

# MARKETING EDUCATION FOR SUSTAINABILITY

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## ABSTRACT

*This paper attempts to provide a clear justification for incorporating education for sustainability (EfS) into business education generally, and marketing curricula more specifically. A set of core sustainability concepts are suggested for inclusion in marketing coursework. A review of existing research demonstrates that business students' knowledge levels vis a vis these concepts is low. The paper concludes with speculation about why marketing educators tend to be "eco-illiterate," and offers suggestions for those who wish to adopt an EfS approach in their courses.*

## INTRODUCTION

Marketing Education for Sustainability requires that our curricula advocate a triple bottom line approach to personal and marketing decision-making that emphasizes the requirements for a sustainable lifestyle, company, economy, and society: (1) environmental/ecological stewardship (maintenance and renewal of "natural capital"), (2) social stewardship (equitable distribution of resources, human and community well-being), and (3) economic stewardship (valuing financial continuity along with profit) (Agenda 21 1993; Hawken et al. 1999; Senge et al. 2008).

Many trends are converging to provide a clear justification for incorporating education for sustainability (EfS) into business curricula. This paper examines these trends and suggests that the marketing discipline is well positioned to take the lead in this endeavor. Next, a set of core sustainability concepts are suggested for inclusion in marketing coursework, followed by a review of existing research demonstrating that business students' knowledge levels vis a vis these concepts is low. The last section of the paper speculates about why marketing educators tend to be "eco-illiterate" and offers suggestions for those who wish to adopt an EfS approach in their courses.

### WHY SHOULD BUSINESS SCHOOLS CARE ABOUT EFS?

The first trend of importance is the United Nations Environment Program (UNEP), which has called for a *Decade of Education for Sustainable Development* (2005–2014; UNESCO 2004). With this impetus, Deans from business schools across the globe have joined with the United Nations Global Compact, a network of over 375 business associations devoted to pursuing sustainable practices in their organizations, to develop *Principles for Responsible Business and Principles for Responsible Management Education* (UN Global Compact 2008a, 2008b). These agreements provide a framework for integrating EfS across all business curricula, including a set

of principles in the areas of human rights, labor, environment, and anti-corruption (see Table 1 and 2 for a list of the *Principles*).

Second, business students are demanding more sustainability-related content. Another signatory on the Global Compact agreement is Net Impact, a nonprofit organization of MBA students devoted to developing leaders who can use the power of business to make a net positive social, environmental, and economic impact (Net Impact 2008). This organization has grown to more than 10,000 members in 119 student chapters in more than 170 countries spanning six continents. Net Impact has also developed a new program for undergraduates in response to significant increases in demand; there are currently 24 chapters at U.S. and Canadian universities (Net Impact 2008). A recent survey of undergraduate business students by this organization found that 87 percent of them believe that business leaders should consider the social and environmental effects of their business decisions; 77 percent want to work for such firms after graduation. These students are actively seeking courses and programs that espouse a "triple bottom line" approach to business decision-making, and can teach them how to solve social and environmental problems; they "seek to influence business behavior by influencing business education" (Knowledge@Wharton 2003, p. 1). For this generation of business students, "sustainability . . . is not an afterthought. It is a central thought. They're coming to your campus soon" (Insidehighered.com 2008, p. 1). This increased student demand for sustainability related courses and programs has led *The Princeton Review* to release its first "green ratings" for U.S. universities in its 2009 editions of college guides (<http://www.princetonreview.com/green.aspx> 2009).

A third trend of import is the fact that marketers are increasingly adopting sustainable business practices, as the evidence mounts linking sustainability with market share and long-run profitability (Business Week 2007; Global Finance 2008; Mendoca and Oppenheim 2007). Key components of practitioners' sustainability efforts

**TABLE 1**  
**UN GLOBAL COMPACT PRINCIPLES FOR RESPONSIBLE BUSINESS**

The principles in Table 1 are based on those established by (1) The Rio Declaration and Agenda 21, outcomes from the 1992 UN Conference on Environment and Development (UNCED), (2) The Universal Declaration of Human Rights, and (3) The United Nations Convention Against Corruption. For the complete text of these documents and the *Principles*, see [<http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html>].

**Human Rights**

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and

Principle 2: Make sure that they are not complicit in human rights abuses.

For example:

- ◆ Provide a living wage and some measure of job security.
- ◆ Assist with the eradication of poverty in communities where they operate.
- ◆ Assist with equitable distribution of resources: food, affordable housing, health care, education, job training (social justice).
- ◆ Encourage sustainable consumption; do not engage in “greenwashing.”

**Labor**

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;

Principle 4: The elimination of all forms of forced and compulsory labour;

Principle 5: The effective abolition of child labor; and

Principle 6: Eliminate discrimination of employment and occupation.

For example:

- ◆ Avoid “sweatshop” and child labor practices.
- ◆ Avoid discrimination based on sex, age, race, etc.

**Environment**

Principle 7: Businesses should support a precautionary approach to environment challenges;

Principle 8: Undertake initiatives to promote greater environmental responsibility; and

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

For example:

- ◆ A precautionary approach means that when there are threats of environmental damage from business operations, measures should be taken to prevent environmental degradation, even when there is a lack of full scientific certainty about the nature of these threats;
- ◆ Re-define company strategies to include the “triple bottom line” of sustainability: economic continuity, environmental stewardship and restoration, social equity;
- ◆ Refocus design, manufacturing processes, etc. toward cleaner production, eco-efficiency, and “design for sustainability.”

**Transparency and Anti-Corruption**

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

include modifications to product development strategies (e.g., design-for-environment, dematerialization of products and packaging), production processes (e.g., resource eco-efficiency, adopting “clean tech” solutions), pricing strategies (full-cost accounting to include environmental costs), and distribution strategies (e.g., ensuring that suppliers meet specified labor standards, reverse logis-

tics to remanufacture products) (Barbut et al. 2005; Chouinard 2005; Esty and Winston 2006; Grant 2007; Senge et al. 2008; Slater 2007a). Sustainability’s link to profit, or as an end goal for business, is becoming a commonly discussed topic around the world in a wide range of industries and situations (e.g., Alexander 2007; Fischer 2007; Goodland 2007; Hastilow 2008; Jackson

**TABLE 2**  
**UN GLOBAL COMPACT PRINCIPLES FOR RESPONSIBLE MANAGEMENT**

**Education (PRME)** The Principles for Responsible Management Education (PRME), launched at the 2007 Global Compact Leaders Summit in Geneva, provide an engagement framework specifically for academic institutions to advance corporate social responsibility through the incorporation of universal values into curricula and research. The PRME have been developed by an international task force of sixty deans, university presidents and official representatives of leading business schools and follow from a recommendation of all academic stakeholders of the Global Compact. More details about the PRME Initiative can be found at [<http://www.unprme.org>].

