Sustainability Education:
Focusing on Hospitality, Tourism, and Travel

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Abstract: This article offers a brief summary of sustainability in general in the hospitality and tourism industry and introduces content information related to sustainability that may be helpful for use in hospitality and tourism education. Specifically, the paper focuses on the following question: What is the emphasis of sustainability education in the hospitality and tourism field? Themes in sustainability education in the lodging, meetings and events, and food and beverage sectors are identified, applications of sustainability practices in hospitality and tourism operations are introduced, and views about the future direction of sustainability education in this field are provided.

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Introduction

In the field of hospitality and tourism education, instructors must deal with the geography of travel and that includes the conflicting dichotomy of travel, which in and of itself uses significant resources, and the current focus on sustainable travel and ecotourism. So just what can instructors of hospitality and tourism do to promote sustainability and sustainable travel? And how can instructors work to enable their students to become professionals who help tourists as consumers, including themselves, to practice sustainability?

This article provides a brief overview of sustainability in general in the hospitality and tourism industry and introduces content information about sustainability that may be of useful in hospitality and tourism education. Specifically, the focus of this paper is: What is the emphasis of sustainability education in the hospitality and tourism field? After reading this article, the reader should be able identify themes in sustainability education in a variety of hospitality related sectors, for this article introduces applications of sustainability practices in hospitality and tourism operations. First, it addresses what instructors can do to teach students in the field of hospitality and tourism, as individual consumers, to promote sustainability for tourists, travelers, and participants in the field of hospitality. Next, attention is given to teaching in the hospitality and tourism areas of lodging, meetings and events, and foodservice segments of the industry. Arguably, hospitality and tourism education covers a great deal of geography when it comes to sustainability.

Background

The hospitality and tourism industry is one of the largest industries in the world (United Nations World Tourism Organization (UN-WTO), 2011). For example, in 2010 in the United States alone, the industry generated more than $1.3 trillion in economic output, provided 7.7 million U.S. jobs (that meant that one of every 17 Americans worked in the industry), and accounted for 2.8 percent of the Gross Domestic Product (GDP) (United States Department of Commerce, 2012). The industry encompasses a wide variety of sub-sectors including foodservice; lodging; meetings, conventions, and special events; attractions; and transportation such as air travel. Due to its substantial economic benefits and job creation that help to fuel economic and social development in communities, tourism and the related hospitality businesses involved in its operations are attractive to many countries around the globe. However, given the nature of the industry, it is not only a group of businesses; it is an open, dynamic, and complex system with numerous interacting components and different stakeholders (Gunn, 1994: Leiper, 1979; Mill & Morrison, 1997; Thanh & Bosch, 2010), and not all of its impacts are desirable. In fact, its complexity makes it difficult to manage toward sustainability (Thanh & Bosch, 2010).

For example, while tourism has been perceived as a positive addition to many communities, it also creates issues related to its development and practice. Tourism has been seen as a desirable industry due to its focus on creating jobs and promoting scenic areas and culture. Developing tourism in an area means that jobs are created in guest services such as lodging properties, restaurants, transportation, and attractions. These new jobs often create demand for in-migration to an area and therefore, the resident population in an area increases at the same time the tourist population increases. This increase in population places greater demand on resources and increases the amount of waste produced and pollution created, resulting in degradation of resources and the welfare of the local population (Thanh & Bosch, 2010). Consequently, the sustainability of such tourism development is questionable, but just what is sustainable tourism?

A user-friendly working definition of sustainable tourism has been developed by the Center for Sustainable Tourism (2012) at East Carolina University (ECU) such that,

"Sustainable tourism contributes to a balanced and healthy economy by generating tourism-related jobs, revenues, and taxes while protecting and enhancing the destination's social, cultural, historical, natural, and built resources for the enjoyment and well-being of both residents and visitors.

