Introduction

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The goal of this *Handbook* is to enhance knowledge and application about sustainability in management education (SiME). We aim to provide a road map for researchers interested in navigating their way around four proposed areas in SiME: (1) theory development; (2) transformative interventions; (3) conceptualization of the role of external facilitators; and (4) definition of characteristics within successful programs. In this process, we used various criteria to help us decide which subjects to include in the volume: directly and indirectly related issues, empirical and conceptual, quantitative and qualitative, different levels of analysis, interdisciplinary–transdisciplinary approaches, old and new models, regional and internationally based contexts, and from well-established authors and relative newcomers to the field. We hope that this original edition will be a reaffirmation of the dominant streams of thought in SiME studies as well as a celebration of some newer modes of inquiry (see Chapter 25). In fact, as we conceptualize SiME, we take the opportunity to define sustainability, and sustainable development in the same context, by drawing from well-cited and applied definitions. Sustainability focuses on the long term contribution of business to society and the impact of that activity on future generations (Visser and Tolhurst, 2010; Waddock and McIntosh, 2011). Development that meets the needs of the present without compromising the ability of future generations to meet their own needs is the classic definition of sustainable development provided by the Brundtland Commission (1987). Since the late 1980s, sustainable development planning has sought achievement of the five goals of sustainability: resource conservation, built environment, environment quality, social equality, and political participation (Blowers, 1991). Achievement of these goals has depended on the incorporation of transdisciplinary participatory processes to address current social, economic, and ecological paradigms. More recently, SiME is defined as a holistic body of knowledge and understanding for management practice that meets the needs of current and future generations (Benn and Martin, 2010; Rusinko, 2010). Hence, SiME can be framed as incorporating the management of economic, social, environmental (Elkington, 1997), and cultural imperatives in all decision making.

In this regard our objective is to provide an overview of research in SiME, using the metaphor of conversations to guide our selection of topics and ground our Introduction to them. Our interest in academic conversations and development of SiME has been widely shared, starting with the Academy of Management (AOM), and the work and accomplishments of its supporting divisions' members. In particular, we share how a unique number of AOM divisions and their active members have advanced our knowledge in SiME and how this model has facilitated new knowledge and combined research/pedagogical conversations to enrich this domain. We also aim to conceptualize SiME as a new series of conversations, in particular those of management studies scholars and researchers who help to constitute sustainability in business education through terms derived from paradigms, methods, and assumptions themselves derived from earlier and on-going dialogues.

In fact, debates on the development of university leadership for sustainability programs in management education have continued over the last three decades. We accept the challenge to answer a number of inquiries that relate to the future of management education given the critiques outlined in the literature. More specifically, we aim to offer a discussion on two overarching themes: *whether ethics and sustainability education has developed in both undergraduate and MBA programs* (Rasche et al., 2013); and *whether the underlying concepts that sustain these programs (with a holistic and leadership approach) are peculiar and atypical options that are only possible in certain business schools* (as proposed for future research by Waddock and Lozano, 2013: 282). In this *Handbook*, we intend to answer both inquiries while raising questions of SiME in four specific areas (see below). We hope that the contributions of this *Handbook* reflect these calls, demonstrating dedicated and reflective dialogues. For this *Handbook*,¹ we extended an invitation for book chapter proposals within the broadly defined subject theme area spanning all the major disciplines in business and management studies, as well as AOM divisions. Potential topics considered for this invitation included, but were not limited to:

- *Area 1: Motivations and outcomes for university leadership in SiME*
 - Survey and samples of business cases for sustainability management education and analysis using the phase model (Benn et al., 2014).
 - Outline of different value propositions for each of the waves and a typology of business models (considering the phase model, or alternate models).
 - Examples that foster and encourage the development of innovative holistic approaches and facilitate sharing for the spread of best practice.
 - Cases that determine pathways between holistic management education and graduate attributes – so as to monitor the effectiveness for graduate career development.
 - Philosophies and systems thinking may often intertwine posing the question whether sustainability involves systems thinking or holistic thinking. If that is the case, what changes need to be made to the current philosophies that frame sustainability management education?
- *Area 2: Content and tools including pedagogical approaches and learning outcomes*
 - What games, simulations, internships or capstone projects offer experiential learning and opportunities as an extension of the classroom?
 - What transformational interventions exist that inspire students to shift from profit or external motivations toward expressing values or internal motivations?
 - How do we get students engaged in sustainability? How can we present sustainability, values, and ethics in a way other than moral orientation?
 - What can the existing disciplines do to promote a triple bottom line approach without introducing all new concepts?
 - How do we evaluate the learning opportunities of the various tools and techniques?
- *Area 3: The role of organizations as change agents*
 - What do institutional theory and social movement theory have to say about

- change processes relevant to business-school pedagogy reform (barriers and enablers)?
- How can we identify distinctive aspects of higher education institutions that foster and impede change?
- How can we utilize/draw from organizational studies for institutional reform?
- What other institutional reforms can we draw lessons from in this change process?
- What can academic societies do to serve as more effective change accelerators?
- *Area 4: Innovative programs – the integration and mechanics needed to sustain long term programs*
 - Examples/narratives of how to overcome faculty resistance.
 - Performance outcomes of students and newly integrated programs. How do we demonstrate the value proposition of new programs in sustainability?
 - If quality management took decades to be mainstreamed in business schools, how long will it take for sustainability?
 - How should we define the success of a program?
 - More research on available design frameworks and examples of student run portions of new sustainability programs.

As a result, those contributions that dealt closely with these and related issues from a variety of perspectives were reviewed (via a rigorous three-stage editorial and blind review process) and subsequently accepted for publication. A good number of very valuable contributions were also received that, for a number of reasons, did not reach the acceptability threshold set for this first special edition.

In this Introduction we, therefore, review these select conversations which constitute this *Handbook* and reflect on some of the themes that characterize them. In doing so, we provide a way of making sense of the book, although, of course, at the outset we must acknowledge that the contents of this book are the product of the judgements of its editors, external reviewers, and contributing authors and, as such, they represent partial and personal accounts of the field. Nevertheless, we hope that most scholars interested in SiME studies would agree that this book contains useful insights about important topics that yield interesting information and insights regarding the nature of management education and its development.

FACILITATING NEW KNOWLEDGE – ROLE OF THE ACADEMY OF MANAGEMENT

This *Handbook* is the tangible result of a multi-year Professional Development Workshop (PDW) series conducted at the Academy of Management conference, beginning in 2009 under the initiation and guidance of Deborah E. de Lange, PDW Chair from 2009 to 2011. A PDW begins with a comprehensive written proposal that is recommended by a peer-review process and accepted by a sponsoring (or a set of) Academy division(s). This is a competitive process, since time and space limit the acceptance rate of PDWs. Also, a legacy PDW is not favored, in order to offer a novel

and innovative annual selection. Thus the longevity of this PDW demonstrates an evolving topic that serves to advance our research, pedagogy, and understanding of sustainability in management education (SiME) – as it was born and labeled since its first acceptance.

According to de Lange:

The neat thing was that after the first PDW, everyone was asking for a repeat. It hadn't originally crossed my mind that it would continue as it has. Each year, everyone wanted another PDW the next year and it became an expectation that people could count on it each year. I proposed doing something slightly different each year (research oriented or teaching oriented). It became a PDW that the participants 'owned' and it was so unexpected, yet very good and an incredible surprise that people latched on to it as they did. This PDW has been community building especially for the Organizations and Natural Environment (ONE) Division.

A product of the first PDW was a book entitled the *Research Companion to Green International Management Studies: A Guide for Future Research, Collaboration and Review Writing*,² in which four groups worked on writing critiques of articles in particular areas of the green management literature. For the second PDW, participants divided into teams to write research articles for publication, and, in the third PDW, teams were created to develop and propose syllabi, therefore offering a teaching orientation for the first time. Many of the syllabi became available at CasePlace.org.³

Dr. de Lange's initial intention was for participants to come out of the PDW with a hard or tangible 'output' (which people felt was gratifying, since they didn't create something in other PDWs, and this way they were making a contribution). In addition, participants were given the chance to work on their 'soft skills', for example teamwork, communication skills, and being able to work across different universities, with new people, in appreciating diversity on teams and to collectively excel as a result of collaboration and strong leadership. Working in groups with facilitators gave early-stage academics the opportunity to lead as well. Building community and facilitating new knowledge have been an outgrowth of the positive environment this PDW has generated. Since participants within the PDW are at different professional stages of their careers, this PDW provided the opportunity where junior and senior faculty could interact and learn from one another in general.

In 2012 the leadership of the PDW transitioned to Ivan Montiel and Patricia Goncalves Vidal, and the focus centered on how to account for all corporate sustainability dimensions. A sustainability audit where workshop participants thought about corporate sustainability measures on the economic, social, and environmental as well as governance levels delivered a rich dialogue. In 2013, Patricia Goncalves Vidal and Jorge Arevalo became PDW co-chairs, and from 2014 to 2016 Jorge Arevalo and Shelley Mitchell co-chaired and facilitated this long-standing PDW, which has been sponsored or co-sponsored by the Organizations and Natural Environment division, the Management Education and Development (MED) division, the Social Issues in Management (SIM) division, and the Management Spirituality and Religion (MSR) working group. The Academy of Management⁴ is a global community of scholars, practitioners, and students that is dedicated to creating and disseminating knowledge about management and organizations (see Chapter 8), and many of its active global members seek to organize, participate, or contribute to a PDW group and become more engaged in its scholarly mission.

As the Decade of Education for Sustainable Development has concluded, it is timely to reflect on progress attained toward embedding sustainability in the higher education curriculum (see Chapter 1). Over this decade, 2004–2014, this PDW's tenure paralleled this period and in several ways reflected both the challenges and the progress experienced toward advancing our knowledge about SiME. This *Handbook* serves as a snapshot in time of SiME exploration and expansion, thus facilitating new knowledge through the role of the Academy of Management as one model of knowledge advancement.

FACILITATING NEW KNOWLEDGE – ROLE OF KNOWLEDGE PRODUCTION WITHIN SOCIOLOGICAL RESEARCH

The second model utilized to facilitate new knowledge on SiME has been produced within sociological research (empirical studies). This explains the format of the *Handbook* chapters in identifying research questions, utilizing a theoretical orientation and analytical techniques, discussing the impact of findings, and suggesting future research. For this reason, as the co-editors, we developed and used a *Handbook* rubric in evaluating chapter submissions to be peer-reviewed during a three-phase process. Knowledge acquisition has been identified as a direct benefit of social capital among the network of *Handbook* authors, their universities, sustainability institutes, and associated stakeholders (Nahapiet and Ghoshal, 1998; Adler and Kwon, 2002). As a result of this *Handbook*, the co-editors envision an expanding network and connectivity to the evolving topic of SiME and its future knowledge production.

