

CURRENT PERCEPTIONS, PROMINENCE AND PREVALENCE OF SUSTAINABILITY IN THE MARKETING CURRICULUM

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As the sustainability movement continues to gain a foothold in industry, it is imperative that higher education takes an active role in educating future business leaders. This paper seeks to address the prevalence and prominence of sustainability in the marketing curriculum and attitudes of program administrators (department chairs/deans) regarding the importance of including sustainability within marketing programs, the business curriculum and within undergraduate education in general. The sample includes department chairs/program directors of Association to Advance Collegiate Schools of Business (AACSB) schools with undergraduate marketing programs. Rusinko's (2010) model is used to map current undergraduate sustainability offerings in both marketing and business programs. The results help create an understanding of where we are today, and create the need to further investigate how to foster top-down support, faculty expertise and student demand for integrating sustainability in marketing and business courses in the future.

INTRODUCTION

As the primary source of education, research, and creative innovation, universities serve as a key supplier of the talent needed by businesses. Educators bear the critical responsibility of ensuring that students are armed with the skills and knowledge needed to function and, ideally, to thrive in the workplace. However, preparing today's students to solve tomorrow's problems is an increasingly difficult task given our rapidly evolving and expanding global economy. It is imperative that university educators recognize and react to current and future demands within the business environment in order to produce a "product" (i.e., employees) that is adequately suited to these conditions (Eisenhardt & Brown, 1998).

This research acknowledges the vital role of trained employees in the sustainability revolution, and the even greater role of university educators for helping to create this talent pool with appropriate instruction and curricula. To date, the bulk of research within the domain of business sustainability education has focused on the shift within industry and, by extension, among business educators, to

embrace the principles of sustainability. Need recognition has led several authors to develop recommendations for activities, exercises, topics, case examples and other specific additions to the standard curriculum to broaden it in a bottom-up fashion. In parallel, several authors have proposed top-down frameworks of strategic approaches for integrating sustainability content into the curriculum.

This study provides another step forward within the domain of business sustainability education with a preliminary look at the extent and nature of actual progress that has been achieved to infuse the curriculum with the principles of sustainability. Specifically, we ask: to what extent are universities developing and delivering business curricula that addresses sustainability principles and practice? Furthermore, to what extent is sustainability content integrated into the marketing curricula, given marketing's emphasis on adapting business strategy to accommodate shifts in external conditions and customer demands?

As a backdrop to this issue, Friel and McLaughlin (2012) suggest the presence of competing objectives when deans and other leadership within a university consider curriculum change, particularly with regard to adopting sustainability content. These authors note a substantial increase (29.2% in 2009 to 50.5% in 2011) of deans who think it is very

important to hire faculty with expertise in sustainability-related topics. However, they also note a plethora of factors that compromise moving forward with actual change. The aim of this study is to assess the extent to which the perceived importance of sustainability education is consistent with actual integration of content into business program curricula, as well as how this integration is taking place. Implications of this research are intended to guide next steps for advancing sustainability within marketing and business education given the institutional barriers that may be present.

LITERATURE REVIEW

The Sustainability Imperative within Business

Albert Einstein said, “The significant problems we face cannot be solved at the same level of thinking we were at when we created them” (as cited in Dawe & Ryan, 2003). The cumulative effects of population growth, exploitation of energy and natural resources, waste and pollution are straining the limits of the environment to support current levels of consumption. A recent United Nations report noted, “increased levels of human activity are threatening to surpass the Earth’s carrying capacity as a source and a sink” (UN System Task Team, 2012).

Increased mass media coverage and robust scientific validation of environmental degradation have heightened public awareness and concern about the array of long-term implications and the dire need for change. This sentiment is more than a social imperative, it is a growing business imperative as well. According to the 2013 MIT-Sloan Management Review and Boston Consulting Group’s Sustainability Report, nearly 50% of companies have changed their business models as a result of sustainability opportunities, a 20% increase over the previous year. Sources motivating this change include supply chain partners, customers, and employees that are exerting pressure on businesses to make a stronger commitment to sustainable practices and offerings. While there is no legal obligation to prioritize social responsibility, there is a greater likelihood for business leaders to be held accountable for shortsighted activities that may

successfully achieve short term financial or growth goals but sacrifice societal considerations in the process.