As institutions of higher learning involved in the education of current and future managers we are voluntarily committed to engaging in a continuous process of improvement of the following Principles, reporting on progress to all our stakeholders and exchanging effective practices with other academic institutions:

**Principle 1. Purpose:** We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.

**Principle 2. Values:** We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.

**Principle 3. Method:** We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

**Principle 4. Research:** We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.

**Principle 5. Partnership:** We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

**Principle 6. Dialogue:** We will facilitate and support dialog and debate among educators, business, government, consumers, media, civil society organizations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

2008; Ryan 2008; Walker 2008). Further, over sixty Fortune 500 companies have recently formed a coalition, the U.S. Climate Action Partnership that is calling for a national limit on carbon dioxide emissions leading to reductions of 30 percent or more over the next 15 years (Slater 2007b).<sup>1</sup>

**MARKETING EDUCATION FOR  
SUSTAINABILITY (EfS)**

While business coursework is following practice in some disciplines, attention to sustainability issues in marketing curricula is limited, for the most part, to discussions of “green” customers, environmental considerations in product development and packaging, and social/non-profit marketing (Aspen Institute, Business and Society Program 2007; Beyond Grey Pinstripes 2008; Demoss and Nicholson 2005). Social and non-profit marketing courses tend to focus on issue-based

non-profit organizations that are attempting to change customer behavior in a pro-social direction (e.g., energy conservation, recycling campaigns). There are very few marketing courses at either the undergraduate or graduate level that devote a significant amount of time to how strategic and tactical decisions in marketing can contribute to the implementation of a more sustainable business model in both for- and non-profit organizations. Thus, there appears to be an increasing discrepancy between the importance placed on sustainable marketing by practitioners and its importance to marketing educators. This places our students at a competitive disadvantage in the marketplace, and also fails to give them the knowledge and skills they need to be sustainability advocates in their place of employment.

This is somewhat disconcerting, given that marketing educators have been calling for more attention to environmental and social issues in marketing education for more than a decade (Anderson 2007; Demoss and

Nicholson 2005; Galbraith and McNabb 1999; Mintu and Lozada 1993; Springett 2005). In fact, the case can be made that the marketing discipline is well positioned to be a leader in integrating sustainability concepts and practices into business coursework. Marketing is the only business discipline that studies the complete product life cycle from product concept to distribution, purchase, use and end-of-life stages. Seventy-five percent of the environmental and social impacts of a product during its lifetime are determined at the design stage, when materials (e.g., chemicals, recyclability) are selected (Ottman 2008). Marketing managers have direct control over impacts because they often decide on a specific product concept and design based on marketing research findings. Distribution strategies and supply chain considerations are also under the purview of the marketing discipline. "Greening" of the supply chain requires the selection of a product transport mode that reduces greenhouse gas emissions, shorter distribution channels (e.g., "buy local" campaigns), and an examination of upstream suppliers to ensure that their employees are making living wages as part of a fair trade policy. In sum, as Jacquelyn Ottman, a long-time consultant on green marketing strategies, so aptly puts: "... the real power of green lies in the hands of marketers – we, the creative folks who have the power to design and promote cleaner products and technologies and help consumers evolve to more sustainable lifestyles" (Ottman 2008, p. 1).

#### **CORE CONCEPTS TO INCLUDE IN MARKETING EDUCATION FOR SUSTAINABILITY (EFS)**

So what should we be teaching our students? A review of recent publications in both business and social sciences journal reveals a consensus around a set of core sustainability concepts. Table 3 displays these concepts and their definitions in alphabetical order, while Table 4 indicates how sustainable marketing differs from social marketing, green marketing, social entrepreneurship, and other sustainability-related concepts. While marketing departments may have neither the resources nor the expertise to offer a separate course in sustainable marketing, every marketing course can incorporate the key concepts outlined in Table 3. Discussion of specific sustainability concepts and tools that are most relevant for Principles of Marketing, Buyer Behavior, and other marketing courses can be found in papers by Bridges and Wilhelm (2008) and Shapiro (2008), and in Fuller's 1999 text, *Sustainable Marketing*.

Regardless of which curricular model is adopted, marketing educators need to embrace an interdisciplinary and international approach to teaching sustainability, because the successful development and implementation of sustainable marketing strategies require, at a minimum, a working knowledge of biology (biomimicry, or

learning from sustainable biological models), engineering and industrial design (design for environmental principles), operations and lean manufacturing (greening the supply chain, global outsourcing, and carbon footprints), environmental and international studies (global ecosystem impacts of marketing activities), and the management literature on environmental management systems (EMS), ethics, social justice and equitable resource distribution (e.g., Ferrell and Ferrell 2008; Hart 2005). One practical means of gaining this breadth of knowledge is to jointly develop a sustainability research stream and/or marketing course with faculty from the afore-mentioned disciplines (Everett 2008; Rowe 2007; Sammalisto and Lindqvist 2008).

#### **STUDENTS' KNOWLEDGE OF SUSTAINABILITY CONCEPTS**

How knowledgeable are marketing students about the key concepts displayed in Table 3? General awareness of sustainability issues is growing, along with demand for coverage of this topic in higher education curricula (Carlson 2008; Rowe 2007; Sherman 2008), but only one longitudinal study was found that directly assessed marketing students' awareness of sustainability related concepts. Anderson (2007) conducted a longitudinal study of marketing students' awareness and perceived importance of specific environmental and social issues. She found that over the course of the six-year study, 30–50 percent of students were unaware of problems with nuclear waste, asbestos, chemical pollution, and other environmentally caused diseases; awareness of an issue was positively related to media attention. Anderson used the findings to introduce these concepts (and others) into the *Principles of Marketing* course. Such education has been found to increase business students' sensitivity to environmental issues and their desire to find business careers within sustainable organizations, even at the cost of lower salaries (Cordano et al. 2003; Goldbach 2007; Leimsider 2006). These findings are consistent with a recent UNEP report noting that a lack of information is the main barrier to customers' adoption of a more sustainable lifestyle (Barbut et al. 2005, Figure 7). It appears that both students and the general public are beginning to recognize the importance of adopting sustainable behaviors and advocating for sustainable business practices. However, as Thomas (2005) states, "In order to integrate sustainability into managerial decision-making processes, students . . . must be persuaded of its *legitimacy* as a business issue" (p. 188). One of the best means of establishing legitimacy is through including sustainability in marketing courses and textbooks.