This definition of sustainable tourism compares nicely to definitions of sustainability that include the triple bottom line approach to social, economic, and environmental spheres (Sustainable Measures, 2010), and can also be seen in terms of capital (The World Bank, 2004). Social sustainability means maintaining social capital, including investments and services that create the basic framework for society (Sustainable Measures, 2010; The World Bank, 2004). Economic sustainability means economic capital should be maintained. It involves maintenance of capital, or keeping capital intact (economic and manufactured capital is substitutable). The traditional economic criteria of allocation and efficiency must now be joined by a third, that of scale (Daly, 1992). Environmental sustainability means protecting natural capital and seeks to improve human welfare by protecting natural capital. Environmental sustainability needs sustainable consumption by a stable population (Goodland, 2001; The World Bank, 2004).

While maintaining and nurturing social capital entails satisfying basic economic, social, and security needs now and in the future without undermining the natural resource base and environmental quality on which life depends, tourism and hospitality, as often currently practiced, may require more services in a shorter time frame than a destination is able to develop and may involve a higher level of natural and human resource use than is reasonable (Thanh & Bosch, 2010). Public policy and business perspectives of responsible hospitality and tourism both recognize the need to support a growing economy while reducing the social and economic costs of economic growth. From a business perspective, sustainable tourism development favors an approach based on capturing system dynamics, building resilient and adaptive systems, anticipating and managing variability and risk, and earning a profit, but this is not easy.

As noted, many people work in the hospitality and tourism industry around the globe. In the past, many professionals entered the field as hourly employees and worked their way up to management positions over many years without formal education or training (Angelo & Vladimir, 2009). While this career path is still possible, more often than not, the current way to leadership and management opportunities in the industry, and generally within a shorter and more certain time frame, is to complete an undergraduate or even graduate degree, preferably in hospitality and tourism management that involves internships and work experience, prior to entry into careers in the industry. The first undergraduate degree program was founded at Cornell University in upstate New York in 1922 (Cornell University, 2012) and now, less than one hundred years later, there are baccalaureate and post-graduate programs in hospitality and tourism around the globe.

As these graduates of hospitality and tourism management programs enter the industry, they face many opportunities and challenges. Serving the public through hospitality is an old and honorable vocation, but now, perhaps more than ever before, the industry is complex and dynamic. Sustainability has received attention from many large firms (eq. Hyatt, 2012; Marriott, 2012; Starwood, 2012: Wyndham, 2012), but this usually refers to "green" hotel practices such as recycling and reducing energy costs, etc. while corporate social responsibility is viewed as a separate area by many lodging operators, and although environmental and social sustainability matter to hoteliers, ultimately, economic sustainability is pivotal to their very existence. For example, while hotel room rates are currently (in the fall of 2012) on the rise throughout the Americas and other regions of the world as well (Smith Travel Research (STR), 2012), this was not the case during the recent recession and hoteliers battled with enormous drops in occupancy and revenues, thus making sustainability efforts, out of necessity, heavily focused on economic viability.

Therefore, hospitality and tourism graduates who enter and pursue careers in the industry will need to have the ability to see a variety of views concerning sustainability and to address the economic, social, and environmental issues facing the industry and the planet, so as not to only focus on the economic matters and to figure out how to integrate the different strands of sustainability into their business operations over the long haul and through varied economic and political eras. However, while sustainability has long been heavily promoted with a triple bottom line approach, researchers not too long ago found that hospitality students, in particular, received little attention to sustainability in their educational programs (Deale, Nichols, & Jacques, 2009). Yet, over the long-run on into the future, what is needed and arguably, what graduates perhaps need to learn and take to heart through their educational experiences and internships, is that sustainability requires a balance and creating that balance is an ongoing challenge and opportunity.

To function in this way, to continuously seek balance, sustainable tourism and hospitality development require the enlightened involvement of all participants, the establishment and nurturance of sound business plans based on well-grounded sustainability principles and practices, as well as effective political leadership to assure far-reaching engagement and consensus building among stakeholders. Achieving sustainable tourism systems and hospitality operations is an ongoing process and it requires the continuous examination of its effects, undertaking the necessary proactive and educational actions as necessary. Sustainable tourism and hospitality need to also provide high quality service and to satisfy tourists, as guests, while ensuring that tourists participate in meaningful experiences that enhance their knowledge and understanding of sustainability while at the same time inspiring other travelers and hospitality and tourism professionals to do the same (UN-WTO, 2011).