Different chapters in this *Handbook* reflect both models described above, and they offer a variety of positions and propositions situated somewhere between the two. As editors, however, we tend to engage in research that reflects the alignment of the two models. Consequently, we view this *Handbook* as an artifact – a highly institutionalized SiME global genre, especially when compared to past academic special issues which have made well-intended attempts to produce and consume ‘knowledge’ for those engaged in the field of SiME. As editors, we are in both the production and the consumption business, having been among the first to produce the call for chapters, to the recipients of the initial proposals and of the subsequent revised versions that constitute the *Handbook*; we are proud to offer an Introduction that helps to make sense of it for other SiME consumers. We acknowledge the use of sense-making devices that will help to direct, encourage, and motivate other consumers to make a particular kind of sense of the *Handbook*. Accordingly, we focus on providing a guideline that emphasizes the *Handbook*'s status as both a discursive object (in support of the Academy's and divisions' aims) and a scientific object (supporting those interested in advancing theory): we examine how the chapters produce knowledge by engaging with scientific and other discourses in different ways.

As we will refer to a set of identified ‘discourses’, we define a ‘discourse’ as a collection of texts, narratives, and statements that ‘provide a language for talking about a topic and a way of producing a particular kind of knowledge about a topic’ (du Gay, 1996: 43). To the extent that discourses are useful for particular groups, they can also be seen as cultural resources (Gergen, 2001; Fineman et al., 2006) that could help to bring about particular understandings and practices (Hall, 2001). An identification of a discourse, or

suggestion for a change in discourse(s), does not only change the way in which people talk about the social world; it also changes the way in which they understand and experience it, as well as who can act upon it and how they can act upon it (Harley and Hardy, 2004). Thus, we are interested in promoting different ways in which the texts and narratives that constitute this *Handbook* draw on discourse to make knowledge claims and to promote particular research practices, that is, the discursive strategies through which the chapters shape the production and consumption of knowledge about management education and its development.

THE *HANDBOOK*: A SHARED VIEW OF SIME

This *Handbook* consists of 25 chapters, divided into five parts. The chapters in Part I explore different ways of theorizing the field of sustainability in management education. It provides examples that foster and encourage the development of innovative holistic approaches and facilitate sharing for the spread of best practice. Part II offers chapters that describe the transformational interventions that inspire faculty and students to shift from profit or external motivations toward expressing values or internal motivations in their program offerings. The chapters in Part III focus on the role of organizations and the effects of institutional reforms and lessons learned from the reported change processes required for sustainability integration. Part IV investigates the integration and mechanics needed to sustain long term programs. The editors then offer some concluding thoughts and *Handbook* statistics in Part V.

DISCOURSE OF CONVERGENCE: ENTREPRENEURSHIP CONSOLIDATION

The first discursive SiME strategy we discuss focuses on program convergence. In fact all the chapters in this *Handbook* report on some level of convergence – or what we would like to label in this book as ‘development in practice’. Specifically, four chapters in the *Handbook* reflect a SiME strategy that focuses on working within a well-defined, convergent scientific discourse that consolidates and enriches the entrepreneurship concept in the academic programs. Concepts describing the relationships of experiential learning, community-based learning, business-school collaborations, business-community and student-led projects, and building collaborations and networks point to a well-defined convergent discourse. In many ways, this discursive strategy in SiME follows in the tradition of what Kuhn (1970) refers to as ‘normal science’, which can apply well when we refer to entrepreneurship and experiential learning developments. We believe this strategy is important, because it offers potential for a set of scientific discourses which will influence practice and policy for management education. This practice and policy, however, will depend on its structure and coherence – the more there is convergence within the discourse and the fewer the alternative discourses, the more powerful the discourse, especially for the advancement of SiME, is likely to be (Phillips et al., 2004). As some have shown, drawing on a small number of well-established discourses is an effective way to make a solid commitment, by which we mean they have the potential to fix meanings so that they

appear solid and become taken for granted, while alternative meanings are more likely to be viewed with suspicion (Harley and Hardy, 2004).

In the *Handbook*, an exemplar of this strategy is described in the chapter by Wong (Chapter 7) on ‘Mission Possible: Introducing sustainability as an experiential entrepreneurship activity’, which shows how particular experiential learning activities, mainly associated with becoming an entrepreneur in first year business education, while considering the relationships between economic, social, and environmental objectives (via a Mission Possible competition), have transformed the university’s ‘Introduction to Business’ course. This convergence has positioned it as an undergraduate cornerstone course, as well as provided students and charity partners with an on-going source of learning and social impact. While noted in the chapter, the concept of an experiential activity is not new to business schools; the scalability of entrepreneurial activities can be innovative, and they can effectively integrate sustainability concepts appropriate for a first year student while allowing faculty to manage student engagement and the administration to incorporate such offerings in the core programs of their offerings. As a result, this chapter argues for a shift in aligning real-world issues with classroom teaching, which has meant that universities are adapting their curriculum towards a focus on social entrepreneurship and sustainability issues. As Wong demonstrates in Chapter 7, experiential learning can be an effective pedagogical method to integrate sustainability concepts, as it offers students the opportunity to experience the same passion that motivates social entrepreneurs as opposed to learning about sustainability from a textbook. In this light, it is interesting to note how the author draws on a relatively small set of integration discursive resources – literature and concepts from within the accepted, dominant discourse of embedding sustainability into courses for all students, rather than stand-alone courses that are often senior level electives (Brammer, 2005; Persons, 2012). As scholars work with this body of knowledge, not only do appropriate research practices become widely enacted, but the gaps in the body of knowledge become evident to members of the academic community. Thus, SiME science will progress as knowledge gaps are collectively constructed and researchers agree on the ways and means to fill them; for example, to effectively embed sustainability education in a business school, it is important to ask where it gets introduced (Rusinko, 2010). This chapter draws the integration map by outlining how the existing structure was changed from first year course integration, game implementation (pre-, during, and post-mission parameters), and the scalability challenges faced by the faculty and participating students in the assessment of the learning outcomes of the course and lasting community impacts.

Similar consolidation can be seen in the analysis of an undergraduate elective course advanced by Ramírez Pasillas and Evansluong in their chapter entitled ‘Sustainable entrepreneurship undergraduate education: A community of practice perspective’ (Chapter 20). Here, the authors also have the luxury of an already established discursive resource, which speaks of entrepreneurship education and the approaches for incorporating sustainability in undergraduate courses and programs (Andersson and Öhman, 2015; Figueiró and Raufflet, 2015). Their literature review draws together different streams of research on entrepreneurship education in a convergent manner, that is, to demonstrate agreement concerning the need to advance sustainability from content-led strategy to renew undergraduate entrepreneurship education to more learning-based approaches: the experiential-based learning perspective and the community-based learning perspective

(Kolb, A. and Kolb, 2005; Chang et al., 2014). The authors argue that neither of these approaches addresses the ‘how-to’ question sufficiently, that is, how business schools develop sustainable entrepreneurship undergraduate courses that recognize the role of active participation for developing knowledge and skills as students participate in a community of practice. To this end, they aim to thereby build theory that allows academics and scholars to examine collective learning processes for sustainable entrepreneurship by also linking pedagogics that, as they propose, foster the development of active citizens who understand and prosper in the complexities linked to sustainability (Wals, 2014; Wyness, 2015). This will imply a process where students move from being newcomers in a subject to becoming fully engaged members in a community of practice by reflecting on their own knowledge and experiences. By drawing on these dominant perspectives in teaching sustainable entrepreneurship, the authors are able to claim individual understandings and practices of sustainable entrepreneurship resulting from evaluating their experiences as: (1) acting as sustainable entrepreneurs; and (2) doing active citizenship through the creation of potential sustainable ventures. As will be evident in Wong’s chapter (Chapter 7), the strategy employed in this chapter also draws on integration theories and the change processes involved in redesigning an interdisciplinary course in order to integrate sustainability and sustainable entrepreneurship in its curriculum and foundation. The same approach helps to consolidate the SiME discourse, as it describes similar planning, pre- and post-evaluations, execution of the pedagogical offering, and the reported matters of difficulty during integration. This discourse outlines the key processes involved in the emergence of new organizational forms for both students and faculty, and underscores the importance of the field level processes required for SiME integration.

Sulkowski’s proposal of ‘University experiential learning partnerships as living laboratories for sustainability’ (Chapter 18) shows how the convergence to collaboration in SiME has progressed through several stages and across various constituents, each associated with a shift in emphasis toward sustainability reporting. The author proposes a broad and generalizable theme, which is to seek sustainability related practices that are in nascent or emerging phases of development or not yet perfected in the world outside of academia. These constituents can include corporations, non-governmental organizations, and public sector entities. In creating a learning opportunity for students to implement a practice at their university or in partnerships in their community, these institutions can facilitate experimentation, knowledge generation, and acquiring skills that the extant curriculum is not equipped to provide (Chapter 18; see also Blasco, 2012). Prior to sharing his detailed and well-guided ‘story’ the author suggests that experimentation, specifically in the realm of experiential learning, is an approach that ideally should be stakeholder-centric in terms of soliciting concerns and innovative solutions and actionable feedback (Sroufe and Ramos, 2011). It is also noted that academic societies have a vital role to play in terms of propagating practices that drive social and environmental change and, more critically, have been shown to advance learning by students in multiple contexts and disciplines (Gallagher and McGorry, 2015; Kruger et al., 2015). It is even recommended that partnering with external organizations to test the integration of theory and practice is one variation of problem-based learning, an approach that has succeeded in producing knowledge and skill development in various disciplines (Savery, 2015). Sulkowski (Chapter 18) demonstrates how the process of sustainability reporting, that is, the choosing, researching, and regular publishing of indicators related to environmental and

societal well-being, is an essential step in the evolution of smart systems in which data are acted upon between connected operations to optimize efficiencies. He then describes his experiences working with student teams to implement such reporting and the lessons learned from his coined term ‘muni–uni’ (municipality–university) collaborations. The two resulting models proposed – collaboration between a university and a local municipality, and off-campus collaborations (sometimes involving industry and NGOs) – point to some valuable lessons learned: (1) that both internal and external stakeholders are more interested in sustainability than commonly assumed; (2) that data on many desired metrics exist somewhere in an organization, and often are easier to find and sum up for a university or even a municipality in comparison to a multinational company with outsourced operations; (3) that length in reporting matters, with density and differences in reporting causing difficulty in performance comparisons; and (4) that we are living in a political climate which requires publicity and feedback as we engage with non-academic sectors on sustainability reporting. Thus, the discourse of collaboration in SiME is becoming more sedimented than thought, with new integration theories incorporating and experimenting with new concepts and external relationships, which complement previous theories rather than replacing them wholesale.