Student exposure to sustainability concepts and sustainable business practices is a function of course and textbook coverage of these issues; less coverage means less exposure to and thus less familiarity with the topic of

**TABLE 3**  
**KEY SUSTAINABILITY CONCEPTS**

**Biomimicry:** (1) Nature as model: a science that studies nature's models and then imitates or takes inspiration from these designs and processes to solve human problems, e.g., a solar cell inspired by a leaf; (2) nature as measure: using biomimicry as an ecological standard to judge the "rightness" of innovations; (3) a new way of viewing and valuing nature, based on what we can learn from the natural world rather than what we can extract from it (see Benyus, *Biomimicry* 1997).

**Clean Technology:** An approach for protecting the environment by preventing the pollution at source, minimizing waste and reducing energy use; application of "Silicon Valley" style innovation, technologies, and entrepreneurship to opportunities in energy, water, and advanced materials (see Pernick and Wilder, *The Clean Technology Revolution: The Next Big Growth and Investment Opportunity* 2007).

**Corporate Social Responsibility (CSR):** The need for an organization to consider the good of the wider communities, local and global, within which it exists; to be accountable to all of its stakeholders in all its operations (employees, investors, customers, public, etc.). CSR has been expanded in recent years to include the concept of sustainable business practices, putting more of an emphasis on environmental stewardship and social justice (i.e., Corporate Sustainability), (see Vogel 2005; Young and Tilley 2006).

**Cradle to Cradle Design/Manufacturing:** When the manufacturer is responsible for all aspects of the product from "life to death" – from RandD and raw materials sources through production, distribution, consumption, and disposal. Emphasis on designing products to be remanufactured or reused, e.g., books that are produced to be remade into books, take-back policies where the manufacturer "takes-back" the product at the end of its useful life to recycle, remanufacture, or dispose of it in a way not harmful to the environment (no land fills), (see McDonough and Braungart, *Cradle to Cradle: Remaking the Way we Make Things* 2002).

**Ecological Footprint:** A link between human lifestyles and ecosystems that allows people to visualize the impact of their consumption patterns and activities on ecosystems; also an analytic tool for determining if our lifestyles are sustainable. Categories of human consumption translate into areas of productive land required to provide resources and assimilate waste products. The "footprint" is the total amount of land required for food, housing, transport, consumer goods and services. This approach shows that the most advanced countries consume and have a larger footprint on the earth than the rest of the planet, (Made popular by Mathis Wackernagel and William Rees, *Ecological Footprint Analysis* 1996).

**Education for Sustainability:** EfS was first described in Agenda 21 (Rio Summit 1992) and holds that education is central to attaining a sustainable economy and society, and that all EfS efforts should be customized to be locally relevant and culturally appropriate. The primary objectives of EfS are to improve and reorient education to incorporate knowledge, training, and values that will guide and motivate people to pursue sustainable livelihoods, to participate in a democratic society, and to live in a sustainable manner. University education should train students to lead all sectors of society in a world striving toward sustainability (see Filho, *Teaching Sustainability at Universities* 2002).

**Environmental Accounting/Full Cost Pricing:** Links the economy to the biophysical environment. It enables firms to understand the full spectrum of environmental costs and integrate these costs into decision making. Adoption of environmental accounting techniques increases the visibility of environmental costs and benefits, and thus impacts pricing strategies. Unsustainable products would no longer be less expensive than their sustainable counterparts if full cost pricing was required (see Markandya, *Environmental Accounting and Sustainability: An Integrated Analysis* 2007).

**Global Warming:** The progressive gradual rise of the earth's surface temperature thought to be caused by the burning of fossil fuels and industrial pollutants. May result in the increase in the volume of water which contributes to sea-level rise.

**TABLE 3 (CONTINUED)**  
**KEY SUSTAINABILITY CONCEPTS**

**Green Product/Marketing:** Marketing a product that lessens the impact to the environment; “environmentally friendly.” It must undertake life-cycle analyses to minimize environmental impact (includes raw materials, production and distribution processes, consumption and recycle/disposal). Contributes to the long term health and viability of our ecosystem; minimizes use of non-renewable resources (see Esty and Winston, *Green to Gold* 2006).

**Macromarketing:** The effects of markets and marketing on society, the effects of social programs on marketing practice, marketing history, marketing systems and marketing phenomena in the aggregate, and marketing’s effects on quality of life (adapted from *Journal of Macromarketing* homepage: [<http://agb.poly.asu.edu/jmm>]).

**Natural Capital:** Refers to the natural resources and ecosystem services that make possible all economic activity. Natural capital is being degraded and liquidated by the wasteful use of such resources as energy, materials, water, and topsoil. Natural Capitalism (Hawken, Lovins, and Lovins 1999) espouses four interlinked principles: radically increased resource productivity; redesigning industry on biological models with closed loops and zero waste; shifting from the sale of goods (e.g., light bulbs) to the provision of services (e.g., illumination); and reinvesting in the natural capital that is the basis of future prosperity (adapted from [www.natcap.org](http://www.natcap.org)).

**Pollution Prevention [P2]:** Actively identifying equipment, processes, and activities that generate excessive wastes or use toxic chemicals and then making substitutions, alterations, or product improvements. Conserving energy and minimizing wastes are pollution prevention concepts used in manufacturing, sustainable agriculture, recycling, and clean air/clean water technologies (see Bishop, *Pollution Prevention: Fundamentals and Practice* 2004; Fuller, *Sustainable Marketing* 1999).