Sustainability Education in Hospitality and Tourism

Given the definition above, the development and business issues involved, and the potential lack of significant attention to sustainability education among those involved with teaching hospitality and tourism operations (Barber, Deale, & Goodman, 2011; Deale, Nichols, & Jacques, 2009), what should be the focus of hospitality and tourism education related to sustainability? Travel itself often uses a significant amount of natural resources, so arguably one of the first concepts that would be prudent to teach is that of the carbon footprint and how to reduce it. A carbon footprint can be defined in a very basic way as "the negative impact that something (such as a person or business) has on the environment; *specifically*: the amount of carbon emitted by something during a given period "(Merriam-Webster Dictionary, 2010). Defined in more detail, the carbon footprint is the following:

"(The) amount of carbon dioxide (CO_2) emissions associated with all the activities of a person or other entity (e.g., building, corporation, country, etc.). It includes direct emissions, such as those that result from fossil-fuel combustion in manufacturing, heating, and transportation, as well as emissions required to produce the electricity associated with goods and services consumed. In addition, the carbon footprint concept often includes the emissions of other greenhouse gases, such as methane, nitrous oxide, or chlorofluorocarbons (CFCs). The carbon footprint concept is related to and grew out of the older idea of the ecological footprint (Encyclopedia Britannica, 2010)."

So how can a traveler reduce his or her carbon footprint? First of all, a traveler can estimate his or her carbon footprint via the carbon calculator provided by Sustainable Travel International (STI) (2010), an organization devoted to leadership in sustainable travel and carbon management. Then tourists can do a variety of things to reduce that carbon footprint. Examples of what tourists can do to try to reduce their carbon footprint include many of the same activities that they can pursue at home such as: patronizing "green", sustainable hospitality and tourism businesses and sites; riding bikes or using public transportation instead of driving a car to sightsee in the area; choosing restaurants that are locally owned and operated and that use local, organic products; supporting local events such as festivals; shopping for items at locally owned

and operated retail stores that offer locally handcrafted items; and buying local produce and products at farmer's markets to eat on the trip or even take home.

Several organizations help to promote sustainable travel, tourism, and hospitality in general and students should be made aware of these organizations and then it would be wise for them to become involved in these organizations to develop positive relationships with those promoting responsible travel behaviors to work toward a more sustainable future for the industry and the world as a whole. An example of such an organization is the International Ecotourism Society (TIES) that promotes responsible travel to conserve the natural environment and respect local cultures. It works to tie together conservation, communities, and responsible travel (see its website at the following: www.ecotourism.org). Another organization, Sustainable Travel International (STI) was established in 2002 as a non-profit organization to provide education and outreach services to travelers, travel providers, and those working at destinations in support of sustainable travel. STI encourages environmental and cultural conservation while promoting cross-cultural understanding and economic development (STI, 2010). STI's current priorities include education and training, the use of sustainable tourism standards and industry best practices through the Sustainable Tourism Eco-Certification Program (STEP), local philanthropy projects, carbon offset projects, and empowering destinations to effect change to support sustainable development (its website is the following: http://www.sustainabletravelinternational.org).

Yet another significant organization is the Center for Sustainable Tourism at East Carolina University, located in the southeastern United States in Greenville, North Carolina. It promotes sustainable tourism throughout the region, North Carolina, and the nation via graduate education, leadership development, community consultation, and collaborative research. The Center's staff and its affiliate faculty members work to assist in the implementation of sustainable practices in business operations, public policies, and personal travel behaviors. The Center investigates challenges facing the tourism industry and destination communities as they work to "balance economic viability with socio-cultural and environmental enhancement and equity" (www.sustainabletourism.org). The Center is in the process of creating a database of tourism-related organizations that have implemented sustainable practices. Working with the university's Office of Engagement, Innovation, and Economic Development; the North Carolina Division of Tourism, Film, and Sports Development; and the North Carolina Division of Pollution Prevention and Environmental Assistance comprehensive, sector-specific checklists of sustainable tourism practices have been developed. The impact of second homes on communities and climate change and tourism have also been the focus of some of the Center's projects.