Extending stakeholder theory underpinnings to the classroom is the notion being presented by Miller, Bell, Fodness, and Whittington’s chapter entitled ‘Sustainability through stakeholder value creation: Redesigning an MBA curriculum’ (Chapter 12). The authors outline how their MBA program was redesigned as a curricular innovation in order to provide students with a holistic perspective on sustainability and corporate social responsibility (CSR), which in numerous ways supports this initial discursive strategy within SiME. The authors argue that the same stakeholder value creation orientation which enables firms to foster collaborative working relationships (Clarke and Roome, 1999), encourages organizational learning (Sharma and Vredenberg, 1998; Roome and Wijen, 2005), and stimulates innovation (Hart and Sharma, 2004) can in fact translate into benefits to the classroom, where learning about the complexity of sustainability and the trade-offs necessary to achieve a better outcome can lead to a richer educational experience as well as an enhanced skill set for personal career building (Collins and Kearins, 2007; Clifton and Amran, 2011). The authors propose an experiential learning integration approach, a cycle that takes students on a venture to gather data, reflect upon an experience, and then draw conclusions that will guide them in forming new assumptions, which then allows them to make even more accurate modifications to subsequent experiences (Kolb, D., 1984). This learning cycle is used in sustainability education to engage students and provide a learning environment in which they can develop the knowledge to make informed decisions (Canto de Loura, 2014). Experiential learning also provides a more holistic approach of learning sustainability, because the exercises can engage the whole person, and has the opportunity for self-reflection (Baden and Parkes, 2013). In a detailed and descriptive manner, Miller et al. (Chapter 12) share how each of the four core courses in their MBA program was transformed into a stakeholder value creation offering. For the new program, the faculty implemented a mix of Quadrant III and Quadrant IV courses based on Rusinko’s (2010) framework, as the ideal approach which would ensure sustainability was a priority among all students in the MBA program – a convergence strategy already noted in two chapters (Chapters 7 and 20) in this SiME discourse. As is the case in the other three chapters in this set of chapters, this particular contribution also reports a

number of integration limitations. One of these is the question of assessment of whether or not such efforts are yielding the outcomes sought by the expressed purpose to provide students with a holistic perspective of sustainability and CSR. As faculties are engaged in curricular rather than individual course innovations, there is much work to do in terms of an integrated approach towards metrics and measurement of learning outcomes and reported program impacts.

DISCOURSE OF INNOVATION: RADICAL INTEGRATION

Whereas the previous set of chapters explored SiME studies as a discourse driven by convergence towards entrepreneurship driven programs, experiential learning, and collaborative efforts, the next set explores the discourse of innovation and more advanced experiments of integration and radical changes to SiME curricula. In this discourse, the modes of integration reflect a call for a new collaborative paradigm and theorizing of SiME studies. Meso-level techniques are being described in this discursive strategy, some of which aim to bridge local business and communities with internationally oriented service learning programs, while others are based on theories of diffusion of innovations and cycles of learning organizations. The approaches offered and discussed in this discourse serve as templates for understanding, documenting, and reporting a set of institutions' progress in implementing sustainability practices. As will be noted and with some additional development, the sustainability journey frameworks described in this set of chapters, and the entire *Handbook*, could enable more complete theoretical development through empirical hypothesis testing. As the authors reflect in their discussions, a combination of top-down support from the university administration and bottom-up, transdisciplinary involvement from students, faculty, and staff is also helpful in institutionalizing and radicalizing sustainability education.

Drawing on a long term management oriented service learning experience, the first chapter in this set, 'The influence of temporality on students' learning processes: Lessons from a service-learning program in Brazil' (Chapter 19) by Barin Cruz and Pozzebon, takes service learning to new levels of curriculum offering, partnership and collaboration, and student international experience. Rather than designing a well-defined international intervention with a beginning, end, and set of clear boundaries (Papamarcos, 2005: 330), the authors develop and propose a temporality-less collaboration model – for service learning programs to last multiple years and span many student cohorts, both undergraduate and MBA. Of interest in this pedagogical design is the approach taken by the authors in housing a new management oriented service learning experience (Kenworthy and Peterson, 2005) for all students considering a Campus Abroad experience – a program designed to enhance international managerial skills for Canada-based students. The authors have redefined service learning courses from those that 'emphasize academic rigor and interaction in real-world course projects where students produce tangible and professional products for use in the *local* community as they work with and learn from organizations designed to serve community needs' (Kenworthy, 2008) to programs that emphasize collaborations and projects between universities (based in developed demographics), and business and communities in *emerging economies* – as is the case here with their social business projects development in a community located in the northeast-

ern region of Brazil. In showing how this proposed service learning pedagogy seeks to balance academic rigor with practical relevance in the context of civic engagement, thus providing students with a broader and richer educational experience (Godfrey et al., 2005), the authors set out to outline how these programs provide students with a broader educational and experiential foundation, including four distinct outcomes of learning: reality, reflection, reciprocity, and responsibility (Godfrey et al., 2005). They then review the main phases of the course project from (1) identifying the social and environmental dilemma, to (2) designing and developing a social business plan, to (3) implementation and mobilization of resources to jumpstart the project, and finally reflect on experiences and learning outcomes. In the process, the authors argue for the role of professors in these international ventures, as very few studies, if any, emphasize the importance of professors' learning experiences (Carrington et al., 2015). It is reported that professors undergo what is then labeled a process of 'reflexivity', which can be related to lived experience and its impact on reality (Godfrey et al., 2005), as well as involving an understanding of how their decisions shape a program and its consequences (Hardy et al., 2001), and how they influence students' ability to be critical. The reflections from this chapter help academics and scholars bridge the convergence of service learning and existing pedagogical interventions as new innovative models that put the individual – both student and faculty member – in context. For the authors, the proper perspective for SiME studies is a new 'collaborative paradigm' – that of the meso-level, which aims to bridge local business and communities with internationally oriented service learning programs.

Following a similar discursive strategy, and drawing on innovation diffusion theory, the second chapter in this set, 'Sustainability as a university value: A journey from awareness to behavior change' (Chapter 5) by Nordman, Christopher, and Jakobcic, proposes an internalizing framework for sustainability that takes universities from levels of awareness to actual behavioral change. The authors conceptualize their integration framework as a process that integrates numerous tools and techniques – a process which is cyclical as opposed to linear (Rogers, E., 2010) in organizations – and argue that for universities the institutionalization of radical innovations, such as sustainability, oftentimes faces much resistance and can take time. To address the structural and stakeholder driven barriers (i.e. students, faculty, administrators, community, etc.), the authors follow Lozano's (2006) 'normative educative strategies' as a way to overcome and reduce the conflicts among related constituents. They note that a combination of top-down support from university administration and bottom-up, transdisciplinary involvement from students, faculty, and staff is also helpful in institutionalizing sustainability (Lozano, 2006). Additionally, a transdisciplinary approach considers the need for more integrated knowledge, shifts the problem focus from the discipline to a higher level question, joins scientists and practitioners in problem solving, and explicitly acknowledges one's conceptual framework and tolerates other frameworks (Luzadis et al., 2010). It is recommended by the authors that, for universities to become sustainability leaders, sustainability must be integrated throughout the curricula, university activities, student organizations, and operations. Nordman et al. (Chapter 5) then set out to describe how this cyclical and normative process was developed for their institution, values identified in the new mission and strategy, and how these were then assessed and aligned with the university's new strategic plan and objectives. On the subject of adopting sustainability values at this particular academic institution, the authors in this chapter provide critical insights as to the influence of both

internal and external factors – where externally the specific region's corporate culture played an important role in the process. The sustainability journey described here is based on stewardship, sound management of institutional resources, community collaborations and support, and innovations already rooted in the corporate and governmental cultures of the region. Therefore, the sustainability practices developed were grounded in fiscal, environmental, social, and academic efforts, describing all together a set of institutional norms and pressures aiming at the same outcome. The authors do caution that their sustainability journey framework does have its limitations. The proposed sustainability journey framework, at this point, is a descriptive model rather than a theory and is not intended for use in empirical research. The model, however, is based on theories of diffusion of innovations and cycles of learning organizations. The approach offered is a template for understanding, documenting, and reporting an organization's progress in implementing sustainability practices – and, with some additional development, the sustainability journey framework could enable more complete theoretical development through empirical hypothesis testing.

The third chapter that addresses the new developing practices of SiME can be seen as a step-by-step journey that searches for the 'required' learning processes involved in integrating the appropriate 'test-sustainability program' prior to implementation. Nobre, Arevalo, and Mitchell (Chapter 10) offer us 'Sustainability learning processes: Concepts, benchmarking, development, and integration' as a story of SiME integration. The authors suggest a learning process for understanding sustainability in higher education contexts – one which includes a critical view and understanding of sustainable development, the role of education as the greatest process of change, the role of instructors in participating and collaborating in SiME related program integration, and the importance of integrating SiME in core courses for business schools. As reported by the authors, the journey begins with a clear view of what the SiME model of integration should look like for emerging economies' educational contexts, after considering what the advances are for the more developed contexts. The authors ground their approach by offering insights into the tensions between maximizing productivity, consumption, and profit driven economic models (Nobre et al., 2009) in this new era of globalizing markets – and the growing debate for a new dynamic conceptual approach to sustainable development, which has taken several years to define and evolve (Gladwin et al., 1995; Rogers, P. et al., 2008). With such complexities, it is argued that education offers the greatest process of change, which in turn can provide society with values and practices aimed at more sustainable development (UNESCO, 2014). To illustrate this approach, Nobre et al. (Chapter 10) set out to describe how Nobre's institution organized and launched an international project which aimed at developing a new undergraduate course in management – one offering radical transformation including improved teaching and learning methodologies, and specially designed to challenge the existing academic program wisdom. This four year observational project gathered ideas and practices from faculty, post-graduate students, professionals, and top managers from Brazil, Europe, and the United States. Activities in this time span included piloting a new integrated course, a set of international benchmarking strategies to monitor the exchange and collaboration between more advanced business schools and the local Brazilian institution's offerings, informational workshops on sustainability, entrepreneurship, and innovation as taught and advanced by the collaborating business-school faculties from abroad, a global Latin American forum for

sustainability organized by the local university in Brazil, and the delivery of academic research and output by master's and PhD candidates at the local institution. Based on Nobre's experiences and four year journey, the authors then propose a set of processes of integration which subsume theoretical concepts spanning cognitive and developmental psychology (Sugarman, 1987; Cória-Sabini, 2008; Goulart, 2009; Watts et al., 2009), general systems, cognitive complexity (Nobre et al., 2010), knowledge creation (Nonaka, 1994; Takeuchi and Nonaka, 2004), design thinking (Brown, 2008; Johansson-Sköldberg et al., 2013), and experiential learning (Kolb, D., 1984; Pless et al., 2011). In the end, the authors also report the integration results of the new course and the implications for those wishing to conduct a similar investigative process oriented approach.

DISCOURSE OF COMPLEXITY: INTERNAL AND EXTERNAL CONSTRAINTS

A number of chapters develop what we refer to as a discourse of complexity – reporting either capacity issues or structural challenges as academic institutions conduct SiME program integration. With complexity, we mean that they approach topics in SiME from a perspective that highlights well-defined, convergent sustainability integration discourses, relationships, and models of integration that are relatively well established in the literature but to some extent and for many reasons do not fully translate in terms of practice. This strategy must be followed with caution, as the potential for SiME integration to influence practice and policy depends on other factors aside from structure and specific models of integration. Even with well-established models, SiME may not reach its potential given the lack and existence of institutionalized frameworks. In discourse analytics terms, the discourse of complexity takes both a macro- and micro-level orientation, as it truly investigates the challenges of SiME integration, paying attention to particular institutional voids as well as research and academic related practices that cast a shadow on SiME endeavors.

