inc. May 2002. http://www.greenmarketing.com
- Polonsky, Michael Jay. "An Introduction to Green Marketing." *Electronic Green Journal*. 1.4 (1994): 1-10. http://repositories.cdlib.org/uclalib/egj/vol1/iss2/art3
- Sustainable Brands. "SB07 Update: Consumers Will Double Spending on Green." Sustainable Life Media. 28 Sept. 2007. http://www.sustainablelifemedia.com/content/story/brands/09282007_1
- Yankelovich, Inc. The Futures Company. "Going Green 2 Perspective: Study Overview." 2008. PowerPoint presentation. http://www.yankelovich.com

Greenwashing

Cone. "Cone Releases 2008 Green Gap Survey." Press release. 15 Apr. 2008. http://www.coneinc.com/content1136

Elgin, Ben. "Little Green Lies." BusinessWeek. 29 Oct. 2007: 45-48.

EnviroMedia. *Greenwashing Index*. EnviroMedia Social Marketing and the University of Oregon. 2009. http://www.greenwashingindex.com

Environmental Leader. "How to Avoid a Green Marketing Backlash." 15 Apr. 2008. http://www.environmentalleader.com/2008/04/15/how-to-avoid-a-green-marketing-backlash>

Nieto, Diana Verde. "Consumers Understand Greenwash, So Why Can't the Communications Industry?" Environmental Leader. 15 Apr. 2008. http://www.environmentalleader.com/2008/06/17/consumers-understand-greenwash-so-why-cant-the-communications-industry

Ottman, Jacquelyn. "Don't Greenwash Your Marketing." Advertising Age. 4 Mar. 2008. http://www.greenmarketing.com

TerraChoice Environmental Marketing Inc. "The 'Six Sins' of Greenwashing: A Study of Environmental Claims in North American Consumer Markets." 2007. < http://www.terrachoice.com/files/6_sins.pdf>

---. "The 'Seven Sins' of Greenwashing: Environmental Claims in Consumer Markets." April 2009. http://sinsofgreenwashing.org/findings/greenwashing-report-2009>

US Federal Trade Commission. Part 260—Guides for the Use of Environmental Marketing Claims." Bureau of Consumer Protection. 1998. http://www.ftc.gov/bcp/grnrule/guides980427.htm

Walsh, Bryan. "Eco-Buyer Beware: Green Can Be Deceiving." Time. 11 Sept. 2008. http://www.time.com/time/printout/0,8816,1840562,00.html

Sustainability in Higher Education

American College and University Presidents Climate Commitment. 2007. http://www.presidentsclimatecommitment.org

Association for the Advancement of Sustainability in Higher Education. Sustainability Tracking, Assessment and Rating System for Colleges and Universities. Version 0.5. 10 Apr. 2008. http://www.aashe.org/stars/index.php

DiMeglio, Francesca. "Green Business Programs Gain Traction." Business Week. 2 Feb. 2009. http://www.businessweek.com/bschools/content/feb2009/bs2009022_467946.htm

Hattam, Jennifer. "10 That Get It." Sierra Club. Nov.-Dec. 2007. http://www.sierraclub.org/sierra/200711/coolschools/ten.asp

MacMillan, Douglas. "Switching to Green-Collar Jobs." *BusinessWeek*. 10 Jan. 2008. http://www.businessweek.com/managing/content/jan2008/ca2008018_005632.htm

National Wildlife Federation. Campus Environment: Report Card on Sustainability in US Higher Education. 2008. http://www.nwf.org/campusEcology/docs/CampusReportFinal.pdf>

Petersen, John. "A Green Curriculum Involves Everyone on the Campus." *The Chronicle of Higher Education*. Commentary. 54.41 (10 Jun. 2008): A25.

The Princeton Review. "Colleges 'Green Ratings." Press release. 28 Jul. 2008. http://www.princetonreview.com/green/press-release.aspx

Robinson, Tom. "Green Apples and Green Oranges: New Green Ratings Differ in their Measure of Sustainability on Campus—and Their Usefulness." *The Greentree Gazette*. Nov. 2008: 22-32.

Rowe, Debra. "Environmental Literacy and Sustainability as Core Requirements: Success Stories and Models." *Teaching Sustainability at Universities: Towards Curriculum Greening*. Ed. Walter Leal Filho. New York: Peter Lang, 2002.

Taft, Kyle. "Recruiting with Sustainable Design." *Green@work*. Nov.-Dec. 2007. http://www.greenatworkmag.com/magazine/articles/2007/novdec/cover.html

University Continuing Education Association. "CE Units Usher in the Green Economy." *InFocus.* 13.8 (Nov.-Dec. 2008): 1-7.

Sustainability in Business

Hart, Stuart L. "Beyond Greening: Strategies for a Sustainable World." Harvard Business Review on Green Business Strategy. Boston: HBS Press, 2007, 99-123.

Grocery Manufacturers/Food Products Association. Sustainability: Balancing Opportunity and Risks in the Consumer Products Industry. Executive Conference Report. 2007. http://www.gmaonline.org/publications/docs/2007/US_CB_GMASustainabilityExecSummary_062007. pdf >

Lovins, Amory B., L. Hunter Lovins, and Paul Hawken. "A Road Map for Natural Capitalism." Harvard Business Review on Green Business Strategy. Boston: HBS Press, 2007, 65-97.

Makower, Joel. Strategies for the Green Economy: Opportunities and Challenges in the New World of Business. NY: McGraw-Hill, 2009.

Packard, Kimberly O'Neill and Forest L. Reinhardt. "What Every Executive Needs to Know about Global Warming. *Harvard Business Review on Green Business Strategy*. Boston: HBS Press, 2007, 21-39.

PriceWaterhouseCooper. "Financial Services Industry Sustainability Issues." http://www.pwc.com

---. "The Sustainability Agenda: Industry Perspectives." http://www.pwc.com

Reinhardt, Forest L. "Bringing the Down to Earth." *Harvard Business Review on Green Business Strategy*. Boston: HBS Press, 2007, 41-64.

Savitz, Andrew and Karl Weber. The Triple Bottom Line. San Francisco: Jossey Bass, 2007.

"Sustainability Matters." *Oracle.com*. White paper. Mar. 2008. < http://www.oracle.com/solutions/business_intelligence/docs/oracle-sustainability-whitepaper.pdf>

Other

Christofferson, Bill. *The Man from Clear Lake: Earth Day Founder Gaylord Nelson*. Madison: U of Wisconsin P, 2004.

Washington Post-ABC News. "Environmental Trends." The Washington Post. Poll. 20 Apr. 2007. http://www.washingtonpost.com/wp-srv/nation/polls/postpoll_environment_042007. html>