In addition to becoming familiar with a variety of organizations committed toward the practices of sustainable tourism, it is necessary to understand more about sustainability practices in different segments of the hospitality and tourism industry. Below the discussion focuses on

sustainability practices in lodging; meetings, special events; and the food and beverage sectors of the industry.

Sustainability Education in the Lodging Sector: Sustainability education about lodging operations includes ensuring that students understand that "green" lodging professionals participate as much as possible in the Leadership in Energy and Environmental Design (L.E.E.D.) certification program of the U.S. Green Building Council (USGBC, 2011) that has become popular in the industry. As the USGBC notes, "LEED is a voluntary certification program that can be applied to any building type and any building lifecycle phase. It promotes a whole-building approach to sustainability by recognizing performance in key areas." The key areas include: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, locations and linkages, awareness and education, innovation in design, and regional priority."

Students also need to be knowledgeable about programs for existing lodging properties, including Green Seal that, since 1995, has been certifying lodging operations and manufactured products that might be used in lodging properties that meet criteria that the organization has specified in a set of standards. These criteria include: waste minimization, reuse and recycling; energy efficiency, conservation, and management; management of fresh water resources; waste water and hazardous substance management; and environmentally sensitive purchasing (Green Seal, 2012). Green Seal prides itself on "using science based standards and the power of the marketplace to create a more sustainable world" (Green Seal, 2012).

Hospitality and tourism students also benefit by be informed about how the American Hotel and Lodging Association (AH &LA) (2010), the largest organization in the United States formed to promote the lodging sector, embraces sustainability in its business plan by striving to "enhance green guidelines and initiatives to increase industry awareness." AH &LA has developed environmental guidelines to assist hoteliers in their efforts to practice sustainability (AH& LA, 2010a) and honors hotels for "Good Earthkeeping" via one its' Stars of the Industry awards (AH & LA, 2010b). AH & LA's 11 minimum guidelines for "going green" are the following:

1. Form an Environmental Committee in your hotel that is responsible for developing an Environmental Green Plan for energy, water, and solid waste use;

2. Manage your hotel's environmental performance by monitoring the electric, gas, water, and waste usage information on a monthly and annual basis;

3. Replace incandescent lamps with compact fluorescent lamps wherever possible;

4. Install digital thermostats in guestrooms and throughout the hotel;

5. Implement a towel and/or linen reuse program;

6. Install 2.5-gallons per minute showerheads or less in all guestroom baths and any employee shower areas;

7. Install 1.6-gallon toilets in all guestrooms;

8. Implement a recycling program --including public spaces -- to the full extent available in your municipality; document your efforts;

9. Implement a recycling program for hazardous materials found in fluorescent bulbs, batteries, and lighting ballasts through licensed service providers;

10. Purchase Energy Star labeled appliances and equipment; and

11. Ensure that all office paper products have 20% or more post-consumer recycled content

(AH&LA, 2010a).

Efforts in the lodging segment of the hospitality industry appear to be focused heavily on green building and on environmental sustainability practices to enhance economic sustainability and students of hospitality and tourism must understand how to apply these principles and practices if they are to become industry leaders and managers of sustainability.   Specific examples of these efforts are helpful for grasping how these principles and practices can be applied. For example, Marriott, Inc. has well-developed sustainability efforts. This large lodging company, with over 3,000 lodging properties, 17 brands and more than 150,000 employees around the globe, has focused its sustainability efforts in five areas. These include:

1. Energy, water, waste and carbon -Reducing the consumption of water, waste, and energy in their hotels and corporate headquarters;

2. The supply chain- partnering with their vendors to use price-neutral products that save energy, decrease waste, and improve waste diversion, and that are made of one or more environmentally friendly substances;

3. Green hotels- connecting with their business partners to expand LEED -certified buildings across the Marriott company;

4. Engaging guests and associates- inviting guests and associates to help the environment through their own routine activities in their homes and workplaces, and while travelling; and

5.   Efforts beyond their hotels—conservation by supporting innovative initiatives including rainforest protection and water conservation.