Trained Employees are a Crucial Resource

Demand on many fronts for corporate transparency and ethical conduct, coupled with a technologically interconnected and globalized economy, underscores the need for firms to move beyond the traditional measures of success focused on economic responsibility to shareholders and legal compliance. Instead, a firm’s long-term viability increasingly depends upon managing a broader array of ethical and discretionary performance metrics (Werther & Chandler, 2011). Successful transition ultimately depends upon attracting and retaining employees with the essential knowledge and skills to leverage sustainability opportunities into tangible value for the firm (Hart, 2009). While the vital role of trained employees in this process is clear, current methods in use by universities to develop and ensure a reliable supply of qualified candidates is not as well understood.

To help fill this research void, this investigation provides a snapshot of the status of sustainability content in the marketing and overall business curricula from three vantage points: (1) the prevalence of sustainability content in the undergraduate marketing curriculum as well as in other undergraduate business disciplines, (2) the prominence of sustainability content within the marketing major and other business major curricula, i.e. is sustainability featured in courses that are dedicated to this subject or is the content embedded within existing standard courses, and (3) the incidence of student exposure to this content given its status as required or elective coursework. In addition to the nature of sustainability content delivery within the curricula, the study also assesses (4) program administrators/faculty perceived importance of integrating sustainability into the marketing curriculum, into the business curriculum and into undergraduate education in general.

Frameworks for Integrating Sustainability Content

In the United States, some progress has been made within the business school curriculum and within the marketing curriculum in particular to incorporate sustainable business considerations. Several approaches have been proposed to achieve this goal. For example, Bridges and Wilhelm (2008) suggest specific learning points pertaining to sustainable marketing strategies, tactics, products, and communications. Borin and Metcalf (2010) propose a variety of methods for infusing the sustainability principles into the marketing curriculum. The extent to which these recommendations have been adopted is unknown. Likewise, much of the progress that has been made in advancing sustainability in curriculum lies embedded in an assignment, or a course that does not typically make headlines or appear in research journals. It is likely that greater effort is still needed on the part of educators to refocus and align with the push toward greater sustainability within the corporate world and within their current curricula.

The first step in assessing the extent to which sustainability content has been incorporated within the curriculum is to examine recent literature on the subject. In the past several years, a number of studies have been published on the procedural aspects of this puzzle (Benn & Dunphy, 2009; Porter & Cordoba, 2009; Rands, 2009; Roome, 2005; Scott & Gough, 2006; Walker, Gough, Bakker, Knight, & McBain, 2009). Several studies suggest that content integration occurs on a continuum that is affected by conditions such as institutional commitment, faculty expertise, and the availability of resources. Other studies suggest techniques and provide examples of what has worked at a particular college or university. It is clear from this review that there is not a "right" way to infuse sustainability into the curriculum.

Rusinko (2010) presents a coherent and highly actionable matrix of integration strategies that can be applied to the marketing curriculum. Four categories of integration strategies are proposed: (I) Discipline-specific within the existing course structure, (II) Discipline-specific within a new course structure, (III)

Cross disciplinary within an existing course structure, and (IV) Cross-disciplinary within a new course structure (See figure 1).

The matrix is a flexible tool that faculty can use to assess their current efforts and/or plan for future curricula expansion. An overview of these strategic options along with their corresponding advantages, disadvantages and suggestions regarding conditions for adopting each approach are presented in Rusinko (2010) and summarized as follows.

- Strategy Option (I) integrates sustainability into existing courses, minors, majors or programs. It is cited as being the easiest to implement and requires minimal resource demand. An example of this option would be a faculty member incorporating a module on sustainability into their existing supply chain or consumer behavior course. While it would allow students some exposure to the topic, it would simply provide a conceptual overview as opposed to an in-depth investigation. The purpose and learning objectives of the existing course would not center solely on sustainability related issues. One advantage is that a faculty member need not be expert on the topic to introduce a module on sustainability in their existing courses. In fact, a number of marketing specific articles have been published with suggestions of learning activities that can be incorporated to existing course (Rusinko, 2010; Borin & Metcalf, 2010). A disadvantage is the limitations imposed by trying to fit new content into an existing course structure that may not be able to accommodate it. Where the two content areas do not align, important facets of sustainability may not be adequately covered or dropped completely. As a result, full integration of sustainability content may not be achieved
- In Strategy Option (II), a new discipline-specific course, minor, major or program is created. This offers both an independent identity and a more standardized approach to sustainability within marketing. An example of this would be a stand-alone course in green marketing or sustainable marketing. This option does allow for a more in-depth investigation into the

