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TRANSFORMING BUSINESS EDUCATION 21st Century Sustainable MBA Programs

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ABSTRACT

Business education should give students the skills to solve complex global challenges. It should align management practices with goals for a sustainable future. Sadly, few management schools even discuss the real issues business leaders face today. This article challenges others to develop a curriculum that embeds sustainability in the core of their programs. The authors argue that faculty and business school leadership should move beyond “saddlebag” initiatives that bolt sustainability onto the traditional, shareholder primacy-driven core. This article profiles three programs as case studies transforming business education to prepare leaders to achieve a more sustainable world. Business schools are torn between competing paradigms. Given the existential challenges facing humanity, business schools will have to change or simply lose relevancy. Our stories of disruption give evidence of success and hope for the coming transformation of business education and of capitalism itself. The lessons learned and insights in this article provide guidance for business school leaders aspiring to redefine management for global sustainability and business school programs. It is an open invitation for others to disrupt and rethink business education before it is too late.

KEYWORDS

business education; sustainable MBA; “saddlebag” initiatives; transformational experience;
integrated management; disruptive; innovation; paradigm shift

INTRODUCTION

In the wake of the 2008 financial collapse, an article in *Harvard Business Review* asked, “Are Business Schools to Blame?” It argued that “the traditional MBA curriculum has divided the challenges of management and leadership in a dysfunctional way.” Business school marketing that trumpets its graduates’ anticipated salaries and ignores the harm its graduates do is one symptom of an underlying problem. The article concluded that “business schools must demonstrate a greater affinity with society’s interests” (Podolny, 2009). Too many business school programs still focus on a “profits-first” mentality in their curricula (Ghoshal, 2005; Giacalone & Thompson, 2006; Slater & Dixon-Fowler, 2010). This myopic focus on “shareholder primacy” is responsible for the unethical and unsustainable behavior that still pervades business (Henle, 2006).

A recent scientific report warned against “Underestimating the Challenges of Avoiding a Ghastly Future” (Bradshaw et al., 2021). Given current economic conditions, environmental degradation, and social unrest, business schools should backcast (the opposite of forecast) from this uncertain future back to where we are now to design and develop the MBAs and skills necessary for solving the global issues and enabling a more sustainable society.

What would such an MBA program look like, and what kind of curriculum will enable students, decision-makers, and businesses to succeed in the future? The co-authors have created three different answers to this question. All, however, are profoundly different from the offerings of business-as-usual schools. The programs described below equip graduating managers with the skills to create shared prosperity on a healthy planet.

Educators are aware that if they wish to be more effective and relevant in the 21st century, they need to integrate new forms of pedagogy and content. An integrated approach can provide opportunities for showing how best practices in sustainability can be part of every business management course (Sroufe, 2018). The three authors have reimagined the MBA by developing programs that deliver the cutting edge of business practice as they prepare students for the challenges that face the world in 2021—climate change, ecosystem degradation, toxic inequality, and systemic racism.

Navarro (2008), in a *BusinessWeek* article entitled “Business Schools: A Study in Failure,” states: “As the first and most important element, the ideal curriculum

should focus on multidisciplinary and integrative problem solving rather than [on] the isolated delivery of individual ‘functional silo’ disciplines.” Happily, “more sustainable business practices” are gaining the attention of business school leadership, faculty, employers, and students.

The insights provided in this paper show that the full integration of sustainability into the business curriculum can be done and that more business schools need to act. Business programs of the past have yet to catch up with today’s employers and students’ needs. The authors provide insiders’ perspectives on disruptive programs as case studies and show how these programs and prior curriculum efforts have integrated sustainability into core courses. They outline the trends leading up to the programs’ launch, lack of differentiation in the academic industry, students’ and employers’ needs, and the need to bootstrap new initiatives without financial resources.

MOVING BEYOND SADDLEBAGS

Business as usual is at risk. Business schools that do not innovate over time will become stranded assets—a piece of pedagogical equipment (a campus and its buildings) or a resource (faculty, knowledge, and skill development) that once had value or produced income but no longer does. Assets can become stranded by external change, including changes in technology, markets, and societal habits. The less nimble programs that have already closed their doors are an early warning sign to other schools. What if the error at the heart of corporate decision making—focusing only on profits (Bower & Paine, 2017)—is also the error at the heart of business school pedagogy? Focusing only on profit maximization has, for too long, kept many schools from innovating to the point that they no longer meet the needs of a changing society.