**Precautionary Principle:** An approach to the management of risk when scientific knowledge is incomplete; a “better safe than sorry” attitude. An internationally recognized principle for action, it states that when science has not yet determined whether a new product or process is safe or unsafe, policy should prohibit or restrict its use until it is known to be safe. Applied to trade, this has been used as the basis for prohibiting imports of GMOs, for example (see Agenda 21: Earth Summit – *The United Nations Programme of Action from Rio, United Nations* 1993).

**Resource Recovery [R2]:** Recovering resources from waste. There is a range of different resource recovery technologies that can change waste materials into resources, through thermal or biological means, resulting in many useful products (e.g., fuel, compost, energy, and chemicals for manufacturing new products. For example, Interface Carpets “takes back” its old carpets and remanufactures them into new carpets (Anderson 1998), (see Fuller, *Sustainable Marketing* 1999; Rhyner et al. *Waste Management and Resource Recovery* 1995).

**Social Entrepreneur/Entrepreneurship:** Someone who develops social innovation through entrepreneurial solutions. A S.E. takes notice of a social problem or need, decides to passionately pursue it, creatively innovates new solutions and entrepreneurially addresses the issue through an organized “business plan” approach, thus allowing the social entrepreneur to address the issue of sustainability of the social venture undertaken (see Nicholls, *Social Entrepreneurship: New Models of Sustainable Social Change* 2006).

**Social Justice:** Refers to the goal (“justice”) of achieving an equitable distribution of resources such as capital, food, water, affordable housing, health care, education, and job training around the world. Focus is on redistribution of wealth from the affluent North to the developing South. Social justice also refers to the upholding of universal human rights (see Miller, *Principles of Social Justice* 2001).

**TABLE 3 (CONTINUED)**  
**KEY SUSTAINABILITY CONCEPTS**

**Social Marketing:** The use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify, or abandon a behavior for the benefit of individuals, groups or society as a whole. Can be used by non-profit (more typical) and for-profit organizations (see Andreason, *Social Marketing in the 21st Century* 2005).

**Sustainable/Sustainability:** Meeting the needs of the present without compromising the ability of future generations to meet their needs; ensuring the long-term viability and well-being of our ecosystem, community and society. Requires focus on: (1) environmental stewardship, (2) social equity, community health, and well-being, (3) economic viability/continuity (see Blackburn, *The Sustainability Handbook* 2007; Hawken, *The Ecology of Commerce: A Declaration of Sustainability* 1993).

**Sustainable Marketing:** The establishment, maintenance, and enhancement of customer relationships so that the objectives of the parties involved are met without compromising the ability of future generations to achieve their own objectives. Requires adoption of “triple bottom line” and “natural capitalism” approaches to decision-making; “design for environment” in product development; full-cost, environmental accounting approach to price setting; “cradle to cradle” approach in production, distribution, consumption and disposal; attention to social equity and community well-being when making all decisions (see Fuller, *Sustainable Marketing* 1999; Peattie and Crane 2005).

**Triple Bottom Line:** Triple bottom line accounting means expanding the traditional company reporting framework to take into account environmental and social performance in addition to financial performance. Coined by John Elkington, co-founder of the business consultancy *SustainAbility*. The term has been expanded and now captures an expanded spectrum of values and stewardship criteria for measuring organizational and societal success: economic, environmental, and social (see Elkington, *Cannibals with Forks* 1997).

sustainability. The most recent and in-depth study on marketing textbook coverage of sustainability content analyzed twenty-one *Principles of Marketing* texts in order to ascertain what percentage of total content was devoted to a discussion of environmental/sustainable marketing (EMS) issues (Demoss and Nicholson 2005). The authors found that EMS coverage ranges from 11 to 37 pages per text, or 1–6 percent of the total number of each textbook’s pages. Only 5 of the 21 texts reviewed mention an EMS topic in 50 percent or more of the chapters, and coverage is typically limited to a discussion of general environmental awareness among certain market segments and how EMS might impact product development, packaging, and labeling. Explicit, tactical recommendations for developing sustainable products, reverse channel systems, or pricing that reflects environmental costs are rarely included. Similar findings have been reported by Thomas (2004) and Bridges and Wilhelm (2008).

At the MBA level, the Aspen Institute’s biannual *Beyond Grey Pinstripes* survey of courses that include sustainability content indicates that some progress is being made, although integration of social and environmental topics into the core curriculum is still limited (Beyond Grey Pinstripes 2008). Over one hundred courses

are listed as including significant coverage of the topic, and there is a substantial increase since the 2005 survey in the number of stand-alone (primarily management) courses on sustainable development and environmental management strategy.<sup>2</sup> Similar findings are reported by Christensen et al. (2007) in their survey of the top 50 global MBA programs, although none of the courses discussed in their study were marketing courses. Further, a search of *Beyond Grey Pinstripes* online database for marketing courses produces only a few courses – on Social Marketing, Marketing Management, and Global/International Marketing – that mention “environmental and social issues” in their summaries or syllabi.<sup>3</sup> While these findings are suggestive of low levels of student awareness about sustainability concepts and issues, there is a need for more studies that directly assess student knowledge.

#### **NEED FOR EMPIRICAL RESEARCH**

Both Ryu and Brody (2006) and Holt (2003) call for more rigorous empirical research to assess the effectiveness of existing EfS efforts in higher education. Fien (2002) notes that most studies of sustainable education fail to develop appropriate research designs that include

**TABLE 4**  
**DISTINGUISHING AMONG SUSTAINABILITY-RELATED CONCEPTS**

Concept	Integration of Sustainability*	Type of Organization	Financial/Economic Objectives		Social Equity Objectives		Environmental Objectives		Consumption
			Growth/Profit	Long-term financial subsistence valued over profits	Equitable distribution of resources; community well-being; alleviation of poverty	Issue-based, e.g. stop child labor	Ecological restoration and long-term stewardship; resource productivity	Issue-based, e.g. conserve energy	
Sustainability	yes	X	X	X	X			X	Reduce **
Sustainable Development	yes	X	X	X	X			X	Reorient **
<b>Sustainable Marketing (ideal)</b>	yes	X	X	X	X			X	<b>Reduce and Reorient</b>
Green Marketing	no	X	X						Reorient
Social Marketing	no	X	X	X			X	X	
Non-profit Marketing	no	X							
Macromarketing	yes	N/A	N/A	X	X			X	Reduce
Social Entrepreneurship	no	X	X	X			X	X	(trend)
Corporate Social Responsibility	no		X	X			X		X
Corporate Sustainability (new)	yes		X	X	X			X	

Sources: Christensen et al. 2007 Filho 2002; Fuller 1999; Hawken et al.1999; Jucker 2002; Kirchgorg and Winn 2006; Mittelstaedt and Shapiro 2004; Peattie and Crane 2005; Peattie and Crane 2005; Peattie and Peattie, 2008; Robinson, Rose and Lawrence 2006; Simon-Brown 2000; Springett 2005; The Chronicle 2006; UNESCO 2004; van Dam and Apeldoorn 1996; van Marrewijk 2003; Wackernagel and Rees 1996; Young and Tilley 2006.

