World Journal of Management
Vol. 7. No. 1. March 2016 Issue. Pp. 92 – 106

Curriculum Sustainability: The Case of U.S Business School Deans

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This study reports on the practices, plans, and viewpoints held by a segment of U.S. business school deans on business sustainability in the curriculum. We had a 37% response to our 2014 online survey. Our findings indicated continued support in academia for the growing global interest in business sustainability. We also present responses on the challenges and opportunities for sustainability business programs. As business schools move toward greater adoption of sustainability topics (now required by AACSB and EQUIS standards) we believe our study may provide constructive information for business programs working to further integrate sustainability within their curriculum.

Field of Research: Sustainability, Business Education, Curricular Design

1. Introduction

The concept of Sustainability has become of great importance during the last several decades, including within Business Schools (Da Luz Neto, Gonclaves de Menenzes, and Krugianskas, 2013). Harnessing the technologies to address the challenges of world population increases, diminishing global resources, and growing environmental issues represents one way the business and academic community can be a partner in responsible global solutions. Many believe that these solutions go beyond CSR (Corporate Social Responsibility) goals, offering attractive opportunities in new markets, growth in existing markets, and strong earnings potentials. While some in the business community oppose and reject sustainable business directions as impediments to growth and development, others see sustainable technical advances as synergistic with all levels of stakeholder interests, including the bottom line, and entirely compatible with the sustainable challenges of society. Regardless of the viewpoint, it is imperative that business schools engage their students in sustainability issues, advances, and directions. Razaee and Homayoun (2014) examined over 40 business course syllabi and determined that Business Schools must do a better job of ensuring that students have a better understanding of the importance of sustainability practices.

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There has been little research focused on the attitudes and interests of Business School leadership in Sustainability, however. This paper examines the attitudes and values of leaders in Business Schools on Sustainability and related issues. It also includes information on current practices in Sustainability curricula.

The academic community, notably business schools, have responded with interest in Sustainability program development (Theissen, 2011). Sustainability pairs well with the required inclusion of corporate social responsibility in business programs, which have been integrated within business academic programs for some time now. The AACSB and EQUIS now both require sustainability curricular coverage, as written into their most recent accreditation standards. The AACSB added an annual sustainability conference to their educational programs several years ago, which enjoys strong popularity. It has recently added a Sustainability Resource Center to its website. With varying levels of interest and progress, university business programs are incorporating sustainability topics into their curricula.

This momentum will likely increase, given the continued impetus from society, the need to meet accreditation standards, and the expanding commercial market for green products and technology. Yet the future remains cloudy; much needs to be done and learned. It remains unclear how business schools will ultimately respond with viable program initiatives that will meaningfully contribute to business leadership and measureable progress. Will business programs take the route of meeting the standards, “checking the boxes,” but adding little to the research and leadership needed to truly meet the needs of advancing global technologies and environmental issues? Or will significant steps be taken: new academic programs, integrative curricular approaches with meaningful advances? The growing awareness of Sustainability as an overall business philosophy, as exemplified by the Global Reporting Initiative (GRI), as well as Accountability 1000, are just a few of the examples of the business environment taking a responsible position in the ever evolving Sustainability movement.

With these issues in mind, and in light of heightened interest in sustainability in general and specifically by the business and academic communities, we developed a survey aimed at learning more about academic practices and viewpoints of those most responsible for business school future directions, the dean. The survey: (1) identifies existing academic sustainability coverages within the Curriculum, (2) investigates the positions of U.S. AACSB Business School deans on the importance of Sustainability education, current best practices, and inclusion within a Business School Mission and Vision.

The remainder of this paper is organized to present first a review of relevant sustainability curricular research, followed by our survey methodology, a section with a discussion of the survey results, including related observations, and finally our concluding remarks.

2. Literature Review

The importance of a Sustainability focus has been embraced my many organizations but is far from being universally accepted. While many business organizations have incorporated Sustainability practices into their strategic Planning and operations, there are those that ignore the evidence of depleting resources. While differences in opinion exist on the challenges, level of threats, and rates of increase, most have recognized the need for further knowledge of potential environmental vulnerabilities, and seek information on feasible alternative remedies. The business community is well aware of the importance of recognizing these issues, with some taking leadership roles. Not recognizing social

responsibilities can prove bad for business, as Nike and Apple learned when news of their treatment of foreign workers became widespread (Business and the Environment, 2012). Although sustainability topics are gaining widespread interest in business schools, and research on the topic is increasing, surveys of the attitudes and opinions of business school deans has not been done prior to our study.