**FIGURE 1:
Integration Framework**

Focus	Delivery	
	Existing Structures	New Structures
Narrow (Discipline-Specific) Curriculum	I. Integrate into existing course(s)	II. Create new discipline-specific sustainability course(s)
Broad (Cross-Disciplinary) Curriculum	III. Integrate into common core requirements	IV. Create new, cross-disciplinary sustainability course(s), minor(s), major(s), program(s)

interaction of marketing and sustainability and would likely result in a greater depth of understanding of the topic within the discipline. Perhaps the biggest barrier to this model is the need for resources, as this option would require either faculty expertise or a team-teaching approach to compliment different areas of expertise.

- Some believe that while a stand-alone course offers benefits, sustainability education needs to be incorporated in a more holistic way across disciplines. In Strategy Option (III), sustainability concepts are infused across disciplines into existing, often-common core requirements. Sustainability does lend itself to interdisciplinary exploration, and this option greatly increases the chance that students will have exposure to the topic. An example of this would be including a module on sustainability in Principles of Management, Micro/Macro Economics, Principles of Accounting and/or other common core courses within the college of business. The key difference between Option I (content incorporated into an existing course in the discipline) and Option III (content incorporated into an existing course across disciplines) is the frequency of exposure as well as the sheer number of students exposed. Given that

many institutions require all business majors to take core classes, exposure would not be limited to marketing majors. The disadvantages are the likely need for college-wide administrative support and departmental buy-in for its successful implementation.

- Strategy Option (IV) creates new cross-disciplinary (within the college of business) courses, minors, majors or programs. As with Strategy Option (III), this approach is likely to result in large numbers of students gaining exposure to sustainability concepts, but would require the most significant resources and support as compared with the other strategic integration options. For a successful cross-disciplinary implementation and the creation of new offerings, infusing sustainability would need to be a business school priority and effort.

The framework developed by Rusinko (2010) serves as the basis for examining the (1) prevalence, (2) prominence, (3) incidence, and (4) importance of exposure to sustainability content in marketing and in other business discipline curricula.

METHODOLOGY

Sample

Several useful resources exist today for documentation of where and how well sustainability principles are disseminated (e.g., AASHE, Aspen Institute). However, the vast majority of this archived information pertains to graduate level education. This research assesses sustainability coverage at an earlier stage in the student's career, at the undergraduate level of education. This focus is inspired by the 1990 Talloires Declaration which establishes sustainability as "the context for all undergraduate learning" (University Leaders for a Sustainable Future, 2007). This vision has important implications for business school programming, suggesting that a sustainability-focused graduate degree may simply come too late in the game to be truly effective. Instead, a younger target audience may be necessary to fully realize and embrace a sustainable business paradigm that emphasizes people and planet as well as profits.

To gauge the overall prevalence of sustainability education within the marketing discipline and business programs overall, the sampling frame of institutions accredited by the Association to Advance Collegiate Schools of Business (AACSB) was selected. AACSB is the most longstanding and recognized professional accreditation a business program can earn. The AACSB standards challenge educators to pursue excellence and continuous improvement in their business programs. In fact, "93% of surveyed schools reported that AACSB Accreditation has a continuous positive effect on ongoing curricula development, program design, and delivery methods" (<http://www.aacsb.edu/aacsb-accredited/students/>). Specifically within the AACSB accreditation standards, standard 15 relates to the management of curricula. In order to gain and maintain accreditation, each school must demonstrate that they have a well-documented, systematic process to develop, monitor, evaluate and revise the curricula of degree programs, including inputs from all appropriate constituencies. This provided the rationale behind the sampling decision, given that each AACSB school is held accountable for this standard. AACSB-accredited schools

represent the leading edge in the future of business education and, as such, are a particularly valid indicator of how and where sustainability-focused business pedagogy has evolved.

The survey sample was developed in three phases of collaborative effort. First, the full listing of 653 AACSB-accredited institutions was assembled from the AACSB publically available website (www.AACSB.com). Second, the list was pared down to only include those institutions with a currently active undergraduate marketing program. Third, the list was further pared down to include only those institutions with an identifiable and reachable marketing department chair or dean. The resulting population was comprised of 548 marketing program administrators presumed to have knowledge of their own program's content as well as a working knowledge of the other business programs in the college.