\* Sustainability considerations are part of every organizational decision process; sustainability as overarching objective (yes/no).  
 \*\* "Reduce" means decreasing absolute levels of consumption, especially in affluent, industrialized societies (e.g., Mittelstaedt and Shapiro 2004; Peattie and Crane 2005); "reorient" means redirecting customer choice towards more sustainable lifestyles and purchasing decisions (e.g. Fuller 1999; Barbut et al. 2005). Some believe marketing has "an inherent drive toward unsustainability" (van Dam and Apeldoorn 1996, p. 45) and that some government regulation will be required for marketing to play a role in achieving macro-marketing environmental and social objectives. No entry (blank) means that this concept does not include a stated position on consumption behavior.

pre- and post-measures of key constructs or report on actual consumption behavior.<sup>4</sup> For example, ecological footprint analysis (EFA) was used by the present author to measure students' footprints at the beginning and the end of the term, with EFA activities assigned during the term that encouraged footprint reduction (Ryu and Brody 2006; Wackernagel and Rees 1996). Students reported significant decreases in their footprints, as posted on their blogs. The next step will be to develop an assessment tool in addition to EFA that can be used to measure student knowledge and consumption behavior processes both before and after students are exposed to marketing EfS curriculum. Unfortunately, progress toward integrating pedagogical tools such as EFA into the marketing curriculum is constrained by generally high levels of "eco-illiteracy" among marketing faculty.

### REASONS FOR ECO-ILLITERACY

Why have marketing educators and textbook authors failed to integrate sustainability concepts and strategies into the marketing curriculum? Jucker (2002) suggests that marketing (and business) education, particularly in the U.S., are based on creating and maintaining a set of unsustainable myths. First, GNP is assumed to be an appropriate measure of a society's well-being, although much has been written about its inappropriateness given that GNP only measures monetary transactions and does not take environmental or social costs into account (McKibben 2007). Second, growth in GNP is presented as an overarching goal and a sign of "progress," even though GNP goes up when old growth forests are clear cut, more people engage in cancer treatments, and individuals go into debt to purchase ever more expensive consumer products (Hawken et al. 1999). What is needed instead is a sustainable economy that provides long-term economic stability at living wages for all its members.

Third, Western societies' economic development model is presumed to be the only valid model for developing countries to follow. The tenets of this model include the capitalist paradigm of consumption driving production, the necessity of free markets and globalization of trade, customer sovereignty, and the perception that "progress" or "civilization" requires ever increasing investments in infrastructure, automobiles, new technology, and non-renewable resources like coal and oil (Friedman 2005; Jucker 2002; Springett 2005). Marketing activities are an integral component of this economic model, because their typical objective is to increase consumption. Fourth, all technological advances are assumed to be "good," and there is a technological "fix" for any environmental or social problems we face; questioning the benefits of adopting a new technology such as nuclear power or genetically modified seeds is perceived as "un-American" (see Mander 1991 for a cogently presented luddite perspective). Fifth, a "win" for the

environment has traditionally been perceived as a "loss" for the bottom line, in spite of the fact that numerous articles and books have now been published documenting the financial benefits of adopting sustainable business practices (Esty and Winston 2006; McDonough and Braungart 2002; Senge et al. 2008).

Last, and closer to home, the Western educational system rewards research specialization and staying within functional disciplines (Everett 2008; Springett 2005; Thomas 2004, 2005). As noted earlier, marketing education for sustainability (EfS) requires an interdisciplinary approach. In summary, EfS will require marketing educators to re-examine the validity of the "unsustainable myths" presented above and consider alternative, sustainable economic and business models, such as those offered in *Natural Capitalism* (Hawken et al. 1999), *Biomimicry* (Benyus 1997), *Deep Economy* (McKibben 2007), and *The Natural Step* (Cook 2004).

### MOTIVATING FACULTY TO ADOPT MARKETING EFS

There is still much work to be done before sustainability will be successfully integrated into the core marketing (and business) curriculum. While there are excellent papers and even books that provide curricular recommendations (e.g., *Teaching Sustainability in Universities*, Filho 2002; *147 Tips for Teaching Sustainability*, Timpson 2006), the marketing discipline needs to develop its own set of discipline-specific recommendations. Before this can be accomplished, however, marketing educators need to be motivated to develop their own expertise in marketing EfS. There is a critical need for professional development initiatives to encourage faculty to increase their sustainability expertise. These initiatives can include funding to attend conferences on the subject (e.g., the *Greening of Industry Network* international conference, ([www.greeningofindustry.org](http://www.greeningofindustry.org)), the *Association for the Advancement of Sustainability in Higher Education* conferences, ([www.aashe.org](http://www.aashe.org)), special sessions and pre-conference workshops at marketing conferences such as AMA and MEA, bringing consultants and speakers to campus to conduct faculty workshops, and monetary incentives to initiate sustainability research programs with other schools and departments (e.g., environmental sciences, industrial design). Joint research projects to encourage the transition to a sustainable campus – infrastructure, energy, food, transportation – would be a noteworthy place to begin, and could also incorporate student-led projects (Rowe 2007; Sherman 2008).

### CONCLUSION

In closing, the author's hope is that marketing educators will rise to the challenge that has been presented

here. The management discipline has experienced a marked increase in sustainability-related research and curricular innovations over the last five years (e.g., Collins and Kearins 2007; Dart 2008; Kearins and Springett 2003). In fact, 2008 saw the advent of a management journal devoted to “sustainable strategic management” (SSM), a new management sub-discipline that is concerned with . . . “strategies that are sustainable from both market and environmental perspectives” (Parnell 2008,

Abstract, p. 35). Further, unlike the *American Marketing Association*, the *Academy of Management* has been and is involved with developing Global Compact’s *Principles for Responsible Management Education* (Table 2). With AACSB calling for business schools to seek ways of incorporating sustainability into their programs (BizEd 2008), it is time for marketing educators to recognize the importance and relevance of this topic for marketing pedagogy and research.