Some segments of society, including the business community, believe environmental threats are increasing at what many consider dangerous and exponential rates (Hansen, Nazarenko, Ruedy, Sato, Willis, Del Genio, Koch, Lacis, Lo, Menon, Novakov, Perlwitz, Russel, Schmidt, and Tausnev, 2005). To address these concerns, a growing Sustainability reporting movement, the Global Reporting Initiative (GRI) February 2015, maintains over 7000 organizations with over 22,000 reports that were voluntarily submitted to their sustainability database. The GRI is growing rapidly and is now supported by four of the world's largest accounting firms, among many others. Some Sustainability experts believe the path to lasting sustainability progress starts with accounting (Weybrecht, 2010), providing needed measurability to an otherwise often qualitative area.

New business areas and opportunities have developed in response to this growing environmental awareness, with new technologies finding receptive and large markets for practical environmental solutions. "Green Business; Sustainable Production; Environment Friendly Products & Production; Green Accounting" are but a few of the now common terms found throughout our global world. John Ellington (2008) states a sustainable business needs to satisfy a company's economic goals, social responsibilities, and environmental obligations. Adopting a sustainable corporate framework and resulting societal image of being "green" can have intangible benefits, which will become more recognizable as sustainable movements gather momentum (Da Luz Neto, et al, 2013)

Notable segments of the business community have reacted enthusiastically to the growing global interest in Sustainability. They believe the Sustainability area offers new market segments, new potentials in current markets, and the prospect of landing on the favorable side of the product development life cycle curves. As technologies move society to advanced levels, with new products and applications, sustainability has a place within that advancement, adding to growth [and profits], not hindering it. The AICPA adds that business should move toward business sustainability "not just because it is the right thing to do, but also because it makes good business sense." (Coffey, 2012) Ernst & Young report (2012) that sustainability performance is now part of increasing numbers of corporate reports.

A recent study by Rezaee and Homayoun (2014) concluded that "business colleges and accounting schools have much work to do in terms of motivating students to the importance of CSR and sustainable practices in business programs." Their conclusion was based on examination of 45 business sustainability education course syllabi with corresponding observations from academics. The question of efficacy in terms of having students understand the importance of CSR and sustainability remains, regardless of the apparent positive directions taken to integrate these areas within academic curricula (Rundle-Thiele and Wymer, 2012).

Previous adoption by some business schools of environmental and Sustainability academic program initiatives have shown valuable progress (Costanza, d'Arge, de Groot, Farberk, Grasso, Hannon, Limburg, Naeem, O'Neill, Paruelo, Raskin, Suttonk, and vab deb Belt, 1997). They showed that the academic community needed to work with business to provide

leadership, research, and motivated graduates that were ready to take on the challenges and opportunities emerging technologies offered.

Opportunities point toward both sustainable and profitable business outcomes. Previous research in this area has failed to determine the level of cultural and philosophical awareness and interest in Sustainability. The focus of this research is to gather and analyze observational data on current attitudes of Business School leadership concerning the role and importance of Sustainability in the curricula.

Our study was designed as a preliminary tool to form an informational database, similar to the Rezaee and Homayoun (2014) study that directly surveyed course syllabi, but ours would target the opinions of deans. As a preliminary, information gathering tool, the survey was not intended to result in conclusive statistical inferences. Our primary mission was simply to gather response-based data on the opinions of deans. We believed this would contribute to moving sustainability course design forward as the area develops. We hoped that areas of interest uncovered in our preliminary survey would be valuable subsequently, leading to more stringent and statistically rigorous approaches. Nonetheless we formed the following hypotheses as we developed the survey:

H1: Business School Deans will have a wide dispersion in their definition of "Sustainability."

H2: Conflicting with Rezaee and Homayoun's (2014) findings, (much work and progress was needed in moving Sustainability curricula coverage forward), Business School Deans will show positive opinions on the importance of including sustainability topics in business education.

H3: Business School Deans will believe a range of approaches are valuable in reaching students on sustainability topics.

H4: Business School Deans will believe students are highly interested in sustainability across a range of curricular alternatives.

H5: Business School Deans will have confidence that sustainability topics can be taught effectively with existing faculty.