Paradoxically, while the business school curriculum asks future leaders, i.e., students, to learn about leadership and management from multiple functional perspectives, business school programs themselves are not integrated across functions. Add to this lack of cross-functional perspective the belief that leaders should not value social and environmental systems in decision-making and the stage has been set for business-as-usual.

For a new paradigm to emerge and be a meaningful part of the curriculum, business schools must redesign course content. This redesign needs to be done while finding new ways to connect commerce to global goals for sustainable development (i.e., the UN Sustainable Development Goals or SDGs). Business school programs, administrators, and faculty can rethink content, delivery, and experiential elements rather than continue with traditionally siloed core courses punctuated by a few saddlebag electives of nontraditional courses (Sharma & Hart, 2014). Integrated programs of the future will be those that align with the needs of a sustainable society. Innovative curriculum and research agendas that engage with and value messy and complex real-world problems *can* produce business leaders who understand their global responsibilities in finding solutions to these problems while generating sustainable value for society and businesses.

When we unpack Sharma and Hart's (2014) article on "Beyond Saddlebag Sustainability," we see that incremental change has been the watchword in the business education field for too long. Over the past 30 years, major business schools have added some initiative, center, or institute focused on sustainability, corporate citizenship, or social entrepreneurship. Evolving societal demands have forced business schools to consider business ethics, corporate social responsibility, and sustainability in their programs' curricula.

The problem is that virtually all of these initiatives, centers, or institutes continue to hang off the side of the existing business school edifice. Like the proverbial "saddlebag" on a horse, the issues are contained within separate compartments that are readily visible from the outside but have little impact on the business program's behavior on the inside. Sustainability has joined other business school "saddlebag" issues such as ethics, entrepreneurship, and emerging economies as a way to recognize such but stop short of fully integrating them into the core DNA of the institutions (Sharma & Hart, 2014).

The MBA curriculum at top-tier business schools remains startlingly unchanged from what it was when one of the co-authors (Hart) started MBA teaching 35 years ago: functional core courses in finance, accounting, marketing, operations, organizational behavior, and strategy still rule, with the "saddlebag" issues addressed through elective courses after students have completed the "real" content. Tenured faculty are typically researchers focused on the established functions and disciplines,

not on the challenges contained in the saddlebags. Why? Because these saddlebag topics are complex and challenging to study. Faculty focused on the saddlebags, therefore, are typically untenured adjuncts, lecturers, or clinical professors with little say in the research agenda and governance of the schools. As a result, institutional inertia business-as-usual reigns.

It is time to move beyond saddlebag sustainability in business education. Now is the time for pioneers, independent players, niche programs, and a burgeoning field of programs that have been waiting on the sidelines to get in the game and to flourish. Doing so will enable the kind of institutional legitimacy and reputation to have the “tip of the spear programs” that gain momentum and scale on a path toward a serious challenge to the status quo. Only recently have a few business schools boldly overcome organizational inertia to develop curricula that lead practice by embedding sustainability into the core, thereby allowing them to educate managers who can rise to the demands of the global sustainability challenges facing the world in the 21st century.

The authors also reflect on and draw from Laszlo, Waddock, and Sroufe’s (2017) “Torn Between Two Paradigms: A Struggle for the Soul of Business Schools.” They recognize that business schools today are torn between two paradigms: the dominant neoliberal paradigm of free markets, profit maximization, free trade, endless growth, and laissez-faire government and an emergent paradigm of an economy in service to the environment, ecosystem services, and a life that supports wellbeing and dignity for all (see the website of the Humanistic Management Network at <http://humanisticmanagement.network>). The local and global crises posed by climate change and growing social inequality pose significant threats to the existing system, i.e., economic systems and business education systems, yet policymakers, university administrators, and those in the seats of decision-makers overseeing promotion and tenure, research strategies, and curriculum development have been too slow to act.

We need a 21st century, fully integrated business school curriculum and research agenda (see Figure 1). We also know what the emergent paradigm looks like, and the authors argue for a pivot in business schools toward this new paradigm. Universities and business schools need to step up their game while envisioning what “traditional” academic disciplines are needed for this century. What topics and skills are needed in a post-pandemic socio-eco-economic system as schools and faculty are tasked

with broadening the perspective of future leaders and managers to enable them to incorporate the significant threats and opportunities facing businesses and society?