Procedure

Research has shown that with online surveys, the most important factors to consider are follow-ups, incentives and length and presentation of the questionnaire (Dillman, 2000). These findings were incorporated into the survey methodology. Each prospective respondent received an email invitation to complete the online survey. The email contained a brief description of the project, assurances of confidentiality, an optional incentive to participate (the individual could choose to be included in several random drawings for gift cards) and a web link to click on to be taken to the online survey.

RESULTS

The survey contained a total of 15 questions including classification questions (see Appendix for survey questions). A total of 51 marketing faculty/administrators completed the survey to yield a response rate of 10.75%. The sample size is sufficient for deriving generalizable results as the rule of thumb for conducting statistical analysis calls for a minimum sample of 25-30 observations (e.g., Hogg & Tanis, 2005). Validity and internal consistency of results is further supported by the assumption that the sample is sufficiently

representative of the intended population (e.g., no significant differences in sample classification data were found between early and later responders, related to the timing of reminder invitations to participate, or other potential sources of systematic error or methodological bias). Additionally, the effect size must be of sufficient power to be detected within a small sample size. The analyses utilized in this investigation are of two types: (1) descriptive in nature and thus not dependent upon parameter estimates in relation to effect size, and (2) independent sample mean score comparisons that take the sample size and standard error of the mean into consideration (significant differences were obtained; see results below).

Prevalence of sustainability content

Slightly more than half of respondents (54.9%) report that they do not currently integrate sustainability content into the marketing curriculum. Slightly less than half of respondents (47.1%) report that they do not currently integrate sustainability content into the business curriculum.

Prominence of sustainability content

About 1/3 of respondents (33.3%) offer sustainability content as a module within one or more courses in the marketing curriculum (Strategy Option I) while about 1/6 of respondents (15.7%) offer a dedicated sustainability course within the marketing curriculum (Strategy Option II). Two respondents offer both dedicated courses and modules within the marketing curriculum (both Strategy Options I and II).

Over 1/3 of respondents (39.2%) offer sustainability content as a module within one or more courses within their business curriculum (Strategy Option III). About 1/5 (19.6%) of respondents offer a dedicated sustainability course within their business curriculum (Strategy Option IV). Three respondents offer both dedicated courses and modules within the business curriculum (both Strategy Options III and IV).

Of the respondents who offer sustainability content using multiple integration strategies

within a discipline-specific or cross-disciplinary context, only one respondent indicated the presence of all four integration strategies (I, II, III, and IV) at their institution (see Table 1).

Incidence of student exposure to sustainability content

A total of 49 marketing courses were reported as containing a sustainability-oriented module (Strategy Option I). Almost 2/3 of these exposures (63.3%) are required undergraduate courses. The remainder of exposures were within elective courses (22.4%) or not labeled (14.3%; see Table 2).

A total of 16 marketing courses were reported as dedicated to sustainability content (Strategy Option II). Over 1/2 of these exposures (56.3%) are required undergraduate courses. The remainder of exposures were elective courses (43.7%; see Table 3).

A total of 37 business courses were reported as containing a sustainability-oriented module (Strategy Option III). The management program was by far the most likely program to include courses with embedded sustainability-oriented content (43.2% of incidence). Corporate strategy and economics programs had the next highest incidence of courses with sustainability-oriented content (18.9% each; see Table 4).

A total of 18 business courses were reported as dedicated to sustainability content (Strategy Option IV). Table 5 presented the variety of titles for these courses, some titles reported by multiple respondents. Note that the required versus elective status of business courses dedicated to sustainability or containing sustainability modules was not assessed in the survey, as it was determined that the sample population would not be likely to have sufficient knowledge of the nuances of each business program's requirements. Instead, simple incidence of sustainability exposure within the business curriculum was assessed at a higher level of abstraction to ensure validity of responses.