The chapter on 'Business cases for sustainability-integrated management education' is a prime example of this discourse. Edwards, Benn, and Starik (Chapter 1) offer a strategic adaptation of SiME in business schools and the phases of organizational sustainability, a CSR model which has applied to corporates but has not been explicitly applied to the higher education sector. The authors caution there are numerous variables associated with multi-level, multi-system integration, challenging the feasibility of integration and the viability of sustaining the curriculum. In this chapter, the authors invite academics to consider the business case for sustainability-integrated management education (also referred to as SiME in their chapter), one which would go beyond the design and implementation of individual courses and programs. The authors begin by offering a brief review of how scholars have conceptualized their business cases for the implementation of SiME in their programs – all based on key special academic issues relating to integration by leading exemplars of such practices. As far as drivers that shape the business case for integration are concerned, it is reported that those intertwined forces related to the ecosphere, society, economy, and technological and regulatory systems contextualize how higher education institutions function and operate – and that the adoption of a holistic approach is best understood through a multi-level conceptualization that considers institutional macro-forces, internal organizational drivers, and the role of institutional

entrepreneurs as they engage in networks and communities of business professionals. The authors provide an insightful summary of research on external and internal drivers of integration from a number of perspectives: compliance-based, market, and voluntary for the external, and governance strategies and policies for the internal. Depending on the individual structures and based on the diversity and complexity of these drivers, it can be assumed that universities will develop and are developing their SiME positioning in diverse ways. Consequently, the authors point out that it is unlikely that a single business case for SiME exists. In order to begin to conceptualize the variety of business cases for SiME, they propose two dimensions: (1) how sustainability is positioned in the curriculum; and (2) how the university determines its strategic positioning in terms of the viability and feasibility of course offerings. Of course, it is also recommended that variation in relation to these elements could provide explanatory power for the development of generic business cases for SiME. Taking into consideration multi-level drivers for SiME, the authors then classify and fully describe 'ideal types' of business cases according to the dimensions of a sustainability phase model (Benn et al., 2014), which serves as a diagnostic tool for analyzing various different phases adopted when operationalizing sustainability. In terms of an integrative model, the authors suggest that each of the phases outlines how the organization responds to both human sustainability and ecological sustainability. It is acknowledged in this chapter that other models for sustainability have been developed and proposed, and that integration has been conceptualized with models focusing specifically on curriculum embeddedness specifically for the management concentration (Rusinko, 2010), or business-school settings (Walck, 2009), via the integration of specific principles such as the Principles for Responsible Management Education (PRME) (Blasco, 2012), and a fair number of case studies reflecting specific course and program level integration, in specific journals for higher education. In this chapter, however, we are introduced to a broader conceptual phase model which the authors suggest can be an alternative approach for explaining integration, while at the same time the perspective offered does lend itself to complexity of integration in a system.

Brueckner, Spencer, Paull, Girardi, and Klomp's (Chapter 15) chapter on 'Journeying towards responsible citizenship and sustainability' also engages with discourses of complexity in integration. In pursuit towards transdisciplinary teaching, learning, and research in their school of business and governance at their university, the authors report various obstacles which still remain to be overcome. The authors point out that Australian universities, much like their international counterparts, face a number of external and internal constraints affecting their ability to discharge their responsibility as sustainability leaders (Leal Filho, 2000; Jucker, 2002; Thomas, 2004). These constraints relate to issues such as funding, requisite expertise, and leadership as well as institutional and operational barriers. The treatment of transdisciplinarity within the higher education system, universities, and business schools in particular is another barrier, which to their reading is a key stumbling block for the advancement of the sustainability agenda. It is this barrier Brueckner and colleagues (Chapter 15) critically direct their attention to in this chapter. The chapter also reveals a number of factors militating against transdisciplinarity in terms of recognition and rewards among national research rewards schemes, where the focus is primarily on single disciplines and reflected in the quality rankings of academic journals. Based on the Australian Research Council (2010), it is reflected that, when compared to disciplines such as physical sciences, econometrics, and economics, multidisciplinary

and sustainability focused areas have disproportionately fewer A*-ranked (top rank) journals. This gulf, the authors suggest, can be explained in part by the fact that sustainability focused research does not have its own Field of Research (FOR) code and is thus frequently captured by another disciplinary sub-code under 'other' or is simply shown as 'MD' denoting multidisciplinary research. As a consequence, sustainability science, which defies disciplinary categorization, cannot be ranked highly in a discipline orientated system that cannot capture it. Also, there is a lack of alignment between Field of Education and Field of Research categories, compounding problems with cross-boundary work stemming from the territorialism and silos commonly found in universities (Scott et al., 2012). In addition to the disciplinary biases reported in this chapter, the authors also take time to highlight strong enablers that have allowed SiME integration initiatives to take off. The authors report PRME as a key driver for SiME program integration. It is suggested that PRME signals a university's commitment to develop the capacity and values of its business students to work inclusively and sustainably in the global economy. Brueckner and colleagues (Chapter 15) proceed to describe their sustainability journey by sharing their PRME integration mechanics, the role of their local Centre for Responsible Citizenship and Sustainability (CRCS) in the process, and the usage of the Delphi approach (Kezar and Maxey, 2014) in their technique. Throughout the chapter, the normative pressures that business schools face and the emotional experiences of those living these experiences and pressures – as presented in their own words and current struggles – are paramount examples of complexity in SiME integration and the way forward for transdisciplinary teaching and research on sustainability.

The third and last chapter that takes on a discourse of complexity is Boyd, Hendry, Hiller, and Martin's analysis of 'Managing for Sustainability: Designing a successful undergraduate program' (Chapter 24). As was reflected in the previous chapter, these authors also take time to describe and discuss the structural barriers faced as they transitioned into SiME design and integration. Of particular interest in this chapter is the focus on the already existent challenges faced by faculty and administrators as they embark on curriculum design in general, and the elements involved in the process, and even beyond the process, that can contribute to either the success or the failure of curricular design efforts. The authors take into account that a number of factors at the university level can have significant effects, including university culture, resource availability, university strategic perspective, and buy-in from potential beneficiaries (Khan and Law, 2015), when proposing curriculum changes. It is also noted that assuring an effective curriculum requires the presence of faculty champions, a facilitator to guide the process, adequate data to guide decision making, and a continuous improvement perspective (Wolf, 2007). Boyd et al. (Chapter 24) argue that designing a curriculum that focuses on sustainability faces different challenges from one focused on management, and yet there can also be some similarities. Considering the complex challenges graduates must wrestle with when they enter the world after college – declining fossil fuel resources, growing energy demand, the negative and positive repercussions of globalization, religious fanaticism and terrorism, tremendous uncertainty, poverty and hunger, immigration challenges worldwide, and so forth – the authors suggest that students must learn to think about integrated, systemic solutions not just to the economic and environmental challenges but also to the interdependent health, social, and political challenges. They also note that effectively providing this education is likely to include problem-based learning and real-world engagement.

Following this logic, they add that curriculum development for sustainability and for management likely lead to similar pedagogical and even curricular thinking. To that end, the authors then state their integration case by describing in detail how students, faculty, administrators, and stakeholders within and outside the university (1) engaged in intensely involving service learning activities, (2) conducted deep reflection that called on them to use their academic knowledge to better understand what happened during their activities and to use that reflection to plan the next steps, (3) produced detailed, thoughtful, critical writing outputs, and (4) in the process were both transforming and transformed. A similar process is described in Knowlton (2003: 9) and Glisczinski's (2007) transformative higher education frameworks. Overall, this chapter offers details and even visuals as to the structural concerns, admissions procedural changes, program changes, faculty changes, core and elective changes, and SiME transition changes to a university and college's strategic concerns, procedural concerns, and so on. The authors take the time to summarize the structures, strategies, and processes that were important to their particular curricular development.

DISCOURSE OF CAPACITY: NEW PARADIGM ISSUES

Another discursive strategy is that of investigating SiME studies itself as a new paradigm. Three chapters do so by systematically analyzing the field from a combined discourse of complexity and capacity issues to a new paradigm of strategizing and coping with new grounds related to SiME integration. In further developing SiME theories or concepts, therefore, a potential and powerful discursive strategy is to highlight changes that have occurred in the academic world and to show how they demand new ways of writing and reporting about sustainability integration. The discourse of capacity can be understood as a set of contextual issues or, as suggested in these chapters, adequate presence of resistances in the process of advancing efforts in SiME. One of these issues relates sustainability reporting and the key role that university stakeholders play in bringing pressure for accountability, the response and effect of strategic commitments by universities, and the capabilities that these institutions possess to translate institutional pressures into action. The extent to which a decision to release a sustainability report is related to the strategic commitment of the university to sustainability will somehow need to be further investigated by looking at a new paradigm consisting of organizational capabilities and performance measures. If such a model is followed, who will be the leaders? How will the laggards cope, and what will then be the role of the external change agents? Another capacity issue in SiME integration relates to the choice between the voluntary and the regulatory approach. Of particular interest to SiME scholars in both developed and emerging economies is the role that government plays in advancing sustainability and environmental concepts in the management curriculum. Even in the regulatory environment (as is the case for eastern Indian business schools), where sustainability is gradually being integrated through regulation, the perception of faculty integrating SiME programs reveals similar constraints to those reported in other chapters in this *Handbook* from more developed regions. These discursive capacity discourses also lead us to the discussion and key role external change agents and boundary spanners play in enabling and advancing sustainability education.

SiME emerges in the interactive exchanges of its members and those recognized as such because they display the current practice(s) of its community within the academic world. Whether a practice of an external agent is meaningful or not – and whether it has organizational consequences – depends on the larger discourses in which the academic institution is situated.