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## ENDNOTES

1 Of course, a significant driver of business sustainability is customer demand; sustainable organizations have a competitive advantage within certain market segments. From the 50 million plus Cultural Creatives (<http://www.culturalcreatives.org/>) to the 23 percent of Americans that are considered LOHAS (Lifestyles of Health and Sustainability) consumers, an increasing number of Americans are choosing to purchase recycled/recyclable, organic, and fair trade products (Clark and Unterberger 2007; Hartman Group 2007; [lohas.com]; Ray and Anderson 2000). These individuals are adopting sustainable lifestyles, with

spending on LOHAS products and services expected to top \$400 billion by 2010 (Natural Marketing Institute 2008).

2 Business schools voluntarily submit courses for inclusion in the “survey,” precluding any conclusions about what proportion of MBA programs cover sustainability in their courses.

3 The online search of this database ([http://www.beyondgreypinstripes.org/search/search\\_coursework.cfm](http://www.beyondgreypinstripes.org/search/search_coursework.cfm)) took place in August 2008.

4 Forty percent of customers say they are willing to buy green/sustainable products, but only four percent actually purchase them (Barbut et al. 2005).

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## REFERENCES

Agenda 21: Earth Summit – The United Nations Programme of Action from Rio (1993), United Nations, New York.

Alexander, J. (2007), “Environmental Sustainability versus Profit Maximization: Overcoming Systemic Constraints on Implementing Normatively Preferable Alternatives,” *Journal of Business Ethics*, 76, 155–62.

Anderson, Beverlee (2007), “Approaches to Greening Marketing Education: Environmental and Social Concerns,” *Proceedings of the 2007 World Marketing Congress*, (June), 102–5.

Anderson, Ray (1998), *Mid-Course Correction: Toward a Sustainable Enterprise: The 1 Interface Model*. White River Junction, VT: Chelsea Green Publishing.

Andreason, Alan R. (2005), *Social Marketing in the 21st Century*. Beverly Hills: Sage Publications Inc.

Aspen Institute, Business and Society Program (2007), “A Closer Look at Business Education: Marketing,” [available at <http://www.beyondgreypinstripes.org/pdf/Marketing.pdf>].

Barbut, Monique, Georg Kell, and S. Dupre (2005), *Talk the Walk: Advancing Sustainable Lifestyles Through*

*Marketing and Communications*. United Nations Environment Programme, UN Global Compact and Utopies.

Benyus, Janine M. (1997), *Biomimicry: Innovation Inspired by Nature*. New York: HarperCollins Publishers Inc.

*Beyond Grey Pinstripes* (2008), Search of Core and Elective Courses at [[http://www.beyondgreypinstripes.org/search/search\\_coursework.cfm](http://www.beyondgreypinstripes.org/search/search_coursework.cfm)]. Accessed 8/08.

Bishop, Paul L. (2004), *Pollution Prevention: Fundamentals and Practice*. New York: Waveland Press Inc.

*BizEd* (2008), “The Socially Responsible Curriculum,” AACSB, (July/August), 22–30.

Blackburn, William R. (2007), *The Sustainability Handbook: The Complete Management Guide to Achieving Social, Economic, and Environmental Responsibility*. Boston: Environmental Law Institute.

Bridges, Claudia and W. Wilhelm (2008), “Going Beyond Green: The ‘Why and How’ of Integrating Sustainability into the Marketing Curriculum,” *Journal of Marketing Education*, 30 (1), 33–46.

Business Week (2007), “Beyond the Green Corporation,” *BusinessWeekOnline*, January 29, available at [[http://www.businessweek.com/magazine/content/07\\_05/b4019001.htm](http://www.businessweek.com/magazine/content/07_05/b4019001.htm)].