The above hypotheses related to all deans queried. We expected that of those responding, relatively few would actually have sustainability courses in place. For those with courses, we asked questions about teaching methods and assessment. Since this is a developing area we knew these responses would be limited, limiting our ability to make conclusive assertions, however, we hypothesized the following:

H6: Business Schools with at least one sustainability course will rely primarily on lecture-based delivery, with significant inclusion of outside experts as guest speakers.

H7: Business Schools with at least one sustainability course will not have consistent assessment tools in place.

3. Research Methodology

To learn more about current concerns, directions taken, and program outcomes we used web-based software (Lime) to survey the practices, plans, and views of the deans of mid-sized AACSB business schools in the United States. The survey was sent to 83 AACSB School of Business Dean. Thirty-three (33) surveys were returned, resulting in a response rate of 37%. It included 21 main questions, with a set of sub-questions for those schools that already offered some form of stand-alone sustainability courses. This is an improvement over prior studies, as none had previously surveyed the opinions of business school deans. The questions were all simple multiple-choice, online response, and designed to appear relatively easy to complete. Most of the questions were based on a Likert-type scale (Dawes, 2008).

As we have reported, our research goal was primarily intended to gather information in the new and developing Sustainability area. Our intention was not to form statistically conclusive arguments, but rather to have an initial probe into the feelings and attitudes of deans on this emerging, and important EQUIS and AACSB required area. Accordingly our findings are based on the relative strength of responses observed, without further statistical investigation. Subsequent studies could explore these areas with more rigor and seek out correlations among the varying demographics of the deans surveyed.

4. Results and Observations

At the outset, it should be understood that the data gathered here concerning Sustainability education is unique in that this type of value-driven information has never been gathered by any other research. Other curricular research have investigated current sustainability programs, but none have directly questioned business school deans on their opinions or future plans. In this way our research differs from prior studies and is unique.

With that in mind we initiated the survey by simply asking respondents to identify with one (or more) of the following sustainability definitions. Our hypothesis (H1) was that there would a wide dispersion in their responses. This held true for the most part. Of the four definitions offered, two garnered 21% acceptance each, and another capturing 51%. Interestingly, the only one that directly mentioned CSR had the lowest response rate. To be fair, that definition compared CSR to sustainability so it's 'avoidance' may have nothing to do with the CSR term. Most respondents favored the definition that included a firm's triple bottom line joining profit motivations along with social and environmental goals.

Table 1: Sustainability Definitions

Field summary for 1		
The term "sustainability" is not clearly defined in the 2013 AACSB standards. Different sustainability definitions are found in industry, government, academics, and globally. Which of the following is most consistent with your business school's understanding of sustainability? *Respondents could check more than one.*		
Answer:	Count	Percentage
An appreciation for the impacts of business activity on society, especially the environment, beyond simply focusing on short-run corporate profits (SQ001)	8	21%
Finding a way for businesses to meet the demands of today's customers without compromising the needs of future generations (SQ002)	8	21%
Corporate social responsibility typically addresses the social impacts of past corporate actions, while sustainability seeks to change the future direction of the company. (SQ003)	3	8%
Sustainability considers business practices that enhance the firm's long-term triple bottom line, which includes monetary profits, social impacts on the community, and environmental impacts on the firm's stakeholder eco-system (SQ004)	20	51%
total Responses	*39*	100%

The following tables and discussion give the survey results in the value of sustainability in the curricula and content delivery approaches. Business schools indicated a diverse approach to covering sustainability within their curriculum. It was surprising to see that only 30% had sustainability embedded within existing core courses, and one-quarter of the schools reported "no program or emphasis in place yet." No schools had yet required sustainability courses within their core, and only one in ten had any sustainability elective courses. This may be because only mid-sized schools were targeted. We suspect that larger schools would at least have elective courses, including a major or minor, none of which our respondents had. Four of the 31 respondents included some level of emphasis in sustainability in their capstone course.

The following tables indicate response attitudes toward a series of approaches, viewpoints, and other sustainability matters, with our discussion following. Certain areas of interest have been highlighted for easier review.