TABLE 1:
Prevalence and Prominence of Sustainability Content in the Curriculum

Sustainability content within:		Modules in courses	Dedicated courses	None	Not sure
Marketing Curriculum	Strategy	I.	II.		
	Count	17	8	21	7
	%	33.3%	15.7%	41.2%	13.7%
Business Curriculum	Strategy	III.	IV.		
	Count	20	10	11	13
	%	39.2%	19.6%	21.6%	25.5%

TABLE 2:
Incidence of Exposure to Sustainability Modules in the Marketing Curriculum (Strategy Option I)

Marketing Courses with modules	count	%required	%elective	%missing
Principles of Marketing	12	100.0%		
Marketing Management	8	87.5%		12.5%
Marketing Research	2	100.0%		
Consumer Behavior	3	66.7%		33.3%
Product Branding	2	100.0%		
Communications Promotion	3	33.3%	66.7%	
Marketing Strategy	5	60.0%		40.0%
Global International Marketing	6		66.7%	33.3%
Retail/Wholesale	2		50.0%	50.0%
Selling Sales Management	1	100.0%		
Entrepreneurship	2		100.0%	
Other:	3	33.3%	66.7%	
Supply Chain Logistics (requ.)				
MKT & Society (elec.)				
Guerrilla Marketing (elec.)				
		%required	%elective	%missing
total	49	63.3%	22.4%	14.3%

Note: Multiple mentions per respondent allowed.

TABLE 3:
Incidence of Exposure to Dedicated Sustainability Courses
in the Marketing Curriculum (Strategy Option II)

Incidence of Sustainability-Dedicated Marketing Courses	count	% of incidence
Required	9	56.3%
Elective	7	43.7%
Examples:		
Sustainability and System Dynamics		
Sustainable Pathways		
Societal Issues		
Small Business Sustainability Consultation		
Marketing and Social Issues		
Marketing: Advanced Topics		

Note: Multiple mentions per respondent allowed

TABLE 4:
Incidence of Exposure to Sustainability Modules in the Business Curriculum (Strategy Option III)

Business Programs with Course modules	count	incidence
Management program courses	16	43.2%
Corporate Strategy program courses	7	18.9%
Economics program courses	7	18.9%
Accounting program courses	2	5.4%
Information Technology program courses	2	5.4%
Finance program courses	1	2.7%
Other programs:	2	5.4%
Operations & Supply Management		
Entrepreneurship		
total	37	

Note: Multiple mentions per respondent allowed.

TABLE 5:
Incidence of Exposure to Dedicated Sustainability Courses
in the Business Curriculum (Strategy Option IV)

Incidence of Sustainability-Dedicated Business Courses
(18 total mentions; some course titles repeated.)
Sustainability and Environmental Management
Personal & Professional Development: Leadership Sustainability Focus
Fundamentals of Sustainability
Sustainability and System Dynamics
Environmental Economics
Green Management
Business Governance & Corporate Social Responsibility
Sustainable Global Human Resource Management
Sustainable Economics
Ethics and Social Responsibility
Corporate Responsibility and Legal Issues in Sustainability
The Sustainable Organization

Note: Multiple mentions per respondent allowed

Importance of sustainability content

Perceived importance of including sustainability-oriented content within the marketing curriculum, the business curriculum, and undergraduate education overall was examined overall and by respondent group. Groups were defined as those pursuing Strategy Option I (offering sustainability-oriented modules within marketing courses), Strategy Option II (offering dedicated sustainability courses within the marketing curriculum), no strategy or unknown strategy (see Table 6).

With regard to the marketing curriculum, Strategy Option II group rated the importance of sustainability education significantly higher as compared with the No Strategy group. With regard to the business curriculum, both Strategy Option I and II groups rated the importance of sustainability education significantly higher as compared with the No Strategy group. Lastly, with regard to undergraduate education overall,

Strategy Option I and II groups rated the importance of sustainability education significantly higher as compared with the No Strategy group.

DISCUSSION

This investigation represents a new phase in the effort to align business education with the needs of the new economy. As companies recognize their obligation to adopt a triple bottom line vision for the future, tangible progress toward this goal depends upon an updated workforce with relevant knowledge, skills, abilities, and a passion for making this vision a reality. As such, universities play a key role in preparing their students for the urgent challenges that await them in the new economy.

The most striking insight from this investigation is the minimal progress that has been made within roughly half of the sample

TABLE 6:
Perceived Importance of Integrating Sustainability into the Curriculum

Respondents with:		Importance of Sustainability Content in ...		
		Marketing Curriculum	Business Curriculum	Undergraduate Education
Modules within marketing courses (Strategy Option I)	Mean	5.47	5.40 ^a	5.27 ^a
	N	15	15	15
	SD	1.685	1.242	1.033
Dedicated marketing courses (Strategy Option II)	Mean	6.50 ^a	5.63 ^a	5.88 ^a
	N	8	8	8
	SD	0.756	1.408	0.835
None (no Strategy)	Mean	4.67 ^b	4.10 ^b	4.33 ^b
	N	21	21	21
	SD	1.713	1.446	1.528
Not sure (Unknown Strategy)	Mean	5.57	5.14	5.00
	N	7	7	7
	SD	0.787	1.215	0.577
Total	Mean	5.31	4.86	4.94
	N	51	51	51
	SD	1.594	1.47	1.302
	F	3.081*	3.983*	3.74*
	p	0.036	0.013	0.017