Richardson and Kachler's chapter on 'University sustainability reporting: A review of the literature and development of a model' (Chapter 16) explores the concept of sustainability reporting and reports on its capacity constraints. The authors describe the existing literature on sustainability disclosure, for the most part, as lacking in theoretical underpinnings. They acknowledge that the factors identified as encouraging the production and release of high quality sustainability reports do reflect a diverse foundation. First, sustainability is seen as an emerging 'product' of universities, and sustainability reporting can be used to recruit students and donors interested in that product line – what the authors label as economic signaling. Second, sustainability is recognized as an emerging normative issue within the institutional environment in which universities operate, and sustainability reports are used to manage these institutional norms – labeled as institutional isomorphism. Third, to the extent that universities are dependent for resources on external organizations and individual donors that link funding with sustainability, universities will use sustainability reports to manage their legitimacy within this network – or resource dependency. In essence, their chapter reviews studies of sustainability reporting by universities and identifies the factors that have been associated with the decision to report on sustainability and the quality of those reports. The proposed model highlights the key role that university stakeholders play in bringing pressure for accountability, the effect of strategic commitments by universities, and the capabilities that universities possess to translate institutional pressures into action. The model also captures the role of universities as change agents in society while also being embedded in social institutions and accountable for their own enactment of institutional logics. A distinction made by the authors in this chapter is that sustainability performance and sustainability reporting are independent, and care must be taken to separate these two dimensions. For example, many universities participate in the STARS system as a way of benchmarking their performance without intending to release equivalent information publicly. Likewise, a high quality sustainability report would reflect the underlying state of sustainability in an organization in an unbiased manner consistent with stakeholder demands for information. It is possible to have poor sustainability performance but provide complete disclosure of this state in a high quality report (classified as Honest Laggards in their analysis). The most likely situation, however, is that sustainability performance is positively correlated with reporting quality: firms with high sustainability performance are likely also to invest in high quality reporting, while poor sustainability performers are less likely to want to publicize their failings (classified as Sustainability Leaders and Sustainability Lemons, respectively, in their analysis). Notwithstanding the theoretical diversity of the factors identified in this chapter, there is an emerging consensus that the decision to release a sustainability report is related to the strategic commitment of the university to sustainability, its organizational capabilities to produce these reports, and the level of its sustainability performance. Understanding the complexities that the business sector has already witnessed in its sustainability reporting efforts, the existing academic literature on sustainability performance by universities

identifies useful proxies for each of the constructs the authors develop here, constructs that can be reasonably built into a model to be further tested.

Our second chapter in this set of chapters addresses the discourse of complexity, capacity, and strategic challenges of integration from an emerging economy perspective. Bandyopadhyay and Mahajan's assessment of 'Faculty experiences with teaching sustainability in management education: A study of select management institutions in India' (Chapter 21) identifies constraints in internalizing SiME. Of particular interest to SiME scholars in this chapter is the role that government plays in advancing sustainability and environmental concepts in the management curriculum. The chapter notes that the University Grants Commission of India, the national regulator of university level education, has made it compulsory for management schools under its control to offer environmental management as a core course (Krishnamoorthy, 2005). In addition to this approach, the Ministry of Environment and Forests, Government of India, has been organizing consultative workshops to introduce and enhance the environment content in business and management education, and has launched a website as well to integrate environmental concepts into management education (Park et al., 2012). The authors recognize that sustainability as a concept is multi-dimensional, and infusing sustainability into any institution of higher learning begins by adopting an interdisciplinary approach in teaching and thus invariably has its own set of challenges. In a detailed and informative fashion, the authors set out to provide literature reviews on sustainable development and the synergies with management education, the history and evolution of integration of SiME in India, and insights into their exploratory study on faculty perceptions with regard to the state of SiME integration. As perceived by faculty currently teaching sustainability related courses (MBA level), the four key constraints in internalizing SiME in India are identified as: (1) sustainability in management education is a very new concept in a developing and emerging economy like India, and the market has yet to develop; (2) there is an inherent demand–supply mismatch between the courses; (3) funding that is presently available for such programs is inadequate; and (4) institutional policies are not conducive to appreciating sustainability related courses and often disincentivize a faculty to pursue teaching sustainability related courses. In addition, the authors offer interesting insights on course distribution by popularity across institutions, the most popular topics and content covered among those faculty surveyed, faculty perception on the choice between stand-alone and integrated courses, and perception on the usefulness and acceptability of sustainability related courses. It is concluded in the chapter that, although sustainability is slowly being integrated in higher education either voluntarily or through regulation, the perception of respondents to such courses in management institutions reveals the presence of adequate resistance to mainstreaming such courses primarily because of lack of awareness and sensitization on the nature and utility of these courses, leading to a lack of appreciation for such courses, dearth of adequate funding, lack of adequate incentives to offer these courses by the faculty due to institutional barriers, demand–supply mismatch for the courses, and absence of a niche market to value the importance of teaching sustainability in the conventional management curriculum. They add there are miles to go before students and peers acclimatize themselves and accept such courses as part of the curriculum. This would largely require support at the top management level in the form of visionary leadership, sustained effort on the part of academicians

to sensitize students, and collaboration between government, industry, and academia for a meaningful impact.

The third chapter in this set, 'External facilitators of sustainable management education (EFSUMEs) and their role in promoting sustainable management education in higher education', focuses on the role of external organizations in advancing the case for SiME in universities, and the strategic complexities involved when seeking engagement outside academia. Vazquez-Brust and Yakovleva (Chapter 17) present to us a unique opportunity to review the landscape of their labeled EFSUMEs, including the variety of strategic relations, assessments of integration, and at the same time a closer critique of their roles on facilitating transition towards SiME education. In their review, the authors point out that the activities of organizations that provide normative guidance, monitoring, and networking opportunities to academic institutions have significantly increased the attention given to sustainability in business schools over the past two decades. Since 2009, there has been a significant change in this landscape. As the authors uncover, some players have disappeared (e.g. Business Environment Learning and Leadership – BELL), some organizations suspended their monitoring activities (e.g. Aspen Institute's Beyond Grey Pinstripes, and Sustainability Endowment Institute's Green Report Card), and some are under internal revision (e.g. Greening of Industry Network – GIN). Additionally, some new players have emerged, most noticeably the Association for the Advancement of Sustainability in Higher Education (AASHE) and the STARS rating system, the Association to Advance Collegiate Schools of Business (AACSB), the 50+20 initiative, GRONEN, and the Sustainability Literacy Test. Inspired by the work of Rands and Starik (2009), the authors set out to classify and assess the contribution of EFSUMEs in accordance with their main roles: those that offer normative guidance (i.e. PRME, Talloires Declaration, Agenda 21, CRE Copernicus Chapter, and others), monitoring (Beyond Grey Pinstripes, Global 100 Sustainable MBA, and others), networking (Academy of Business in Society – ABIS, GIN, GRLI, LEAP!, and others), and resource provision (Aspen Institute's CasePlace.org, Giving Voice to Values – GVV, UNESCO Education for Sustainable Development, and others). In the area of monitoring, those organizations that monitor the implementation of sustainability in business schools and universities have undergone the most significant changes in recent years. In the US, the few remaining monitoring organizations with open disclosure of laggards and poor performers (such as the Sierra Club) face a dwindling number of academic participants and withdrawal of support, whereas the dominant normative guidance organization, UN PRME, is criticized for the lack of mechanisms to differentiate free-riders joining in to benefit from green credentials without implementing substantive change (Perry and Win, 2013). In terms of networking EFSUMEs, there seems to be a tendency for management conferences to become more specialized and research focused and less interdisciplinary and practice oriented. It is suggested by the authors that, in order to accelerate change, management conferences should be encouraged to engage with local management audiences and local organizations such as schools, businesses, and non-governmental organizations (Sarkis et al., 2015). This is just one way of assuming more active and visible roles in disseminating management knowledge and collaborating with management practitioners. While the authors argue that external facilitators of sustainable management education are needed to support paradigm change in education, they call for more efforts to be set in place to raise the profile of sustainability through ranking, research, and pedagogic endeavors. Subsequently, they call for further research

to explore to what extent EFSUMEs promote curriculum development, improvement of student experiences, organizational change in the higher education sector, and professional development of management academics.

DISCOURSE OF URGENCY: A CRITICAL APPROACH

A number of chapters develop what we refer to as a discourse of urgency, by which we mean they approach topics in SiME studies from a perspective that highlights both the concern and urgency to take a critical approach to management studies and that a shift in the current paradigm begins to take place. The authors of these chapters point to the potential for universities and SiME studies to improve the well-being of individuals, communities, societies, and environment, by considering incumbent paradigms in our programs. Concern for the welfare of humanity as well as the natural environment is an important topic for SiME studies, because pollution of the environment is done by corporations, public and voluntary sector organizations, and individuals through organized processes in their work and leisure activities. Educating students about preserving the natural environment should be an organizational phenomenon where environmental NGOs, governmental ministries, academic institutions, and corporate departments all must be critically involved, as well as the large, complex inter-organizational networks that connect these players. The authors in these chapters argue that a new ideological set of frameworks has recently developed, which stresses the role of academia and businesses as leaders in addressing environmental issues. In order to examine this ideological development, the authors use the lens of critical theory (and variations of related perspectives). Collectively, they argue that critical theory provides an appropriate and insightful lens for academic programs because of its ability to highlight the political nature of corporate environmentalism, and provide an intellectual foundation that supports a subversive position on an issue of grave academic importance.

Manring's chapter, 'The role of management education in transdisciplinary collaborations for sustainable social-economic-ecological systems' (Chapter 14), explores an important new topic in SiME studies – panarchy as the emerging conceptual framework. Responding to how universities can effectively move to the forefront in collaborations which address the sustainability of social, economic, and ecological systems, the author illustrates the utility and teaching potential of case studies that provide transdisciplinary perspectives and approaches to addressing the challenges and opportunities of regional sustainable development. Manring applies the panarchy framework (Allen et al., 2014) as a trans-domain approach for comprehending the social, economic, and ecological complexities of sustainable development. She reports that students have indicated that working with real cases and issues enables them to better understand the complex frameworks, and once the frameworks are understood they provide an effective means for students to grasp 'the whole' of these social-economic-ecological systems. The case studies presented in this chapter also demonstrate that overcoming resistance and creating change, which move individuals, organizations, societies, and networks into new sustainable basins of attraction, require in-depth action research inquiries and diagnostics into the DNA of structures, processes, and cultures on multiple levels and scales, and understanding of organizational learning and behavior, all of which are management education

fundamentals. It is urged sustainable change takes years of action research collaborations to replace incumbent basins of attraction and fears of change with new visions, motivations, and practice to make the new vision the reality. The two cases chosen for this chapter are presented as large regional social-economic-ecological systems. The Monroe County case in Pennsylvania and the Albemarle-Pamlico Estuary in North Carolina case, argues the author, make conceptual frameworks and methods analyzing social-economic-ecological systems more readily useful for management educators, researchers, and practitioners. They also extend management perspectives into interdisciplinary curricula, teaching, research, and practice (Manring and Moore, 2006; Manring and Pearsall, 2006; Steiner and Posch, 2006; Zilahy et al., 2009). The author describes integration in both undergraduate and MBA programs, along with the reported mechanics and insights as to the on-going commitments this course offering entails. This chapter opens the door to what the author refers to as the evolution of resilient, social-economic-ecological panarchies as learning networks. The author locates a number of learning processes that are essential to support the resilience adaptive capacities this new paradigm offers, including transformative learning processes, virtual learning networks, holographic systems thinking, resilience, and network ruptures and setbacks. These provide both a strong underpinning for the concept of urgency as an addition to our field and a bridge to important yet overlooked areas for inspiration and intellectual borrowing.