Tables 2 & 3: Value of Sustainability Programs & Approaches

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	No Answer		TOTALS
SUSTAINABILITY & ACADEMIC PROGRAMS:								
"Sustainability topics are an important component of business education."	8	18	2	1	0	2		31
	27%	58%	6%	3%	0	6%		100%
"The following approach is likely to achieve valuable and lasting student sustainability awareness, interest, and knowledge."								
Sustainability topic embedded in more than one core course	14	11	4	0	0	2		31
	46%	35%	13%	0	0	6%		100%
Sustainability topic as a significant new component of an existing Business & Society course	5	14	7	1	1	3		31
	16%	45%	23%	3%	3%	10%		100%
Sustainability topic embedded broadly across major area courses	9	12	5	2	0	3		31
	29%	39%	16%	6%	0	10%		100%
Required sustainability core course	5	4	9	7	3	3		31
	16%	13%	29%	23%	10%	10%		100%

It is encouraging to note that 85% of respondents Strongly Agree or Agree that sustainability topics are important components of business education, supporting our suspicions (H2). However, it is apparent that much work is needed to ensure that valuable sustainability program coverage is needed, as only nine of the 31 respondents have at least one course currently in place.

As we hypothesized (H3), the deans valued a range of sustainability delivery methods. Almost half strongly favored embedding sustainability in core courses. This approach reminds us of the ethics coverage many AACSB schools chose, which represents an "easy" means to report

coverage. However, in an ideal curricula, an integrative approach to Sustainability is perhaps among the best of learning pedagogies. For example, it can be argued that including different currencies (euro, rupee, yen) in accounting homework embeds global perspectives in courses; many doubt the significance of such an approach. Raising course content from "embedded" to "significant new component" of an existing course changes reported favorability from "strongly agree" to "agree", with 30% either neutral or disagreeing on the idea. Approximately one-third favor a stand-alone core Sustainability course, but the remaining two-thirds don't like the idea of a core Sustainability course. We suspect this reflects the difficulty in managing current curricula through the many competing demands than the importance of the area (which, as reported in the above paragraph, enjoyed very strong support).

Table 4: Student Interest in Sustainability

What level of interest do you believe your business students have in a:	Strong	Somewhat Interested	Indifferent	Not Interested At All	No Answer	TOTALS
Sustainability Major	1	3	18	8	1	31
	3%	10%	58%	26%	3%	100%
Sustainability Minor	1	9	15	5	1	31
	3%	29%	49%	16%	3%	100%
Sustainability Courses	3	16	10	0	2	31
	10%	52%	32%	0%	6%	100%
Sustainability Coursework Embeded in Regular Courses	7	19	4	0	1	31
	23%	61%	13%	0%	3%	100%
Sustainability Certification Programs	1	9	14	6	1	31
	3%	30%	45%	19%	3%	100%

We were surprised to see that the deans believed there was little student interest in a Sustainability major, with only minimal support for a Sustainability minor. However, deans do believe that a large percentage of students (62%) are in favor of having a Sustainability course,

supporting our hypothesis on perceived student interest (H4). They also believed that at least one-third of their students favored a Sustainable Certificate Program.

Given the favorable, if not overwhelming, interest in sustainability by both Deans and students, Faculty expertise to teach Sustainability courses was examined (H5).

Table 5: Faculty Sustainability Expertise

	Strongly Agree	*Agree*	*Neutral*	*Disagree*	*Strongly Disagree*	*No Answer*		TOTALS
FACULTY EXPERTISE IN SUSTAINABILITY:								
"Faculty with expertise and professional sustainability experience would be most suitable to teach sustainability courses. This would most often be adjunct teachers."	2	8	13	7	0	1		31
	6%	26%	42%	23%	0	3%		100%
"Our existing full-time business faculty can effectively deliver sustainability content or stand-alone courses without any additional training required."	1	12	5	10	2	1		31
	3%	40%	16%	32%	0.06	3%		100%
"Our existing full-time business faculty can effectively deliver sustainability content or stand-alone courses, but will require additional training."	0	16	6	6	1	2		31
	0%	53%	19%	19%	0.03	6%		100%
"All business faculty should receive some level of sustainability training as part of an integrated approach."	1	14	6	8	1	1		31
	3%	46%	19%	26%	3%	3%		100%

Deans report that existing faculty are capable of teaching Sustainability course with no training in the area (43%) while at the same time report that 53% of their faculty would require additional training to effectively teach Sustainability. This indicates that deans are mixed on whether their faculty can adequately cover Sustainability courses, negating our hypothesis (H5) that the deans would have confidence in delivering courses with existing faculty. There was a strong minority (38%) that believed that Existing Full-Time Faculty were not capable of effectively teaching Sustainability courses.