(Marriott International Inc., 2012).

Corporate social responsibility (CSR) is also important to many lodging chains and individual properties and often discussed separately from a company's sustainability efforts and yet via donations of goods, services, and volunteer hours it clearly addresses social sustainability (McGehee, Wattanakamoichai, Perdue, & Calvert, 2009). In addition to being good for the community, these practices can be good for business. For example, the *Chicago Tribune* recently ranked Hyatt Hotels as the number one place to work in the city of Chicago and the company's strong emphasis on sustainability, including social sustainability, had much to do with that recognition (Hyatt Hotels, 2012). The Hyatt company's employees serve as community ambassadors engaging frequently in community activities such as helping local schools and focusing on finding specific ways to assist communities where their hotels are located worldwide (Hyatt Thrive, 2012). Caring appears to be an important part of the corporate culture of a number of hotel firms such as Hyatt (2012), Marriott (2012), Starwood (2012), and Wyndham (2012).

Sustainability Education in the Meetings and Events Sector: The meetings, conventions, and special events sector of the hospitality industry provides leadership in sustainable practices and students need to be well versed in this area of sustainability, too. Special events and festivals, both large (Bridge the Gap, 2010**;** Denver 2008 Convention Host Committee Greening Initiative, 2008) and small (Jackson County Chamber of Commerce, 2009), are embracing sustainability efforts. The Green Meeting Industry Council (2010) is a global, non-profit organization that advances sustainability in the meetings industry and is a member of the Convention Industry Council (its website is the following: http://www.greenmeetings.info).

A very useful guide for both novice and experienced event planners is the Green Event Manual created by the Bridge the Gap (2010) program in Kansas City, Missouri. The U.S. Environmental Protection Agency (2011a) promotes sustainable meetings on its website and, in the industry itself, Meeting Professionals International (MPI) (2011) embraces corporate social responsibility (CSR) and the triple bottom line of people, planet, and profit. MPI has launched a carbon offset program and promotes sustainable meetings. The Green Meeting Industry Council (GMIC) (2010) provides information and networking for sustainable meetings and BlueGreen Meetings (2010) (hosted online by the GMIC) recommends ways to for turn meetings "green." Suggestions for creating and conducting sustainable meetings and events that students should be able to identify include:

1. Doing one's homework--that means planning ahead, investigating carefully, and choosing sites, vendors, and materials thoughtfully.

2. Putting it all it in writing--establishing an environmental statement or policy for the meeting, getting buy-in for it from the meeting host organization's management, and sharing the policy with suppliers, delegates, and speakers.

3. Using paperless technology-- cut down paper use by creating a conference web site; offering electronic registration and confirmation; and advertising via the web and/or email and other digital media.

4. Meeting close by--reduce distances traveled by speakers and delegates by choosing a site that is close to as many delegates as possible; choose a venue and hotel that are close to the airport and within walking distance of each other.

5. Encouraging the use of public transportation--encourage mass transit, carpooling, walking, and cycling whenever possible.

6. Purchasing responsibly--check to see if the venue is reducing consumption of non-renewable resources; check to see if the venue has Green Seal Certification and sustainability practices are in place.

7. Practicing the 3Rs--ask the host hotel and meeting venue to provide visible and accessible reduction, reuse, and recycling services for paper, metal, plastic, and glass; recycle onsite.

8. Bulking up--have the food and beverage service provider use bulk dispensers for sugar, salt, pepper, cream, and other condiments.

9. Lightening one's stay--choose a property that uses bulk dispensers for shampoos and soaps in guest suites and bulk containers for condiments, and that offers buffet dining to save on use of serving dishes and utensils.

10. Eating green--include vegetarian meals and have meals planned using local, seasonal produce.

11. Closing the recycling loop--have all printed materials published on recycled paper, using vegetable-based inks, and on both sides of the page.