Figure 1: Foundations of Disruptive Change and Transformational Education

Existing management education is terrific at educating analysts and functional specialists who increase efficiency and preserve the status quo. It was a good place to start, but it is a tragic place to stop. These educational systems are not so good at preparing students to transform business by valuing social and environmental performance. More needs to be done to enable leadership roles ready for the complexities of the world they will face in a post-pandemic world craving a more resilient future. We have the tools and knowledge to make a new paradigm take hold in business education as part of new 21st century business programs.

Evolutionary “better practices” can move us toward more integrated learning, embracing project-based action learning and community engagement. These new pedagogical practices, along with reflective learning, will allow students to think about what they have learned, why it is important, and consider impacts on the world. The authors can also envision department walls coming down: co-instructed courses, environmental science, planetary boundaries and UN SDGs within the curriculum, faculty and students together finding solutions to large, complex global problems as part of integrated management collaboratories. These ideas only scratch the surface of integration shifts that bring about a more systemic

perspective in management education while grounding it in notions of sustainability, wellbeing, dignity for all, and ethical considerations at the core of a 21st century full of complex challenges.

Only recently have a few business schools overcome organizational inertia to embed sustainability into the core curriculum. When it comes to creating new MBA programs, the case study examples provided here are the tip of the spear. They now educate managers who can rise to the demands of the world's global sustainability challenges in the 21st century. The following examples tell the origin stories of how three award-winning and innovative programs came about. They set forth the design elements and catalysts along with what makes each innovative and disruptive. These programs and their designers wanted to go beyond a saddlebag approach to curriculum and bridged two paradigms while creating change. They continuously struggled for the business schools' soul in their ongoing work. Our thinking in sharing these stories is much like that of the Baldrige Prize winners of the past quality revolution: the winners report on what they are doing to learn from and adopt new practices. The authors hope that these learnings will help others in their quest to transform business education. They next present the three programs in order of when these were launched.

DUQUESNE: DESIGNING THE 21ST CENTURY MBA FOR TRANSFORMATIONAL EXPERIENCES

In early 2006, a small task force of faculty accepted the new business school dean's challenge at a private, Catholic university founded by the Spiritans in Pittsburgh, Pennsylvania, to design a "blue sky" MBA program for the 21st century. At this time, the dean watched declining numbers of part-time graduate students and wanted to differentiate the school's curriculum from other MBA programs in the region. After benchmarking MBA programs and conducting independent primary research with prospective students and prominent regional employers of MBA graduates, a team of faculty assessed competing business paradigms and took the risk of recommending an innovative 12-month curriculum that would prepare next-generation leaders to

ethically manage triple bottom line forms of capital—social, environmental, and financial.

This triple-bottom-line (TBL) call to action would evolve and be the catalyst for Integrated Bottom Line (IBL) performance. This phrase was coined by Theo Ferguson, with further work from Walter Link and Hunter Lovins (Lovins, 2016), and used to enable organizational change (Sroufe, 2017). The IBL became an embedded element within a textbook developed for business management courses. The book has a purposeful approach to action learning, questioning a reader's integrated enterprise (IntEnt), a play on words for why and how sustainability can be integrated into every business function. The design and development of the MBA Sustainability program was a catalyst for the development of an award-winning book now used in almost two dozen countries—*Integrated Management: How Sustainability Creates Value for Any Business* (Sroufe, 2018).

Building on the university's Catholic reputation for ethics and its faculty expertise, the task force defined key program features for a three-semester, accelerated MBA program designed for a transformational educational experience. Themed semesters helped to anchor learning with auditing and benchmarking in the first semester, process improvement in the subsequent, and change management in the final semester. A majority vote moved the program forward, but there was opposition from some faculty. At the same time, an endowed chair in finance was converted into a chaired position in sustainability to help launch, further design, and develop the program. This new program was launched in the Fall semester of 2007, with transformational experiences (live projects and two study abroad trips in one year) now vying for the soul of a business school. The timing of the launch meant that students graduated at the end of July. Over the years since its inception, the start and graduation of cohorts have changed to May. The May graduation helped align with market hiring practices, and the program designers have scaled back to having one study abroad trip.