Ahen's chapter on 'Reforming the delinquent organization: Academia's impactful tribute to society' (Chapter 2) also engages with discourses of urgency and concern and critiques current university–society relations. Much like Manring in Chapter 14, Ahen argues academics need to be challenged in their offerings, pedagogical philosophies, and goals in redesigning considering the minds of future decision makers. While emphasizing a discourse of concern and urgency, the author embeds his discussion in two distinct approaches to SiME. First, he problematizes the cult of managerialism in the twenty-first century, the abuse of academic freedom and the objectification of society, the ideologies, values, and managerial decision making, and the questionable relationship between business and society. Then he provides critical and interesting possibilities to overcome the delinquency in organizations. Drawing on Habermas's (1997) approach to critical theory, the author argues for more enlightenment in the twenty-first-century business-school pedagogy. As he points out, curricula must more effectively reflect teaching, learning, and research that possess, from their core, redesigned philosophies and goals. It is suggested that program integration should offer transformation of the minds of future managers, leaders, and decision makers, who will operate globally while being contextually sensitive. Throughout the chapter the author emphasizes society's increasing need for corporate responsibility and places managerialism at the center of greed, selfishness, exploitation, and enslavement for profits. The author is motivated by the fact that valid competing forms of knowledge articulations are emerging, and universities must adapt speedily to the changing environment in order to cement their legitimacy. There is particular attention being placed on 'knowledge shifts' in these discussions. These shifts imply the changing views of knowledge in society and the ensuing implications among six dimensions as pressures on university pedagogy. These are: (1) modern technologies that make public knowledge publicly available and which affect disciplinary knowledge; (2) pressures from other institutions that produce knowledge, for example think tanks and NGOs; (3) an exponential increase in sustainability-oriented organizations, especially in emerging

economies; (4) the increasing power of stakeholders employing non-college-degree holders with experience; (5) the fact that universities are no longer the privileged producers of knowledge; and (6) increasing competition between various knowledge claims, which has caused serious problems for the so-called culture of expertise in our universities (see Figure 2.1). The author also offers some critical and thought provoking perspectives on paradigmatic changes in university research and education, and exposes the current empirical model, depicting a cycle of indifference in academia. He proposes that more forums on critical management studies must aim at turning the tables by demonstrating that they are the core and not the periphery of academic thought and university education. Academic freedom, he posits, must be redefined so that not only does it include what is of interest to the researchers but also they must have a burden of creating the maximum social value and impact.

Our third chapter in this set, 'Critical reflection and transformative learning: The development of shared value rationality in the teaching of strategy for sustainability' by Brunstein, Sambiase, and Bidart Carneiro de Novaes (Chapter 3), draws on critical theory and transformative learning theory and their contribution to management studies and further describes our strategic discourse of urgency. The authors introduce an assessment framework for critical reflection and transformative learning and apply it to their existing discipline at their institution with a graduate course focusing on strategic sustainability management. The course intervention, or as they label it 'pedagogical experiment', proposes to develop the notion of shared value as a strategic goal. It entails a distinct mentality framework which is presented to students with the purpose of transforming the unsustainable values and models with which business has hitherto been conducted (Hart, 1995; Emerson, 2003; Porter and Kramer, 2011). For their teaching purposes, didactic-methodological resources based on interdisciplinary theoretical discussions are used, as well as playful experiences involving these concepts, a kind of sustainable entrepreneurship game with group experience dynamics. Taking this approach, critical reflection and transformative learning are nurtured via experiences which seek to give meaning to the theory and allow students to make emotional exchanges under the logic of shared value. For their theoretical construct, the authors draw from rational and social perspectives. The rational is adopted owing to its importance (Mezirow, 2010), where the individual is the unit of analysis. Here, the intention is to promote critical reflection in order to nurture a better understanding and critical view of the world. For this purpose, the focus of attention and interest is on the habits of the mind, expressed in the subjects' (i.e. students') points of view. The social transformation perspective, on the other hand, is founded on the presupposition that reality and individuals are socially constructed in the context of their history, culture, and society. This perspective is concerned with the intersection of personal biography and social structure. Here, the unit of analysis shifts from the individual to the individual within the context of society. Emphasis is on becoming aware of the dominant culture and its relationship with power. People become conscious of political, social, and economic contradictions and act against oppression. The authors report that transformative experience occurs when individuals become critically aware. Transformative learning takes place within this perspective when the learner becomes aware of their own history and biography and how they are inserted in social structures that support privilege and oppression. Arguments and insights about strategic management courses designed around shared valued propositions are also well considered in this

chapter. The authors defend their position in their application, especially as many have criticized the concept of shared value in terms of business legitimacy, business purpose definition, capitalism redesign, and also the supplanting of corporate social responsibility (Crane et al., 2014).

A strong similarity occurs in this chapter and that of Bandyopadhyay and Mahajan (Chapter 21) in that SiME integration took place as a direct result and response to a governmental movement to make environmental education compulsory in Brazilian universities, at all levels (see Brunstein et al., 2015 for more details). In addition, higher education institutions in Brazil began to be evaluated by the Ministry of Education both for interdisciplinary inclusion of the theme in their curriculum and for the national student performance examination (ENADE), which began to demand sustainability related knowledge in students. Following an open question script to evaluate corporate responsibility knowledge in students, the authors then share student 'feedbacks' relating and reflecting critical reflection on sustainability among a number of dimensions, as proposed in their assessment framework. Based on these qualitative assessments, it is reported that new knowledge and reflections were attained. Students' learning discourses displayed ecological rationality, and thinking about developing other types of value creation as they enter the business world, other than economic.

The concern of Schutel, Raufflet, Figueiró, and Jacobi (Chapter 4) is that management education lacks passion, and that educators need to move beyond the traditional instrumental rationality and cognitive skills approach we take in the classroom. In 'Sustainability in management education: An alternative paradigm based on critical pedagogy and substantive rationality', the authors explore a SiME framework based on anti-dialogical theory and critical pedagogy theory. Much as in the previous chapter, the authors set out to share their critique of the current pedagogical paradigm in management courses, which in their view is the result of a hegemonic radical-positivist epistemological model. In this model, productivity is an imperative which influences the understanding of what administration is by limiting it solely to its economic perspective. In addition, the philosophical basis of the modern science of instrumental rationality is the basis of theories that form and qualify administrators, making them conform to the rules of markets while maintaining the logic of production relations of the contemporary world. The authors suggest that, for sustainability to be an effective practice, collaborative efforts and a new rationality based on new theories are required. To do so, the authors combine insights into critical pedagogy theory (Freire, 2005) with insights from substantive rationality (Ramos, 1989), as two complementary foundations for a new approach to SiME. According to scholars, Paulo Freire is widely recognized as one of the most influential pedagogy thinkers of the twentieth century (Gerhardt, 1996). His key pedagogical ideas are centered on the human potential for creativity and freedom from oppressive structures through conscientization, which is the process by which people achieve a deepened awareness of their lives and their capacity to transform reality (Gerhardt, 1996: 9). It is reported that this pedagogy aims to promote the recognition that personal and social change is possible by altering how individuals and collectives understand and act politically in the world (Dale and Hyslop-Margison, 2010). Meanwhile, Brazilian sociologist Ramos (1989) proposes a new science of organizations based on a substantive rationality which is based on the psychic dimension of human beings and critical capacity. This rationality confronts the market ideology embedded in society (Ventris and Clander, 2005) and is

necessary for a new paradigm of management, in contrast to the instrumental rationality of the current development model, leading to a critical, ethical, and humanist attitude to society and nature (Serva, 1997; Azevedo and Albernaz, 2006). Before building on these perspectives, the authors provide a set of arguments on the current, more dominant paradigm in SiME. The authors argue that the current model is intrinsically related to the science paradigm – or efficient control of reality. It is designed for the technical control of reality and is a legitimate means of institutionalized control of the natural world and of human conduct (Ramos, 1989). Different views on sustainability are also shared in the chapter, where the authors make the case as to how a new paradigm could be reached, taking into consideration the new ‘Triple E’ vision paradigm they propose. According to the authors, enabling, engaging, and educating together form the basis for a new more collaborative and interactive SiME model (based on the work of Muff et al., 2013). Enabling involves research in service of society, supporting companies toward stewardship and accompanying leaders in their transformation. Education is related to transformative learning, issue-centered learning, and reflective practice and field work. Engaging entails open access between academia and practice, faculty as public intellectuals, and institutions as role models. Finally, collaboration involves the preferred place for stakeholders to meet and collaborative action learning and research platforms (Muff et al., 2013). The core idea is that, from this perspective, business schools will be able to provide knowledge and practice to responsible leaders for a sustainable world.

DISCOURSE OF INTERROGATION: A QUESTION ON ASSESSMENT

This set of chapters adopts a discursive strategy that is focused more explicitly on questioning the changing nature of integrated models in SiME studies. Collectively, we refer to these as a discourse of interrogation, as they present to this *Handbook* an opportunity to critically review whether SiME integrated methods, after some time of adequate integration, actually deliver measurable outcomes. In fact, critique on rigor and assessment has been a theme promoted heavily in the proposal submission, full chapter development, and delivery of the accepted chapters for this volume. The chapters in this set show how different phases in the field of SiME’s history and the different perspectives developed over the years act as lenses to view the achievements – and perhaps more importantly the shortcomings and deficiencies – of earlier models of study, suggesting perhaps alternative approaches to SiME. Our discourse of interrogation aims at showing how discursive change and divergence can expose gaps that then form a basis for conversation and debate designed to probe those gaps further.

In ‘A review of the pedagogical tools, games, and simulations in the sustainability classroom’, Simmers and Soderstrom (Chapter 8) employ a discourse of interrogation to show that the current pedagogical landscape used in well-intended business schools is simply not enough in terms of SiME interventions. While the authors believe there is wide promulgation of pedagogical interventions, and report that these enhance student development of reflectivity, critique, and social action or engagement, faculty need to develop more innovative and illustrative educational experiences which deeply challenge the hierarchical, normative conception of capitalist development (Hudson and Weaver, 1997), and fuller

interventions that address issues of equity, equality, and futurity. In terms of rigor and assessment, the authors argue for more extensive survey measures, in particular course-based surveys which can measure changes in attitudes, changes in behaviors, actions taken in the workplace and outside of the classroom, and observations of field work including pre- and post-tests using standardized assessment criteria. Simmers and Soderstrom (Chapter 8) call for more research that focuses on measuring changes in perceptions through surveys given in courses or through proxy measurement of inspiration. These can include grades on capstone projects relating to sustainability issues, senior theses strictly focused on advancing sustainability knowledge, or review of student cases, publications, or conference attendance with faculty involved in SiME research. In responding to what interventions can be used to inspire students to shift from profit or external motivations towards broader sustainability values or internal motivations to foster a sense of responsibility for the state of the environment, the authors make a number of recommendations, including testing different aspects of Rusinko's (2010) matrix, such as a stand-alone course versus a module within a course (cells I and II), or common core integration versus cross-disciplinary programs (cells III and IV), or the role of co-curricular options in sustainability education. They even suggest conducting longitudinal studies, following cohorts of students who experienced sustainable education programs through five, ten, and more years of their professional careers, in order to shed light on adequate assessments of the impact of sustainability education on business decision making. As with other topics discussed in this chapter, the authors also explored the successes and challenges in teaching sustainability. Drawing from the work of Rusinko (2010) representing structure and the work of DuPuis and Ball (2013) representing process, the authors set out to classify successes and challenges and found that all reported successes focused on process (i.e. guest speakers, group research projects, presenting opposing views, use of YouTube videos, TED talks, and sustainability internet sources, etc.). However, their data reflected that challenges were almost evenly divided between process and structure (i.e. student understanding for a course takes time, how to approach more meaningful projects, changing the capitalism mentality, less is more by other faculty teaching the same course, adapting a topic to the traditional curriculum with limited time to expand, lack of time for short MBA courses, etc.). After positing that process focused learning will heighten transformational learning, they then discover that it is not sufficient, as attention to how sustainability education is structured is important to counter pedagogical challenges.