Overall F tests were significant for each measure of importance. Superscripts a and b designate post hoc multiple comparison mean score significant differences (LSD criteria).

surveyed. Given the rapid expansion of the green movement, increased concern about social inequity, intensified scrutiny of corporate accountability and heightened interest in other corollaries of the sustainability revolution, it would seem highly unlikely for any business school to avoid adopting some sustainability programming in some fashion. However,

nearly 1/2 of respondents (41.2%) do not currently infuse sustainability into their marketing curriculum. Less than 1/4 (21.6%) report a lack of sustainability content in the broader business curriculum, however this proportion is still surprisingly large. Coupled with the fact that a sizable proportion of respondents are not sure if efforts are being

made within the marketing curriculum (13.7%) or business curriculum (25.5%), there is considerable room for improvement.

As previously stated, Friel and McLaughlin (2012) identified a host of barriers that can exist at the institutional, departmental or faculty level when considering and adopting sustainability content within programs of study, such as insufficient faculty expertise, weak faculty support, resource constraints and incompatible curricula issues. The authors propose tactics for overcoming internal and external pressures to maintain status quo. Their suggestions include pressure from alumni with interests in sustainable enterprise, student demands for more relevant post-graduate preparation, the availability of sustainable job placement opportunities, and efforts to win institutional support in the form of grants, foundation allocations, and other sources of funding that require demonstration of sustainability-oriented pursuits. Any or all of these factors could be present in the current study as disruptive forces between recognizing and acting upon the perceived importance of adopting sustainability content.

Research should investigate other tactics for overcoming potential sources of inertia. Several barriers previously mentioned are external in nature; faculty expertise or the lack thereof is an internal factor. The Friel and McLaughlin (2012) finding of increasing demand for faculty with sustainability-related expertise is encouraging. However it would be useful to develop tangible methods for assessing the breadth and depth of sustainability-related expertise among faculty candidates, as well as best practices for updating the skill sets and expertise within the existing faculty ranks.

It is possible that students are not demanding change in sufficient numbers or urgency due to inadequate awareness of the vast array of job opportunities increasingly available in the green sector. Post-graduation employment is a high anxiety topic for many students, thus greater awareness of sustainability-oriented employment opportunities might help them find a voice to demand change. This type of career development initiative is likely to require partnering with alumni or local firms who value sustainability and would appreciate a supply of

candidates with solid preparation in this area. Career Services staff are also an important resource as they could provide a greater understanding of the opportunities available to students as they choose their majors and future career paths.

Of those institutions that do incorporate sustainability both into marketing and general business classes, differences exist in their execution and strategy. Nearly 1/3 of respondents note that they offer modules in existing marketing courses (Strategy Option I in the Rusinko matrix). According to the results, module integration is occurring primarily in Principles of Marketing, Marketing Management, Marketing Strategy and International Marketing. Many of these courses are required for the major, a finding that supports its "prominence" within the program and guaranteed exposure to the topic. Other courses with sustainability modules are primarily elective offerings and likely to occur later in a student academic career, which equates to less prominence for the topic. In short, sustainability content has reasonable prominence, i.e. likelihood of student exposure, within the marketing major when it is available at all.

On the business curriculum side, management, economics and corporate strategy programs are the primary vehicles for integrating modules of sustainability-related content into cross-disciplinary/core courses (Strategy Option III in the Rusinko matrix). These findings offer preliminary evidence of a sustainability trend across business disciplines, giving a greater number of students some exposure to its component parts without the need to develop new curriculum structures. The diversity of where sustainability content is placed across the business program suggests that it is likely to be encountered at an early point in the student's academic career and thus may trigger both interest and further inquiry. Future research should address the prominence, i.e., guaranteed exposure, to the content within these business courses and the depth of coverage that is achieved.