At about the same time as the program's launch, the United Nation's Global Compact (UNGC) announced the Principles for Responsible Management Education (PRME). Duquesne was among the first group of signatories. The new curriculum, focused on integrating sustainability, had already incorporated the principles outlined in the UNGC, so alignment with the PRME initiative was a natural fit. Core-required live project courses and an international study trip were embedded in the new program design to enable students to investigate global best practices and sustainability challenges firsthand while building a more sustainable mindset

for responsible leadership in an uncertain global economy. Since the program's inception, and at the time of the writing of this article, the program founders have designed and delivered more than 200 live consulting projects, with no two projects being the same, and 18 international study experiences. Given that the program has evolved, MBAs now mentor undergraduate student teams while building leadership skills. Signing the PRME affects both implementation and assessment, including what is taught (content), how it is taught (process), the environment in which it is taught (context), and how learning outcomes are measured (assurance of learning) (Waddock, Rasche, Werhane, & Unruh, 2010). These are critical issues as cyclical economic crises and public awareness of sustainability alter business schools' expectations for preparing globally minded leaders who can responsibly address today's problems and tomorrow's challenges.

The PRME offers a robust framework for developing and strengthening MBA curricula when student educational experiences are explicitly aligned to pedagogical strategy, content delivery, and performance assessment. These are not simply saddlebag efforts. The program's primary goal is to prepare graduates to lead organizations that value prosperity today without compromising tomorrow's resources. To meet this goal, the program designers first identified a set of program-level goals and curriculum design priorities that support experiential learning. To jumpstart the development of skills and understanding of business concepts, they required non-business students to complete online modules before starting the program. These modules helped get students up to speed on accounting, statistics, economics, and finance basics. The designers then juxtapose these fundamental building blocks of business management with contemporary and more sustainable business practices as a way of developing critical mindsets for responsible management in the 21st-century economy.

As early signatories of the PRME, the program's guidelines became an inspiration for faculty who serve as curriculum architects, course designers, project developers, and study trip leaders. The program founders use a mix of program and course-level approaches to assess how well they are achieving program and, ultimately, Association to Advance Collegiate Schools of Business (AACSB) goals, including 360-degree feedback from corporate partners, peer evaluations, reflective essays, and psychological measures using web-based instruments.

A Focus on Experiential Learning

Collaborative, cross-disciplinary learning ties theory to practice when conducted in real-world settings. To facilitate such learning, faculty developed and continuously improved a cross-discipline pedagogy that features regular project updates to faculty teaching in the MBA program. The program designers baked into this process cross-discipline faculty evaluation of student performance before deliverables are presented to external clients. Faculty from all disciplines are also encouraged to mentor student teams. The formal, 360-degree evaluation process collects ratings from course instructors, other business school faculty, student peers, and corporate clients. It uses instruments that explicitly ask about the extent to which students appropriately applied tools and concepts from specific courses in core business disciplines. In a given semester, the program has up to seven live projects running simultaneously.

Core-required courses for three live consulting experiences anchor semesters within this 12-month MBA curriculum. The experiential learning courses that integrate live consulting are designed to provide tangible opportunities for MBA students to apply concepts from each semester's core business courses. They become purposeful integration opportunities for faculty to use the projects within courses and assignments and serve as live case studies each semester.

Orientation
Summer Semester
ACCT-715 Accounting for Decision Makers STAT-710 Applied Statistics MGMT-716 Business Ethics and Global Responsibility MGMT-712 Sustainable Business Practices Project I GRBU-713 Systems Thinking and Managerial Decision Tools GRBU-731 Professional Development Practicum
Semester Break
Fall Semester
MGMT-724 Strategic Sustainability and Models ECON-720 Managerial Economics FINC-721 Financial Management MGMT-722 Sustainable Business Practices Project II ISYS-725 Managing Information SCMG-727 Supply Chain/Operations Management MGMT-723 Managing People for Sustained Competitive Advantage GRBU-731 Professional Development Practicum

Semester Break
Spring Semester
<p>MKTG-730 Marketing Management MGMT-736 Strategic Innovation Management MGMT-737 Leading Change in Sustainable Enterprises GRBU-731 Professional Development Practicum—<i>Taught over 3 semesters; final grade in Spring</i> MGMT-732 Sustainable Business Practices Project III MGMT-738 Global Business—Study Trip</p>

Table 1: Duquesne University—Course Sequence for Students

The first semester and field project focus on understanding auditing and benchmarking best practices in sustainable business measurement, management, and reporting. Student teams analyze an actual issue for a large corporate client by researching and benchmarking best practices from multiple perspectives, analyzing a range of alternatives, and proposing solutions that apply broad-based learning. All teams involved in the first and subsequent engagements have multiple opportunities for reflection, reanalysis, and the resolution of competing outcomes before providing written and oral deliverables to clients. Complementing core courses in the second semester of the program, the second project course emphasizes process improvement and project management. It offers teams more autonomy to conduct collaborative deliberations in the classroom and the field. The third and final project engagement includes options to put students on-site with their clients to address strategic change opportunities.