12. Saving energy--coordinate with the meeting venue to ensure that energy lights and air conditioning will be turned off when rooms are not in use.

13. Conserving water--choose a property that offers a linen reuse program, water saving devices, and wastewater recycling.

14. Offering carbon offsets--provide a carbon-offsetting program to guests; carbon footprint calculators (web-based tools) can determine the amount of CO_2 emitted by the facility and activities required to host an event; the formulas calculate the cost of an investment in renewable energy sufficient to balance (or cancel out) the emissions from an event.

15. Being grateful--thank all of those involved in the meeting or event from those employed at the site, to every volunteer, vendor, performer, speaker, and partner, etc.

16. Spreading the word--tell delegates, speakers, and the media about the success of a sustainable meeting or event; sustainability efforts are contagious.

(BlueGreen Meetings, 2010; Denver 2008 Convention Host Committee Greening Initiative, 2010; Jackson County, 2009).

Sustainability Education in the Food and Beverage Sector: Sustainability in the food and beverage segment of the hospitality industry involves consumer and operator decisions and behaviors. This segment of the industry has become very active in sustainability efforts and students must learn about these efforts to practice as sustainable leaders and managers in the industry. Efforts have focused on engaging in environmentally and socially responsible actions that also provide economic benefits to businesses. McDonald's restaurant company is committed to sustainability efforts and in particular to volunteering through the use of an online management tool called Volunteer Match, group volunteer activities, and incentives for employees who volunteer such as a monthly raffle for a donation to the winning volunteer's charity of choice (McDonald's 2012).The Sustainable Table (2012) is an entity created by the non-profit organization GRACE Communications Foundation (and note that GRACE does not appear to stand for anything but grace) dedicated to communicating about sustainable eating and celebrating "the joy of food and eating." The organization developed the *Eat Well Guide* that helps consumers understand issues facing the world's food supply, and offers alternative solutions (its website is the following: http://www.sustainabletable.org/home.php).

Sustainable dining has naturally become linked to sustainable agriculture that is defined by the Sustainable Table (2012) as food production methods that are "healthy, do not harm the environment, respect workers, are humane to animals, provide fair wages to farmers, and support farming communities." This type of agriculture promotes local, small-scale sustainable farming. The Sustainable Table (2012) offers information about ways to promote sustainability for consumers, agriculture, and industry, and the London based organization called Sustain (2010) "advocates food and agriculture policies and practices that enhance the health and welfare of people and animals, improve the working and living environment, promote equity and enrich society and culture. " Sustain (2010) promotes the following principles for consumers and business operators who wish to adopt a sustainable approach to food:

1. Use local, seasonally available ingredients (to minimize energy use and support the local economy);

2. Specify food from farming systems that minimize harm to the environment (such as certified organic produce, and from farmers who practice sustainable farming techniques);

3. Limit foods of animal origin (because meat, eggs, and dairy production are highly significant uses of resources, etc.);

4. Exclude fish species identified as most "at risk" and choose fish only from sustainable sources;

5. Choose Fair-trade-certified products (to ensure that producers receive a fair deal);

6. Avoid bottled water (to minimize transport and packaging waste); and

7. Promote health and well-being (by serving whole grains, vegetables, fruits, and foods, reducing fat and salt content, and the use of artificial additives, etc.).

In the United States, the *American Farm to Table Restaurant Guide* (2012) promotes restaurants that "share a solid commitment to using primarily naturally-raised and organic ingredients sourced directly from local farms and farmers' markets. " While the farm-to-table movement emphasizes the products used, the National Restaurant Association(NRA) (2010) has launched its Conserve Initiative to promote sustainability in foodservice operations. Its emphasis focuses on energy conservation in restaurant operations and these are important practices for students to be able to apply. Ten tips provided by the NRA's Conserve program include the following:

1. *Turn Off* --Turn off interior/exterior lights and cooking hoods when not in use. Install motion detectors in storerooms, offices, and restrooms. Set lights on timers.