Survey findings indicate a small number of institutions offer dedicated sustainability courses within the marketing program (Strategy

Option II in the Rusinko matrix, pursued by 15.7% of respondents) and within the business curriculum in general (Strategy Option IV in the Rusinko matrix, pursued by 19.6% of respondents). These courses were reported to be a mix of new courses (Societal Issues, Sustainable Marketing, Advanced Topics) and special sections of existing courses (Retailing, Channels, Principles of Marketing, Consumer Behavior). It is significant to note that the majority of these dedicated courses are required for the marketing major (56.3%). Within the college of business, 18 instances of courses dedicated to sustainability were reported (examples of course titles include Sustainability and Environmental Management, Sustainability and System Dynamics, Green Management, Environmental/Sustainable Economics). It is not known what proportion of these dedicated courses are required for business majors. Regardless, these findings suggest a commitment by presiding marketing and business program directors to immerse students deeply in sustainability concepts, by choice or by design, for an entire course. Among other benefits, this type of experience would ideally provide a competitive advantage to students when seeking employment.

The survey did not reveal any evidence of new cross-disciplinary programs oriented toward sustainability being offered at the undergraduate level, however it may be too soon to see this type of innovative programming. Over time, majors and minors in business sustainability at the undergraduate level could be quite commonplace. Current literature corroborates these findings, as cross-disciplinary work tends to reside in an MBA-level certificate program or concentration.

It comes as no surprise that department chairs/administrators who placed a stronger value on sustainability were more likely to have dedicated sustainability courses in the marketing curriculum. This begs the question as to whether their support is an antecedent or consequence of integration. Those that had discipline-specific courses report significantly higher mean perceived importance of sustainability content within the marketing curriculum (mean $x = 6.50$) as compared to those without such offerings (mean $x = 4.67$) on a 7-point Likert scale. A similar pattern of

results is found when judging the importance of sustainability content within the business curriculum and the undergraduate curriculum overall, as ratings by respondents with dedicated or integrated modules are significantly higher than ratings by those without such offerings. Further research on the role administrators played in championing integration would be of interest to both department chairs and faculty alike. The literature references both top-down sustainability initiatives and grass root efforts. Even if faculty are the driving force behind integration, if resources are involved they likely to need the support and approval of department chairs/administration. Department chairs also would play a role in defining criteria for new hires, which, in turn, increases the odds for integration.

Overall the findings indicate that there is a presence of sustainability in the curriculum, but it does not yet appear to be a high priority for many institutions at this time. It can be concluded that faculty resources, student demand and administrative support are likely antecedents to integration. Those who rated sustainability as being important had modules and courses, while those who did not rank sustainability as a priority, did not. While this appears to be common sense, it does lend insight into how to build and grow integration efforts. If attitude is an antecedent to course integration and development, we must begin to address it. Given that most of the quadrants require (or are more successful with) top-down support, these findings indicate that we must create a convincing argument to administration for these endeavors if sustainability is to find a foothold as well as longevity within marketing and business curricula.

LIMITATIONS OF THIS RESEARCH

Limitations of this research include both the sample size and the type of institutions surveyed. While AACSB schools are credited as being on the leading edge of curriculum development there are likely non-accredited schools making significant progress on sustainability integration. Likewise a 10.75% response rate may or may not be a representative sample of AACSB schools. Although effort was taken to target

marketing department chairs or deans in the absence of a chair, a relatively high number of respondents were unsure if sustainability efforts were being undertaken. This uncertainty may be due to respondents' high level view of the content covered by curricula within their department. Perhaps a sample of faculty may be needed to report upon the specifics of instructional efforts in the classroom.

It is also possible the current definition of sustainability itself is inadequate for enabling respondents to frame their department's coverage of concept. The survey introduction provides the most commonly cited definition of sustainability, derived from the Brundtland Report, as: "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (World Commission on Environment and Development, 1987). This definition is more philosophical than tangible, as it lacks specificity regarding the core topics one would expect to cover when teaching the principles of sustainability (Daly, 1996). Respondents may be more familiar with the notion of a "triple bottom line" in business that emphasizes environmental, economic and social equity measures of business performance. As noted by several authors, congruence between core sustainability-related concepts and the triple bottom line is not well articulated or widely available in instructional materials (e.g., Borin & Metcalf, 2010; Bridges & Wilhelm, 2008; DeMoss & Nicholson, 2005). This lack of clear alignment could reflect some degree of measurement error in this research. To close this potential gap, future research should pursue development of an integrated typology of sustainability concepts and alignment of these concepts with the triple bottom line of business performance as well as associated learning objectives. A comprehensive framework is needed to create a more coherent approach for effectively situating sustainability principles within the business curriculum and assessing relevant outcomes.