The intersections of experiential learning-based projects and deep learning come from student ownership of the learning process. They leverage a “double-loop learning” feedback cycle (Argyris, 1997) through 360-degree evaluations and regular coaching from course instructors and faculty mentors. Students complete three different projects in different teams and with different clients. They gain first-hand experience with several industries, different operations, a range of sustainability challenges, and client management styles. It is essential to recognize that faculty who serve as team mentors, instructors who play a coaching role, and clients who collaborate with students to frame and solve problems also benefit from action learning (Raelin, 2007). The outcomes assessment process aligns with AACSB expectations and includes longitudinal analysis of multiyear evaluation data from clients, faculty (who teach in all disciplines), course instructors, and peers.

Analysis of multiyear and multisource assessment information from each engagement drives continuous improvement in curriculum design, pedagogy, and client selection. These student engagements create internal value for program administrators, opportunities for faculty research, and measurable value for external clients. Based on demonstrated contributions to learning and retention as measured by soliciting information from exit interviews and the consulting experiences' value for career placement, the projects quickly became cornerstone experiences within the program.

Evidence of Success

In the first year of this program, Duquesne was ranked among the top schools in the Aspen Institute's new *Beyond Grey Pinstripes* rankings and has consistently been ranked among the top schools in multiple rankings. The MBA program is currently the No. 1 ranked program in the United States and ranked No. 4 globally by the Corporate Knights. Program courses and instructors have received University teaching awards, University assurance of learning awards, and been touted as exemplary by the AACSB review teams auditing the program. The curriculum's validity came early on with a Page Award for the best environmental curriculum in the United States from the University of South Carolina. More recently, the program's success has inspired some faculty across schools on campus to work together in developing and proposing an undergraduate major in sustainability, and sustainability is also included in the University's part-time MBA curriculum. Accolades for instructors include innovative teaching awards for courses from the Decision Sciences Institute, the Aspen Institute's Ideas Worth Teaching awards, and an innovative teaching award from the Production and Operations Management Society.

BARD: "HERE TO LEAD THE CHANGE"

It was 2009. Eban Goodstein looked at Hunter as they sipped Jack Daniels in a faux barbeque restaurant in Copenhagen and spoke what filled both their minds: "It's going to fail, isn't it?" December snow sifted down outside as delegates from the United Nations' climate summit trudged grimly by. The summit had been billed as the last chance for a "top-down" binding agreement on global warming pollution. Along with Eban's wife, Chungin, they had left the venue early in search of the closest thing they could find to comfort food. Rarely a wise choice when traveling, but the Jack tasted good.

“Yes, it is,” Hunter agreed. “But even if we’d won here, we’d still have to figure out how to cut emissions 80% in 30 years. We’re just going to have to work that much harder. So, how’s your new Bard Center for Environmental Studies going?”

“We really need your ideas—natural capitalism (Hawken, Lovins, & Lovins, 2013), reinvented capitalism—to become business as usual,” he mused.

Business has to figure out how to keep the lights on, set food on the table, get health care for everyone, in ways that radically cut pollution. We have to find ways to profit as we treat workers, suppliers and communities with justice and respect. I’m thinking of creating a joint degree for my policy students with a business school.

Chungin had been telling him to start his own sustainable business school, like the one Gifford and Libba Pinchot had founded outside of Seattle. But, until that moment in Copenhagen, it had seemed like an impossible lift.

“Let’s start one together,” Hunter grinned. She had done that, seven years before, in California, though it was fast going off the rails as its traditional board wanted to retreat to conventional accreditation. She knew it was possible, with a better partner, to do it right. And so was born the Bard MBA in Sustainability.