2. *Fix Leaks* --Repair leaky faucets and toilets. Stop air leaks by caulking and insulating around leaky windows and doors and installing energy curtains in freezer rooms.

3. *Replace Lighting* --Replace incandescent light bulbs with longer lasting CFL light bulbs or LED lights. Replace traditional exit signs with LED exit lighting.

4. *Reduce. Reuse. Recycle.* --Follow the 3 R's of sustainability: reduce, reuse, and recycle. Reduce waste. Reuse furniture, flooring. Recycle paper, plastics, glass, and aluminum.

5. *Unplug* --When not in use, unplug computers, electronics, coffee machines, POS system, and any small appliances.

6. *Use Less Water* --Serve customers water upon request. Run dishwashers, washing machines only when full. Install low-flow toilets, waterless urinals, tankless water heaters.

7. *Train and Inform* --Train employees on energy saving procedures and on the importance of energy conservation and water use. Tell customers about your energy efforts.

8. *Clean and Maintain* --Clean equipment runs more efficiently. Regularly dust and clean appliances, top to bottom. Perform routine preventive maintenance on HVAC, plumbing, appliances, and major equipment.

9. *Remodel or Build Green* --Use low-VOC (volatile organic compounds) or no-VOC paints, recycled flooring and managed forest wood. Install a reflective roof, sun lights, and energy-efficient windows.

10. *Look for the ENERGY STAR Label* --Purchase appliances, electronics, and other EPA-tested equipment that carries the ENERGY STAR label.

Specifically, in terms of food and beverage consumption, students would do well to be able to engage in the practices recommended by the Sustainable Eating Movement *(*Smith & MacKinnon, 2007). The movement encourages consumers to eat local; eat seasonal; eat organic; eat vegetables; and eat low on the ocean food chain.

Conclusions

In addition to content about sustainability, an important part of sustainability education in hospitality and tourism is getting students to ask questions of operators and others about their practices related to sustainability. Sustainability questions to ask (and get answers to) about hospitality and tourism operations include:

1. Does the property purchase items that are reusable or recyclable? In food and beverage operations? In all areas?

2. Does the property have recycling programs and what are they (eq. for aluminum, plastic, paper, gray water, composting)?

3. Do guests have the option to reuse items such as towels and sheets instead of having these items changed every day?

4. Does the property incorporate "green" cleaning products and techniques into its operations?

5. Does the property purchase locally grown, seasonal, and/or locally made products?

6. Does the property use native plants in its landscaping?

7. Does the property have programs to reduce consumption?

(Examples include the use of energy-efficient lighting, low-flow toilets and showers, and alternative energy sources like solar or wind power.)

8. How does the property contribute to the local community? For example, is it involved in charitable giving and/ or do its employees get involved in local charitable events?

9. Does the property help promote local events and activities by suggesting these to its guests?

10. Is the property locally owned and operated? If not, does it make a concerted effort to try to hire local employees? (Bridging the Gap, 2010).

11. In addition to our own sustainable behaviors what can we do to educate others about sustainability in theory and practice? What can we do to increase the application of sustainable practices?

Educating students to become leaders and managers in the hospitality and tourism industry is not easy in an industry with high labor costs and frequently low profit margins, but ultimately the sustainability of the industry itself hinges on not only adapting to changes that necessitate sustainability, but becoming proactive innovators in the practice of sustainability. Hospitality and tourism professionals need to practice sustainability in financial operations; employee experiences; community action; facilities management; purchasing; food production, preparation, and service; planning and staging events and meetings; and as part of overall business plans and processes. Many hospitality and tourism companies already emphasize sustainability in their practices (e.q. Hyatt, 2012; Marriott, 2012; Starwood, 2012; Wyndham, 2012), yet these are not always evident to the public and these practices are not ubiquitous throughout the industry.