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APPENDIX: Sustainability in the Marketing Curriculum

Thank you for taking a few moments to complete our survey. The following 10 questions ask you to describe the extent to which the principles of sustainability are included in the undergraduate marketing, business, and university curriculum at your institution. You will also be asked your opinion about the importance of addressing sustainability in the context of a marketing, business and general education, and any goals or initiatives being considered for delivering sustainability-related content in the future.

For the purpose of this survey, sustainability is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987). From a business marketing perspective, sustainability can be understood in terms of a company’s triple bottom line of environmental, economic and social equity performance.

The Marketing Curriculum and Sustainability

Do any of the courses in your undergraduate marketing program address the principles of sustainability, in their entirety or as a course module?

- Yes, modules within one or more courses address sustainability issues in marketing
- Yes, one or more entire courses address sustainability issues in marketing
- No, our undergraduate marketing program does not include entire courses or course modules that address sustainability issues in marketing
- Not Sure

(skip pattern if Yes, modules within courses dedicated to sustainability)

Please check the names of the courses with modules that address sustainability issues in marketing. Please indicate if each course is a required or elective offering.

	Required	Elective
Principles of Marketing	<input type="checkbox"/>	<input type="checkbox"/>
Marketing Management	<input type="checkbox"/>	<input type="checkbox"/>
Marketing Research	<input type="checkbox"/>	<input type="checkbox"/>
Consumer Behavior	<input type="checkbox"/>	<input type="checkbox"/>
Product/Branding	<input type="checkbox"/>	<input type="checkbox"/>
Communications & Promotion	<input type="checkbox"/>	<input type="checkbox"/>
Marketing Strategy	<input type="checkbox"/>	<input type="checkbox"/>
Services Marketing	<input type="checkbox"/>	<input type="checkbox"/>
Global/International Marketing	<input type="checkbox"/>	<input type="checkbox"/>
Retail/Wholesale	<input type="checkbox"/>	<input type="checkbox"/>
Selling/Sales Management	<input type="checkbox"/>	<input type="checkbox"/>
Entrepreneurship	<input type="checkbox"/>	<input type="checkbox"/>
Other (<i>please list</i>):	<input type="checkbox"/>	<input type="checkbox"/>

(skip pattern if Yes, entire courses dedicated to sustainability)

Please list the names of the courses that are entirely dedicated to sustainability issues in marketing. Please indicate if each course is a required or elective offering.

Required	Elective
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The Business Curriculum and Sustainability

Do any of the undergraduate business courses offered at your university address the principles of sustainability, in their entirety or as a course module?

- Yes, modules within one or more business courses address sustainability issues
- Yes, one or more entire business courses address sustainability issues
- No, our undergraduate business program does not include entire courses or course modules that address sustainability issues
- Not Sure

(skip pattern if Yes, modules within business courses dedicated to sustainability)
Please check which business disciplines offer courses with modules that address sustainability issues.

(skip pattern if Yes, entire courses dedicated to sustainability)
Please list the names of the courses in other business programs that are dedicated to sustainability issues.

The Importance of Teaching Sustainability in the Marketing, Business, University Curricula

To what extent do you feel that it is important to address sustainability issues in marketing education?
Rate on a 1 to 7 scale where 1 = not at all important and 7 = extremely important.

How do you think the Business School rates the importance of addressing sustainability issues in business education? *Rate on a 1 to 7 scale where 1 = not at all important and 7 = extremely important.*

How do you think the University rates the importance of addressing sustainability issues in undergraduate education? *Rate on a 1 to 7 scale where 1 = not at all important and 7 = extremely important.*

Plans for Teaching Sustainability

Please describe any initiatives under consideration for changing, expanding, or revising how the principles of sustainability are currently being addressed within the marketing curriculum, business curriculum, or university curriculum in general at your institution.

The following questions are for classification purposes only.

Is your university public or private? Public Private

Approximately, how many students are marketing majors? _____

Approximately, how many students are enrolled in the business school? _____

Approximately, how many students are enrolled in the university? _____

How many faculty teach in the undergraduate marketing program? _____

How many faculty comprise the school of business? _____

Please provide the name of your institution (optional): _____

Thank you!