- Carlson, S. (2008), "How Green was my College?" *Chronicle of Higher Education*, 54, A4.
- Chouinard, Yvonne (2005), *Let My People Go Surfing*. New York: Penguin Books.
- Clark, Duncan and R. Unterberger (2007), *The Rough Guide to Shopping with a Conscience*. London: Rough Guides Ltd.
- Collins, Eva and Kate Kearins (2007), "Exposing Students to the Potential and Risks of Stakeholder Engagement When Teaching Sustainability: A Classroom Exercise," *Journal of Management Education*, 31 (August), 521–40.
- Cook, David (2004), *The Natural Step*. Devon, U.K.: Green Books Ltd.
- Corcoran, B.P., E.W. Kim, and W. Arien (2004), "Case Studies, Make-Your-Case, and Case Stories: A Critique of Case-Study Methodology in Sustainability in Higher Education," *Environmental Education Research*, 10 (1), 7–21.
- Cordano, M., K.M. Ellis, and R.F. Scherer (2003), "Teaching about the Natural Environment in Management Education: New Directions and Approaches," *Journal of Management Education*, 27 (2), 139–43.
- Christensen, Lisa Jones, Ellen Peirce, Laura Hartman, W. Michael Hoffman, and Jamie Carrier (2007), "Ethics, CSR, and Sustainability Education in the *Financial Times* Top 50 Global Business Schools: Baseline Data and Future Research Directions," *Journal of Business Ethics*, 73 (4), 347–68.
- Dart, Raymond (2008), "A Commentary on 'Piercing the Bubble': Should Management Education 'Confront' Poverty?" *Journal of Management Education*, forthcoming. Available at: [<http://jme.sagepub.com/cgi/rapidpdf/1052562908318627v1>].
- Demoss, Michelle and Carolyn Y. Nicholson (2005), "The Greening of Marketing: an Analysis of Introductory Textbooks," *Journal of Education for Business*, (July/August), 338–46.
- Ellington, John (1997), *Cannibals with Forks: The Triple Bottom Line of 21<sup>st</sup> Century Business*. Oxford: Capstone Publishing.
- Esty, Daniel and Andrew Winston (2006), *Green to Gold*. New Haven: Yale University Press.
- Everett, Jennifer (2008), "Sustainability in Higher Education: Implications for the Disciplines," *Theory and Research in Education*, 6 (2), 237–51.
- Ferrell, O.C. and Linda Ferrell (2008), "A Macromarketing Ethics Framework: Stakeholder Orientation and Distributive Justice," *Journal of Macromarketing*, 28, 24–32.
- Fien, J. (2002), "Advancing Sustainability in Higher Education: Issues and Opportunities for Research," *International Journal of Sustainability in Higher Education*, 3 (3), 243–53.
- Filho, Walter L. (2002), "Teaching Sustainability: Some Current and Future Perspectives," in *Teaching Sustainability at Universities*, Walter Filho, ed. Frankfurt am Main: Peter Lang, 15–24.
- Fischer, L.D. (2007), "Roll out the Green Carpet," *BRW*, 29, 62–63.
- Friedman, Thomas L. (2005), *The World Is Flat—A Brief History of the Twenty-First Century*. New York: Farrar, Straus, and Giroux.
- Fuller, Donald A. (1999), *Sustainable Marketing*. Thousand Oaks, CA: Sage.
- Galbraith, Sharon and David McNabb (1999), "The Environment and Marketing Education," *Proceedings of the Western Marketing Educators' Association Conference*, (April), 112–15.
- Global Finance* (2008), "Sustainable Progress," September 8<sup>th</sup> Cover Story, available at: [<http://www.gfmag.com/index.php?idPage=956>].
- Goldbach, Justin (2007), "A Closer Look at Business Education: Marketing," *Aspen Institute, Business and Society Program*, Center for Business Education. Available at: [<http://www.beyondgreypinstripes.org/pdf/Marketing.pdf>].
- Goodland, R. (2007), "More Crucial Than Oil Scarcity: Climate Change Policies for a Sustainable Libya," *Climate Policy (Earthscan/James and James)*, 7, 539–42.
- Grant, John (2007), *The Green Marketing Manifesto*. West Sussex, England: John Wiley and Sons Ltd.
- Hart, Stuart (2005), *Capitalism at the Crossroads: The Unlimited Business Opportunities in Solving the World's Most Difficult Problems*. Upper Saddle River, NJ: Wharton Publishing.
- Hartman Group, (2007), "The Hartman Report on Sustainability: Understanding the Consumer Perspective," summary available at [<http://www.hartman-group.com/products/reportsSustainability2007.html>].
- Hastilow, N. (2008), "Low Carbon Britain," *Accountancy*, 141, 108.
- Hawken, Paul (1993), *The Ecology of Commerce: A Declaration of Sustainability*. New York: HarperCollins.
- \_\_\_\_\_, Amory Lovins, and L. Hunter Lovins (1999), *Natural Capitalism: Creating the Next Industrial Revolution*. Boston: Back Bay Books.
- \_\_\_\_\_, (2007), *Blessed Unrest*. New York: Viking Press.
- Holt, Diane (2003), "The Role and Impact of the Business School Curriculum in Shaping Environmental Education at Middlesex University," *International Journal of Sustainability in Higher Education*, 4 (4), 324–43.
- [[www.insidehighered.com/news/2008/07/23/sustainability](http://www.insidehighered.com/news/2008/07/23/sustainability)] (July 23, 2008), "Sustainability Failures."
- Jackson, C. (2008), "Helping Business-Led Railways to Share Best Practice," *Railway Gazette International*,

- 164, 115.
- Jucker, Rolf (2002), "Sustainability? Never Heard of It! Some Basics we Shouldn't Ignore when Engaging in Education for Sustainability," *International Journal of Sustainability in Higher Education*, 3 (1), 8–18.
- Kearins, Kate and D. Springett (2003), "Educating for Sustainability: Developing Critical Skills," *Journal of Management Education*, 27 (April), 188–204.
- Kirchgeorg, Manfred and Monika Winn (2006), "Sustainability Marketing for the Poorest of the Poor," *Business Strategy and the Environment*, 15, 171–84.
- Knowledge@Wharton (May 19, 2003), "The Triple Bottom Line: Student Activists Demand more from B-Schools," [http://knowledge.wharton.upenn.edu/article.cfm?articleid=773], Accessed February 6, 2009.
- Leimsider, Rich (2006), "A Closer Look at Business Education: Career Services," *Aspen Institute, Business and Society Program*, Center for Business Education. Available at: [http://www.beyondgreypinstripes.org/pdf/careerreport.pdf].
- Lenk, Peter, W. DeSarbo, P. Green, and M. Young (1996), "Hierarchical Bayes Conjoint Analysis: Recovery of Part-Worth Heterogeneity from Reduced Experimental Designs," *Marketing Science*, 15 (2), 173–91.
- Louviere, Jordan D., David A. Hensher, and Joffre D. Swait (2000), *Stated Choice Methods: Analysis and Application*. Cambridge: Cambridge University Press.
- Mander, Jerry (1991), *In the Absence of the Sacred*. San Francisco: Sierra Club Books.
- Markandya, Anil (2007), *Environmental Accounting and Sustainability: An Integrated Analysis*. New York: Edward Elgar Publishing.
- McDonough, Will and Michael Braungart (2002), *Cradle to Cradle: Remaking the Way we Make Things*. New York: North Point Press.
- McKibben, Bill (2007), *Deep Economy*. New York: Times Books.
- Mendoca, L.T. and J. Oppenheim (2007), "Investing In Sustainability: An Interview With Al Gore and David Blood," *McKinsey Quarterly*, 3, 107–12.
- Miller, David (2001), *Principles of Social Justice*. Boston: Harvard University Press.
- Mintu, A.T. and H.R. Lozada (1993), "Green Marketing Education: A Call for Action," *Marketing Education Review*, 4 (Spring), 17–23.
- Mittelstaedt, John and Stanley Shapiro (2004), "2004 Macromarketing Conference Abstracts: Macromarketing Scholarship and Education for a Global Century," *Journal of Macromarketing*, 24, 190–96.
- Natural Marketing Institute (2008), "Understanding the LOHAS Market Report." Available at: [http://www.marketresearch.com/publisher/1549.html].
- Net Impact (2008), accessed on February 6, 2009 at [http://www.netimpact.org].
- Nicholls, Alex, ed. (2006), *Social Entrepreneurship: New Models of Sustainable Social Change*. New York: Oxford University Press.
- Ottman, Jacquelyn (September 9, 2008), "Power of Green Lies in Marketers' Hands," [http://www.greenmarketing.com/index.php/articles/complete/power-of-green], Accessed February 6, 2009.
- Parnell, John A. (2008), "Sustainable Strategic Management: Construct, Parameters, Research Directions," *International Journal of Sustainable Strategic Management*, 1 (1), 35–45.
- Peattie, Ken and Andrew Crane (2005), "Green Marketing: Legend, Myth, Farce or Prophecy?" *Qualitative Market Research: An International Journal*, 8 (4), 357–70.
- \_\_\_\_\_ and S. Peattie (2008), "Social Marketing: A Pathway to Consumption Reduction?" *Journal of Business Research*, article in press.
- Pernick, Ron and Clint Wilder (2007), *The Clean Technology Revolution: The Next Big Growth and Investment Opportunity*. Boston: HarperCollins Publishing.
- Ray, Paul H. and Sherry R. Anderson (2000), *The Cultural Creatives: How 50 Million People are Changing the World*. New York: Three Rivers Press.
- Raynolds, Laura T., Douglas Murray, and John Wilkinson (2007), *Fair Trade: The Challenges of Transforming Globalization*. New York: Routledge.
- Rhyner, Charles R., Leander Schwartz, Robert Wenger, and Mary Konrell (1995), *Waste Management and Resource Recovery*. Boca Raton FL: CRC Press LLC.
- Robinson, Rose (2006), "Educating Aspiring Social Entrepreneurs," Web seminar hosted by [www.CasePlace.org](http://www.CasePlace.org), September 6.
- Rowe, Debra (2007), "Education for a Sustainable Future," *Science*, 20 July, 323–24.
- Ryan, T.J. (2008), "Consumers Need To Show Some Green," *Apparel Magazine*, 49, 35–36.
- Ryu, Hyung-Cheal and Samuel D. Brody (2006), "Examining the Impacts of a Graduate Course on Sustainable Development using Ecological Footprint Analysis," *International Journal of Sustainability in Higher Education*, 7 (2), 158–75.
- Sammalisto, Kaisu and Thomas Lindhqvist (2008), "Integration of Sustainability In Higher Education: A Study With International Perspectives," *Innovations in Higher Education*, 32, 221–33.
- Senge, Peter, Bryan Smith, Nina Kruschwitz, Joe Laur, and Sara Scheley (2008), *The Necessary Revolution*. New York: Doubleday.
- Shapiro, S.J. (2008), "Marketing, Society, and Controversy: An Online Course from a Macromarketing