In a recent study of the attitudes and behaviors related to sustainability of hospitality educators, students, and industry professionals, stronger environmental attitudes were reported by educators and they felt that environmental issues needed to be an important part of the hospitality curriculum; however, industry professionals reported higher rates of environmental behavior than did the other stakeholders, probably due to their business perspective toward saving money (e.g., reducing the cost of utilities, etc.) (Deale & Barber, 2012). In the study, industry professionals who had strong interests in the environment were interested in economic sustainability significantly more than either educators or students, although interest in social sustainability was significantly higher for educators than either students or industry professionals. The industry professionals' responses suggested that changing consumer behavior and attitudes related to sustainability and purchasing principles related to sustainability were the most relevant topics, again probably due to their focus on the economic aspects of their businesses. Students with strong environmental attitudes in the study felt that these two topics were much less relevant than did educators and industry professionals and believed that the understanding of consumer demand was the most relevant topic (Deale & Barber, 2012). In terms of how sustainability should be taught, students with strong environmental attitudes in the study advocated for guest speakers while educators and professionals with strong environmental attitudes thought that case studies, service learning activities, and projects were the most effective methods of learning about sustainability. The differences in the views of these three stakeholder groups are important to consider when figuring out how best to develop a curriculum that integrates sustainability practices into teaching in hospitality and tourism (Barber, Deale, & Goodman, 2011).

As noted often, sustainability is frequently defined in terms of a triple bottom line that may be made up of a balance between *equity, economics*, and *environment*, or *people, products*, and *planet* (Dhiman, 2008) and as sustainability education moves forward in hospitality and tourism, the different views of various stakeholder groups, including educators, industry professionals, students, and community members are important, as ultimately all interests matter in terms of being able to not just understand sustainability but also to practice sustainability. Education can also be seen as one of the pillars of sustainability, for *education, environment*, and *economics* (personal communication with Carrie Blaskowski, Jackson County Green Energy Park, January 12, 2010) may be another way to view these important, critical practices.

Looking to the future of sustainability education in hospitality and tourism, one might be well served to look at the way sustainability is viewed in businesses in general, for although tourism is a complex system, it will not happen if it is not also operated via a sustainable business model. For example, in the book, *The Necessary Revolution: How Individuals and Organizations Are Working Together to Create a Sustainable World,* concerning sustainability in business, author Peter Senge (2008) wrote that, "sustainability innovators can ill afford to be unprepared or unskilled when it comes to engaging in conversations that build mutual understanding and the ability to work together." Senge (2008) stressed that organizational leaders must "bring to life" new ways of thinking, seeing, and interacting that create focus and energy. Beginning with the sustainability issues most central to the organization, employees and the community are keys to fostering and supporting this process. As hospitality and tourism educators move forward with other stakeholders, including students, industry professionals, and community members, they would do well to see them as their partners in sustainability education.

While it might be easy for one group of stakeholders to ignore the needs of another and to push its own agenda, ultimately, only through working together will sustainability become universal in the hospitality and tourism industry. As the study of stakeholders' views noted, educators, students, and industry professionals might not necessarily agree on the importance of different aspects of sustainability, but each of the stakeholder groups has important contributions to make in sustainability education (Barber & Deale, 2012; Barber, Deale, & Goodman, 2011). For instance, educators are perhaps more concerned about the big picture view of sustainability while industry professionals are focused on the financial bottom line and students may have passionate interests with regard to the environment. Yet, all of these views need to be incorporated into sustainability education for students-- the future hospitality and tourism professionals-- to understand and apply sustainability. In the real world, it is not about perfection, but rather, it is an ongoing balancing act, for as Harrison (2001), noted, sustainability is not a destination; it is a journey.

Therefore, continuous attention to education for and about sustainability needs to continue to be at the center of any debates and discussions concerning the future of the hospitality and tourism industry. Fortunately, the industry is well placed to be an innovator in the area of sustainability because people love to travel; they like to eat out; they like to stay in hotels

and enjoy resorts; and they delight in congregating together for events. In addition, tourism and hospitality form the basis of the economies of many communities and countries. This industry touches almost everyone. Thus, sustainability will continue to be of paramount importance in the hospitality and tourism industry and in the education of its future leaders, managers, employees, and guests.

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