Finally, we asked about cross-discipline approaches to sustainability topics. This included coupling business faculty with faculty and courses from other areas including biology, ecology, political science, freshman orientation, and integrated within general education programs. Our university currently has a sustainability topics course team taught by business management and biology professors. None of the deans strongly favored any of these cross discipline approaches.

4.1 Report of Nine Schools with Sustainability Programs

Of the thirty-one respondents, nine reported to currently offer at least one sustainability course. They listed Marketing and Sustainability, Environmental Sustainability, Sustainable Business Management, Sustainability Topics, and Eco-Preneurship among courses they presently offer. This represented 30% or the respondent schools. The following are with respect to those nine schools and programs. The nine schools of this subset reported overwhelmingly (8 of 9) that their academically qualified, full-time faculty teach the Sustainability courses. While schools reported that their faculty were “generally interested” in offering Sustainability courses, one school reported that their faculty had no interest at all in this area. We also asked the nine sustainability program schools about effective teaching methods and assessment.

Tables 6 & 7: Sustainability Teaching Methods & Assessment

Which of the following TEACHING METHODS are used in your sustainability courses?	Primary Method	Used Often	Used Sometimes	Not Used	TOTALS
Lecture	6	2	1	0	9
	67%	22%	11%	0	100%
Guest Speakers	1	2	5	1	9
	11%	22%	56%	0.11	100%
Student presentations	3	3	2	1	9
	33%	33%	23%	0.11	100%
Student projects	4	3	1	1	9
	45%	33%	11%	0.11	100%
Student papers	3	3	3	0	9
	34%	33%	33%	0.00%	100%
Service learning	2	1	3	3	9
	23%	11%	33%	0.33	100%

How do you ASSESS sustainability learning?	Primary Method	One Source	Not Used At All	No Answer	TOTALS
Objective tests	3	4	2	0	9
	33%	45%	22%	0	100%
Qualitative (essay) tests	1	4	3	1	9
	11%	45%	33%	0.11	100%
Student/alumni surveys	0	3	5	1	9
	0%	33%	56%	0.11	100%
Focus groups, exit interviews	1	2	6	0	9
	11%	22%	67%	0	100%
Not directly assessed yet	0	1	6	2	9
	0%	11%	67%	0.22	100%

Ninety percent of programs used lectures as the method used to teach Sustainability, as we hypothesized (H6). Over half of the courses (56%) did incorporate guest speakers in their classrooms. It was also reported that a strong reliance on student projects, presentations and papers was used in two-thirds of Sustainability courses. We also hypothesized (H7) that assessment will not be consistent across schools, which was true.

Table 8: Business School Demographics

DEMOGRAPHICS FOR THE NINE SCHOOLS THAT CURRENTLY HAVE SUSTAINABILITY COURSES:	Responding Schools	Number of FACULTY: Average #	Minimum	Maximum	Total Schools
Number of full-time faculty in your business school:	9	28	12	60	9
Number of part-time faculty in your business school:	9	8	2	20	9
Number of schools with at least one FULL-TIME faculty member with academic sustainability credentials:	4 44%	2.3	1	5	9
Number of schools with at least one PART-TIME faculty member with academic sustainability credentials:	2 22%	0.5	0	1	9
Number of schools with at least one FULL-TIME faculty member with professional experience in sustainability:	3 33%	1.3	0	3	9
Number of schools with at least one PART-TIME faculty member with professional experience in sustainability:	2 22%	0.5	0	1	9
Number of schools with at least one faculty member doing sustainability RESEARCH:	4 44%	3.5	1	6	9

Schools with programs in place averaged 28 full-time faculty and 9 part-time. There were 2.3 full-time faculty members with academic sustainability credentials, on average, in the four schools that had such faculty. It is possible that with the emergence of a new Sustainability focus, those with professional expertise might be best to deliver topically current programs in sustainability. Matching the right, and willing professional, with courses and programs could be challenging but effective.

Several schools volunteered interesting comments about their programs and viewpoints on sustainability programs in general. One respondent felt sustainability was “false priority”, just a buzz-word and not real. All others were far more positive. One college competes with others colleges on their campus to reduce energy consumption. They also have had success getting students involved in promoting campus recycling and resource management. All schools reported that university administration is supportive of their program and efforts. Another school reported the success of a sustainable marketing course required for all marketing majors, and as an elective for other majors. The school tried a sustainable business minor but it failed after a lack of student interest. However, another school has successfully offered a sustainability minor as well as offering an environmental economics course.