In 'Developing the sustainability mindset', Rimanoczy (Chapter 9) also employs a discourse of interrogation, by posing a number of critical questions. First, if it is possible to develop leaders so that they are motivated and ready to act in a sustainable way, what would such a course look like? Or, adding to the question, could it be possible for business schools to intentionally develop leaders so that they become motivated and ready to act in such a way that the results of their actions generate and reinforce the principles of sustainability? If so, what would such an intervention look like? On her quest to identify some answers, the author identifies and develops a set of elements (based on qualitative research on business leaders championing sustainability initiatives) which became the components of the construct called 'the sustainability mindset'. The sustainability mindset is defined as a way of thinking and being that results from a broad understanding of the ecosystem's manifestations, and from an introspective focus on one's personal values and the higher self, and finds its expression in taking actions for the greater good

of both society and planet. According to the author and her earlier work, the mindset creates the foundation for any kind of sustainability initiatives, since it shapes a new way to look at the world, interpret data, analyze problems, and explore alternative solutions (Rimanoczy, 2010). These findings led to the design of a course intended to develop the sustainability mindset in students – a course originally aimed at graduate students. Following a cyclical design and process of integration, the author describes the knowing, being, and doing elements of the proposed framework. The course was designed with the objective of developing basic ecoliteracy (Semetsky, 2010; Goleman et al., 2012; Muff et al., 2013), to depict the true state of the planet, and with a focus on connecting the fragmented information required in sustainability offerings, and to expand the knowing dimension of the model. The course design also addressed aspects falling into the domain of emotional intelligence (Mabry, 2011; Lambrechts et al., 2013; Metcalf and Benn, 2013), to address the more holistic developmental goals connected to self-awareness and the being dimension, in students. The author explains that, in order to ground these different learning objectives and developmental goals into some meaningful action, students are then invited to work in small teams on self-selected passion projects that are designed to make a positive impact on the community. As was done in previous chapters, the author describes the implementation process of this course offering, including the unique learning methodology chosen for integration, the progressive implementation in three different business-school programs in the United States, and student reflections connected to the learning objectives of this course and its attempt to develop leaders motivated and ready to act in sustainable ways.

Miesing, Krzykowski, and Rich's chapter on 'Enabling sustainability in management education' (Chapter 22) adopts and reflects on a discourse of interrogation by identifying and reflecting on three unique dilemmas. First, the authors' school of business identified a problem, which concerned the changing demographics within its full-time MBA student body, which demanded more applied learning and relevancy in its curriculum. Second, the business community identified a problem – that of MBA graduates lacking the ability to apply business concepts outside of business-class silos. Third, the academic community identified a problem – that of the MBA curriculum lacking integration and being largely focused on theory at the expense of application and skill development. Making an attempt to reflect on how to best address these on-going stakeholder concerns, the authors use this chapter as an opportunity to reflect, share, and inform academics on the success of their integrated 'Going Green Globally' or G3 program, and the developed sustainability 'compass framework' and the determinants of this newly integrated SiME graduate program. The authors begin their chapter by reviewing a number of approaches business schools have historically adapted to as they respond to the sustainability challenges in their curricula. They argue these approaches have neglected the value of sustainability as a bridge into practical experience as well as an academic fulcrum and proceed to introduce their innovative, yet unique, first year student experience, which later became a program cornerstone. This cornerstone of their full-time MBA program, G3, brings together local public and private organizations, a variety of campus resources, and their MBA students to produce tangible financial results, environmental benefits, and career opportunities – much like a high level practicum in most business schools. The authors report that two years were needed to reshape and implement a more applied curriculum to meet the changing student needs and the growing interest in sustainability. Interestingly,

they report, as the popularity of sustainability and the field of sustainable management evolved, so did their G3 program. The way the program works is that G3 is organized as a consulting engagement, not a class. It is a required component of the first year of the curriculum. The client organization (not the school of business) provides the focus for the team's work, with team members acting as business professionals rather than students. It is reported that initially client organizations came from a network of relationships maintained by the business school and its faculty, including executives, alumni, and members from the school's advisory board. With word of the success of the program spreading, they now vet and select clients based on the types of projects they provide for the student teams. In this way, G3 creates partnerships between the school, students, faculty, and myriad community partners and stakeholders. The authors proceed to share the program logistics and offerings (Appendix 22.1), and even provide problem domains and past G3 projects (Appendix 22.2). It is reported that this model, or transformational intervention, inspires over 40 full-time MBA students each year to shift from solely profit and external motivations toward expressing personal values and intrinsic incentives. As first year MBAs, the students seek solutions to business problems which combine a short term, bottom-line rationale with long term sustainable models. In the process, students make use of the developed new framework, or Sustainability Compass, to guide these considerations as they navigate the real world of sustainability challenges in real life, based on community, university, and student engagement. The authors close by expressing their desire for readers to reflect on their experience and relate it to their curricular challenges in the hope that they will be able to develop a sustainability program that is relevant to their stakeholders. The authors share their complete G3 syllabus, examples of past projects, and a wealth of detail of their integration journey, along with an interim assessment.

Hart, Fox, Korstad, and Nill (Chapter 23) interrogate the discourse of engagement in top ranking MBA programs in their chapter on 'Sustainable MBAs: A phase model development of sustainability in MBA education'. Here, the authors seek to examine to what extent MBA programs have incorporated sustainability and sustainability related topics into their programs, so that an academically fit phase model can be proposed in terms of SiME levels of integration. To substantiate their proposed framework, the authors drew on a literature review which included various proposed models for integrating sustainability in business, with some dating back as early as the 1990s. These included: Hunt and Auster's (1990) five-stage model that ranged from beginner to proactivist in terms of environmental management; Roome's (1992) five-strategy framework (i.e. non-compliance, compliance, compliance plus, commercial and environmental excellence, and leading edge); Hart's (1995) capability model focusing on strategic goals (pollution prevention, product stewardship, and sustainable development); Berry and Rondinelli's (1998) model for identifying best practices and defining characteristics of modern firms that fully adopt proactive corporate environmental management (i.e. involvement from the top management team, establishing environmental strategies and goals, fostering participatory decision making within the organization, monitoring and benchmarking environmental performance, and engaging in continuous assessment and feedback); van Marrewijk and Werre's (2003) multi-level, multi-dimensional model of internal and external drivers for six different stages of a company's view towards corporate sustainability (from lowest level describing no motivation, to nominal attention paid to sustainability, followed by economic benefits, to seeking balance between economic social and ecological issues, to reflecting synergistic

to holistic approaches, to fully embedding and integrating sustainability); and the more recent and perhaps most widely diffused phase model developed by Dunphy, Griffiths, and Benn (Dunphy et al., 2003; Benn et al., 2006). This latest conceptualization proposes six phases, which are targeted at defining characteristics of corporate views towards human and environmental resource sustainability. In brief, the first phase is defined by exploiting these resources and rejecting any responsibility towards them. In the second phase, the needs and associated costs of these resources are to be minimized as much as possible. In the third phase, companies focus on meeting bare minimum obligations arising from these resources to avoid penalties and liabilities. The fourth phase focuses on integrating human and environmental management practices into overall planning to reduce costs and increase efficiency. In the fifth phase, organizations seek ways to proactively develop and implement strategic uses of these resources. Lastly, in phase six, organizations view themselves as responsible for human and environmental resources and seek to utilize them in a way that generates value for multiple stakeholder groups. Hart and colleagues (Chapter 23) point out that the extent to which top executives pay attention to the needs of stakeholders is influenced, in part, by their education and that, for many firms, their primary leaders are trained in top US MBA programs and these programs have a direct and lasting influence on them. However, as indicated by their review of various models of sustainability integration, there is a variance in the extent to which firms have embraced sustainable social and environmental strategies. The authors then interrogate the increase in sustainability education in business programs and question whether there exists a potential variance among them. To this end, and based on their analysis of top ranking MBA programs, a five-phase model is proposed in the chapter, reflecting programs that are silent (Phase 1), trivial (Phase 2), accepting (Phase 3), embracing (Phase 4), and leading (Phase 5), in terms of incorporating all sustainability related topics in their programs. In their discussion the authors do acknowledge that the goal of the chapter was not to highlight specific schools or label programs in any way. Rather, the intention of their analysis was to develop a five-phase model of sustainability education in MBA programs. To that end, while programs move up and down the rankings, the framework they propose is far more stable.

DISCOURSE OF INSTABILITY: OVERCOMING CONTRADICTION

Advances in SiME are, in themselves, empirical science – intimately connected to the practices, processes, structures, and outcomes of the organizational world. As such, an important feature of its discourse is the set of connections made between theories, concepts, frameworks, and the empirical reality to which they point. In further developing SiME theories and concepts, therefore, a potentially powerful discursive strategy is to highlight changes that have occurred in the organizational world and to show how they demand new ways of writing about sustainability and integration processes. As changes occur in the real world, academic treatment of these imported concepts also changes. As the two chapters in this set of chapters show, research in SiME studies is revised and refocused as real-world conditions change. Thus, the chapters take their motivation from the changing nature of the empirical world and, by evoking it, the authors are able to make sense of the different ways in which knowledge is produced within a field of study.