- Perspective,” *Journal of Macromarketing*, 28, 195–96.
- Sherman, Daniel J. (2008), “Sustainability: What’s the Big Idea?” *Sustainability*, Mary Ann Liebert, Inc., 1 (3), 188–95.
- Simon-Brown, Viviane (2000), “Sustainable Living: Strategies for Breaking the Cycle of Work and Spend,” *International Journal of Sustainability in Higher Education*, 1 (3), 290–96.
- Slater, Dashka (2007a), “How Green is My Valley,” *Sierra: The Magazine of the Sierra Club*, (May/June), 21.
- \_\_\_\_\_ (2007b), “As the World Warms: Signs of a Changing Planet,” *Sierra: The Magazine of the Sierra Club*, (May/June), 19.
- Springett, Delyse (2005), “Education for Sustainability in the Business Studies Curriculum: A Call for a Critical Agenda,” *Business Strategy and the Environment*, 14, 146–59.
- The Chronicle of Higher Education (2006), “The Sustainable University: In Search of the Sustainable Campus,” October 20, available at: [http://chronicle.com/free/v53/i09/09a01001.htm].
- Thomas, Ian (2004), “Sustainability in Tertiary Curricula: What is Stopping it Happening?” *International Journal of Sustainability in Higher Education*, 5 (1), 33–47.
- Thomas, Tom E. (2005), “Are Business Students Buying It? A Theoretical Framework for Measuring Attitudes Toward the Legitimacy of Environmental Sustainability,” *Business Strategy and the Environment*, 14, 186–97.
- Times Higher Education Supplement (2007), “Green Is the Color of Profitable Marketing,” 8 June, 12. Available at: [http://www.timeshighereducation.co.uk/story.asp?storyCode=209254andsectioncode=26].
- Timpson, William M., Brian Dunbar, Gailmarie Kimmel, Brett Bruyere, Peter Newman, and Hillary Mizia (2006), *147 Practical Tips for Teaching Sustainability*. Madison, WI: Atwood Publishing.
- UNESCO (2004), *United Nations Decade of Education for Sustainable Development*. Available at: [http://portal.unesco.org/education/en/en/].
- United Nations Global Compact (2008a), “Principles for Responsible Business,” Available at: [http://www.unglobalcompact.org].
- \_\_\_\_\_ (2008b), “Principles for Responsible Management Education. Available at: [http://www.unprme.org].
- van Dam, Ynte and Paul Apeldoorn (1996), “Sustainable Marketing,” *Journal of Macromarketing*, 16, 45–56.
- van Marrewijk, Marcel (2003), “Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion,” *Journal of Business Ethics*, 44, 95–106.
- Vogel, David (2005), *The Market for Virtue: The Potential and Limits of Corporate Social Responsibility*, Washington, D.C.: The Brookings Institute.
- Wagner, M.W., S. Schaltegger, and W. Wehrmeyer (2001), “The Relationship Between the Environmental and Economic Performance of Firms,” *Greener Management International*, 34, 95–108.
- Wackernagel, Mathis and William Rees (1996), *Our Ecological Footprint: Reducing Human Impact on the Earth*. Gabriola Island BC: New Society Publishers.
- Walker, C. (2008), “The Green List: Changes for a Healthier Planet,” *Alaska Air Magazine*, (June), 26–34.
- Wilhelm, W., S. Mottner, T.J. Olney, C. Bridges, B. McKenzie, and E. Soares (2006), “From Tree Hugger to Triple Bottom Line: Bringing Sustainability into the Marketing Curriculum,” *Proceedings of the 2006 Marketing Educators’ Association Conference*, 95.
- Young, William and Fiona Tilley (2006), “Can Business Move Beyond Efficiency? The Shift Toward Effectiveness and Equity in the Corporate Sustainability Debate,” *Business Strategy and the Environment*, 15, 402–15.