5. Conclusions, Limitations and Further Study

5.1 Limitations and Further Study

As no other survey of business school deans has been done, our results do not contradict prior studies. Because ours is the first study of its kind, and given the strong emphasis of EQUIS and the AACSB in sustainability, these results should be of interest in guiding curricular decisions. The findings, however, are limited by the small sample base, and the lack of statistical rigor used in discussing the responses. Our intention was to use the survey as a tool to preliminarily gather information on the attitudes of deans in this emerging area. We also hoped to learn more about the types of programs in place, although we knew that would provide limited data as we believed not many programs were in place at the time. The survey information provides valuable insights from which we believe more statistically-based investigations might now be pursued. New research might also have value in extending this survey to a broader contingent of deans, including internationally, and by also including faculty and students in the survey. As we noted, our findings are limited by the small sample size as well as the method of analysis which focused primarily on descriptive statistics.

We also believe it might be interesting to run correlations in a broader study on responses with university demographics. Investigating and comparing the attitudes of deans, as we have, with that of faculty and students on the importance of sustainability and delivery methods could also prove valuable. EQUIS and the AACSB are strongly committed to integrating sustainability into business school curricula. Leaning more about methods and underlying interest to do so is very relevant to curricular development.

5.2 Conclusions

As expected, the majority of Business School Deans (51%) reported that Sustainability included the triple bottom line concept, impacting financial, social, and environmental decisions of the organization. In addition, 85% believed that Sustainability topics were

important to a Business School degree, that these topics should be taught in more than one course (81%), and that Sustainability topics should be offered broadly across the entire Business Curriculum (68%). However, only 29% of Deans felt that Sustainability should be presented in a Core Course and only 13% felt that a Sustainability Major was important. Given these results, it is not surprising that only 33% of Deans felt that there was a need to offer Sustainability Certificate Programs.

Academic proficiency required to teach Sustainability was also examined through the Dean's responses. It appears that 65% of those asked did not believe that professors should have any experience or additional training in Sustainability to teach these courses. However, on the same survey, Dean's reported that only 43% of their faculty were qualified to teach Sustainability courses and that they should receive additional level of Sustainability training to teach these courses.

It is clear that Business School Deans believe that Sustainability concepts are important to include within a Business School Curriculum, although the degree of coverage within the curriculum varies greatly (from part of a Business Course to a complete Business Major). These Senior Business School Administrators believe that these topics should be covered within existing course or courses and that these courses should be spread across the business curriculum. However, there is little interest in presenting concepts in a core course or as a Sustainable Major. There was also little interest in the Business School training external constituents, such as engineers or urban planners, in the area of Sustainability. A majority of Deans also reported that they did not believe that faculty required any specific training to teach Sustainability courses.

Favorable concepts of sustainability and its importance are endorsed by growing segments of society, including political, ethical, commercial, and economic. This research suggests that the senior administrators of today's Business Schools are aware of their responsibility to educate and train the business leaders of tomorrow in the area of Sustainability.

Society's dependence on limited resources, renewable and non-renewable, highlights the need for better stewardship and management of our environment. Sustainability has evolved from an emotional, philosophical, and political debate to growing acceptance based on research and knowledge. It is clear to many segments of society that our dependence on finite, non-renewable resources has an unpleasant end. To say that acceptance is universal, however, largely overstates the case at this point in time. While a growing portion of society believe it is imperative to develop and apply programs to motivate different areas of sustainable research and discovery, backlash remains. Higher education has an important role in the process. And business schools, in particular, can lead the way with relevant research and supportive educational programs.

The world business community can and should play a major part in the education, investment, and implementation of activities furthering sustainable technological advances, industrial practices, and business opportunities. Developing technologies demonstrating the growth and profit potential of sustainable directions will go a long way to foster the sustainable movement. Sustainability education in Business School programs, at the undergraduate and graduate levels, will support the necessity of efficient and effective resource management, as well as the impetus to develop new and renewable sources of energy. Our survey is one step closer to understanding current business school curricular initiatives and programs. The survey shows that sustainability course integration and

programs are largely favored by business schools, although implementation remains an issue. As programs develop, further successes and failures in curricular approaches should lead the way to effective advances supporting our next generation of business leaders with knowledge on effective and profitable sustainability business ventures. Higher education, with science and business programs in particular, remains in a supportive, developmental phase. As academic programs move forward, the research and educational needs to meet the challenge and opportunities afforded by the sustainable movement look to be both favorable and opportunistic.

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