The first such chapter is Albert, Breßler, and Hüsigg's (Chapter 11) work on 'Expansive Learning through contradictions of sustainability'. As the title suggests, this chapter takes the position that teaching sustainability effectively becomes an increasing challenge, as the subject is already full of contradictions when presented to business students. Albert and colleagues (Chapter 11) propose a learning concept that applies to the awareness of contradictions. If properly and successfully implemented, the findings could have an innovative effect on the processes of change and education management of the change community, since organizations use the didactical model as a structure for change processes. According to the authors, contradictions describe logical false propositions and may take the forms of paradoxes and dilemmas. Paradoxes are propositions which are self-contradictory or contradict the common opinion but yet are well founded. Dilemmas describe situations in which a person must choose between two or more options and none of them show favor. In brief, the authors make an attempt to deal with the following contradictory topics in their chapter: the multiplicity of theoretical sustainability approaches; the resulting contradictory definitions and paradoxical conceptualizations; the different weighting of the ecological, social, and economic dimension of sustainability and accordingly paradoxes by different practical implementations; the discrepancies between sustainable intentions and side-effects; the mismatches between sustainable consciousness and actions; and the practical dilemmas of sustainable actions. It is also argued in this chapter that any action, in particular a sustainable action, is based on decisions. But decisions are difficult to make if contradictions or paradoxes occur in their assumptions or decisions themselves are part of dilemmatic situations. And, based on the authors' own experiences, sustainability decisions made by business students are no exception to these discrepancies. To fill this gap and deal with the problem, Albert and colleagues (Chapter 11) share a presentation of the application of a modified concept of Expansive Learning (based on Engeström, 1987, 1999, 2014). They do so by describing the implementation of a learning concept, which takes place within a project-based course in their undergraduate program. As introduced in the course, Expansive Learning is a collective process and starts by questioning a current activity and revealing the contradictions within that activity. To resolve the contradictions, the authors suggest, a new form of activity must be established which is examined, implemented, and evaluated. The authors spell out some of the contradictions of sustainability, beginning with the issue of contradictory definitions in the literature, followed by a number of paradox issues relating to the concretization of its concept. They mention a number of overlapping dilemmas that precede the level of action of the dilemmas themselves. For example, it is agreed among scholars that there is a dilemmatic relation under today's economic conditions. Based on the fundamental dilemma of accepting the deterioration in sustainability of one dimension when taking action on improving the sustainability of another dimension, other dilemmatic decision problems result, for example with regard to resource equity. Hence, according to Müller-Christ (2008: 3), an equal and just distribution of natural resources among people on earth (improvement of the social sustainability) is only possible when more is consumed than is produced at the same time (deterioration of the ecological sustainability). The chapter concludes with an evaluation model and the initial findings of the model application, which can be used by instructors in higher education as a framework for a novel approach to learning.

A second chapter that argues for a changing world and, hence, the need to engage students with conversation on gender equality as part of SiME interventions is Williams,

Meliou, and Arevalo's chapter 'Gender and sustainable management education: Exploring the missing link' (Chapter 13). The authors question whether threshold concepts enable us to understand how students engage with gender as a key concept in responsible, sustainable management education. The authors observe and argue that a sense of equity and social justice is at the heart of the concept of sustainability, which also encompasses aspects of gender equality (Haynes and Murray, 2015). They point out that in no region of the developing world are women equal to men in legal, social, and economic rights (World Bank Gender and Development Group, 2003). Accordingly, there is increasing awareness that the achievement of women's equality is key to solving the challenges of development and poverty. And, as the authors acknowledge, this dimension of gender equality is often missing from sustainability debates both in business and in management education (Flynn et al., 2015). To address this gap, the authors aim to contribute to debates in gender and sustainable management education by focusing on and evaluating a learning opportunity of an intervention they designed in order to engage students, as future leaders, with gender equality as a key issue in addressing the social justice aspect of the social pillar of sustainability. Their contention in this chapter is that there is a need to evaluate current approaches to learning interventions designed to engage students and make them aware of and challenge conventional assumptions about the role and responsibilities of leaders, which may limit sustainable development. Guided in their endeavor by Meyer and Land's (2005) work on threshold concepts, which represents an innovative and transformed way for management education practitioners to understand and interpret gender as an integral aspect of responsible management education, the authors design an engaging course intervention taking a combined interpretivist, reflective, and practice learning approach. The authors share their approach as to how they instrumentally and carefully integrated gender in their curriculum, a process still seen as problematic, whether the audience consists of students or managers, as it demonstrates the problematic nature of the dominant status quo (Kelan, 2013; Gherardi and Murgia, 2015), which maintains management theory and practice as gender neutral. In the process, Williams et al. (Chapter 13) identify two forms of embodied practice: those of the emotional and the physical. As they report, it was through emotional responses and experiences of the body that students were able to articulate their experiences, whereby instructors could see the extent to which gender is a troublesome concept that students were, in varying degrees, able to grapple with as part of their engagement with sustainability through the responsible management agenda. Overall, it is reported that students' engagement with gender as a social construct was shaped by the prevalence of a 'common sense' or intuitive understanding of gender and difficulties in accepting that, whilst gender may shape their social lives, it shouldn't (and therefore wouldn't) transfer to work organizations, which have policies in place to protect against it. In the interviews, students used experiences from their personal and social life to problematize their own common sense making, including experiences on campus, yet a number struggled to develop a clear understanding of how the gendered relations and expectations they experienced could be managed in the workplace. It is concluded in this chapter that, owing to the sustainability imperative, business schools should move beyond rationality and instrumentality and educate the future leaders differently. Gender is inherent in the social justice dimension of sustainability and an important area of concern; however, despite official acknowledgment, as research evidences, not much has been done to address this concern (Kilgour, 2013).

BORROWING DISCOURSE: THE LENS OF ANTHROPOLOGY

Our last discursive strategy in SiME ventures further afield and emphasizes connecting to different discourses. This strategy explores multiple discourses and the ways these discourses can be connected to each other. Much of what constitutes knowledge in organization management studies today was, at some earlier point in its history, anchored in research and writing from other disciplines, such as psychology, sociology, economics, or political science. This tradition of borrowing continues to be an important source of intellectual resources in modern management studies. In fact, a good portion of chapters in this book leverages important ideas from other disciplines, although we highlight one particular chapter to show some differences in patterns of borrowing.

The chapter on ‘The importance of philosophical and anthropological knowledge in management education regarding sustainability’ by Martins (Chapter 6) is a prime example of what we describe as heavy borrowing for SiME. By asking how anthropological knowledge can help in management education to deepen students’ awareness of human nature as applied to management styles and sustainable objectives, the author borrows and draws from the relatively distant discipline of philosophical anthropology in hopes that this host discipline will more critically be enmeshed in SiME orientations. Her research desires to show, from a different perspective, how philosophical anthropology could help future managers by deepening in them such concepts as man, rationality, relationality, nature, work, and so on, which can then generate in them more responsibility towards the economy, the environment, and society. The idea would be to sustain and achieve more efficacious action in facing necessary and appropriate goals.

The hypotheses and philosophical reasoning in this chapter are inspired by the Socratic method and are uniquely developed through questions on key critical SiME concepts – a method that helps us to step back, pause, and reflect on the purpose and meaning of our activities in management education regarding sustainability. Martins (Chapter 6) points out that nowadays we face a challenge in management education regarding sustainability – that the pragmatist point of view which departs from purely utilitarian goals that narrow stimulus may be disappointing agents whether they achieve results or not, because of its incompleteness. The author argues that a philosophical approach can help to reflect beyond economic prosperity, generating commitment, real social responsibility, and global realization through ‘the science of total motivation’ (Doshi and McGregor, 2015). After injecting a dose of philosophy into the studies of SiME, the author begins to pose a set of questions which are answered via reflections that employ both assumptions and an anthropological perspective in our field. First, we are asked what it is we are aiming for in management education – specifically what we intend to manage, and how we define what we mean by education. The author then summarizes the ‘means’ and ‘ends’ in management education in a variety of points linking rationality and relationality. We then are asked to consider what exactly it is we mean by sustainability and, as we seek an answer, are invited to consider taking an interdisciplinary approach as a fundamental tool in achieving this integral forward-looking objective. It is suggested that this approach helps avoid focusing exclusively on the economic impact of sustainability, and dares us to think further about values, science, normative competencies, real social needs, and so on. We are invited to remain fully aware of those who are to be actually sustained: people and planet, for their (own) sake (Koch, 2015). In her trajectory, the author also offers insights into innovative ways of reflecting on the subject through

new methodological patterns, and the benefits of anthropology for promoting sustainability. The author concludes by suggesting that sustainability has *per se* an interdisciplinary nature. She posits that, by understanding people, we can also understand the world and the market as a big and free conversation between citizens (Hayek, 1979: 69ff.). The author suggests that wealth and its sustainability in all its senses are not static units that multiply when people work in a rational and relational way: authentic economic anthropology necessarily reaches the complexities of the person and society's welfare.

CONCLUSION

We began this Introduction by asking *whether ethics and sustainability education has developed in both undergraduate and MBA programs; and whether the underlying concepts that sustain these programs (with a holistic and leadership approach) are peculiar and atypical options that are only possible in certain business schools*. Reflecting on the process through which we aimed at finding some possible answers and considering the *Handbook* areas as well as the proposed discursive SiME strategies, we believe the consumers of this *Handbook* will agree that a genuine 'yes' exists for the first question. SiME is not only being integrated in undergraduate and graduate programs, but is being adopted in core courses, introductory management courses, culminating capstone projects, and collaborative service learning and experiential programs, and as a key compulsory offering in MBA programs. As will be witnessed in various chapters of the *Handbook*, this process of integration is taking an interdisciplinary, multidisciplinary, and transdisciplinary approach. In regard to the latter question, we believe that SiME has reached a number of diverse demographics and, as illustrated in the discourses we identified, similar constraints of integration are being reported in different parts of the world. Whether developed or emerging, the consumption of SiME seems to be taking similar integration paradigms – paradigms which continue to develop and shift into more acceptable frameworks given the resistances and barriers reported in the chapter narratives.

As we reflect on the process through which we attempted to address each of the four areas in the original call for chapters, this *Handbook* is now the product of newly defined areas in SiME. For example, our call for content on 'motivations and outcomes for university leadership in SiME' yielded chapter contributions that extended an understanding of how the field of sustainability is being *theorized* by academics, and how this process is being interpreted by many of our contributing authors as a *development in practice*. Likewise, in our search for 'pedagogical content and tools' for most effective learning outcomes, important narratives were uncovered as to how truly motivated faculty have recently *transformed* their offerings and *interventions* in innovative as well as sustainable ways. Our inquiry for further 'explanations as to the key roles' of external organizations in advancing SiME integration described a rather unstable arena. According to the chapters in this area, external facilitators' roles have evolved into *boundary spanners*, *change agents*, and *reform accelerators*. Lastly, our call for 'descriptions of innovative programs' reported *innovation* as a key variable in enforcing SiME integration and the need for more radical mechanics to sustain the impacts and success of long term programs. In essence, we can see that production of SiME (in the form of integration) and consumption (in the form of reporting on integration) play vital roles for academia. On the one hand, it

is very clear that members of the field have been producing – there are many insightful examples and narratives, descriptive manuscripts and creative ideas in the literature and methodologies we present in this *Handbook*. On the other, we acknowledge that the SiME approach we have taken here (through new knowledge areas and discursive strategies of SiME) has been responsible for generating important new knowledge and practice in the field. What we labeled in the beginning as ‘development in practice’ can now be perceived as more provoking and constructionist approaches for those looking into SiME conceptualizations and operationalizations. In both cases, as these contributing scholars have gone about their work, the shared process has also played an important role. First, in producing texts, these authors are also reflecting other texts and, in addition, reaffirming existing discourse, challenging it, or trying to create new discourses. Much to our honor, and as editors, we have been among the first to be enlightened by these chapters and have carefully orchestrated them into the production that constitutes this *Handbook*.

NOTES

1. The four areas and accompanying titles represent the original call for chapters.
2. Published by Edward Elgar Publishing; see online at <https://www.amazon.ca/Research-Companion-International-Management-Studies/dp/1849803633>.
3. In October 2016, CasePlace.org was taken offline, and *Ideas Worth Teaching* took its place.
4. See aom.org.

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