Now a decade old, the program was just named the number one green MBA by the Princeton Review of educational institutions for 2021. Bard also made the top ten list of best MBAs for non-profits alongside the programs at Vermont, Harvard, Stanford, Columbia, and Berkeley.

The mission of the Bard MBA in Sustainability is to

transform business towards a focus on equity, social justice, and environmental sustainability.

Every course—from operations to finance, strategy to leadership—teaches students to build for-profit and non-profit organizations that are in business to solve the critical challenges facing humanity. All entering students take Hunter’s Principles of Sustainable Management (PoSuM—named for Pogo, Walt Kelly’s little cartoon critter who said: “We have met the enemy and he is us” and “We are confronted by insurmountable opportunities”). Students learn the essential ecological literacy and social literacy that all business leaders should have. They learn the business case for sustainability. This differs from the triple-bottom-line concept which, while

appealing, is not a business reality. They called their approach “Integrated Bottom Line” business (Lovins, Wallis, Wijkman, & Fullerton, 2018). If the students are shown that behaving more responsibly toward people and planet enhances every aspect of shareholder value, it becomes core to the business—baked in, not bolted on. This approach is not a cost center but essential to regenerative value creation in a company.

Students learn how to do carbon accounting as well as traditional balance sheets. They understand the difference between the Global Accounting Reporting Initiative, the Sustainability Accounting Standards Board, and the International Integrated Accounting Committee Reporting Council. They know what the United Nations’ Sustainable Development Goals are and why they matter. They know how to use tools from scenario planning in Tableau. They know how to implement anti-racist practices in organizations. Just as importantly, they learn who they are as business leaders, working in pods in Leadership and Personal Development to clarify their values as they engage in the hard conversations.

Based in New York City, the Bard MBA offers a hybrid, low-residency structure. Classes meet in person one extended weekend each month and then online twice each week in the evenings. This allows students to work while in the full- or part-time programs. It also makes it possible to attend from anywhere in the United States. Students fly in once a month from Los Angeles, Houston, Denver, and Orlando, with carbon emissions offset by a carbon fee.

As Eban puts it, “Our New York City location has enabled us to assemble a world-class faculty [made up of] cutting-edge sustainable business practitioners. They are all implementing sustainable businesses in their day jobs, then bringing that insight into the classroom.” Many of the professors are academicians with coveted “terminal degrees,” but that is not why Bard hired them. They are practitioners first and good teachers second—PhDs first, then JDs and MBAs.

Term 1	Term 2
Principles of Sustainable Management	Data and Decisions
NYCLab I	NYCLab II
Personal Leadership Development	Strategy for Sustainability
Economics for Decision-Making	Operations and Supply Chains
Accounting and the Integrated Bottom Line	Finance for Sustainability

Term 3	Term 4
Leading Change in Organizations	Sustaining a Mission-Driven Organization
Entrepreneurship	Globalization and Emerging Markets
Stakeholders and Marketing	Employees and Organizations
Capstone	Capstone
Elective*	

Table 2: BARD MBA—Course Sequence for Full-Time Students

*Business and Sustainable Development, Impact Finance, Circular Value Chain Management

Sustainability Vision	Leadership	Business Foundations
Principles of Sustainable Management	Personal Leadership Development	Accounting and the Integrated Bottom Line
NYCLab I & II	Leading Change in Organizations	Finance for Sustainability
Sustaining a Mission-Driven Organization	Employees and Organizations	Economics for Decision-Making
Capstone	Entrepreneurship	Globalization and Emerging Markets
	Strategy for Sustainability	Operations and Supply Chains
		Data and Decisions
		Stakeholders and Marketing
		Elective*

Table 3: BARD MBA—Courses by Primary Curricular Vertical

*Options in Spring 2018: Business Pragmatics, Business and Sustainable Development, and Impact Finance

All students take the core courses (see Tables 2 and 3). As part of an emphasis on experiential education, all Bard students take a unique, year-long course in Sustainability Consulting called NYC Lab. Mentored by Laura Gitman, Managing Director at BSR, the course has students choose from applications submitted by major companies, government agencies, and NGOs who are seeking help meeting their sustainability challenges. They then diverge into concentrations, including Circular Value Chain Management and Impact Finance. In the final year, students complete an individually mentored capstone, working one-on-one with a faculty member to develop a leadership career trajectory. Bard also offers certificates in Sustainable

Management for those who took an MBA at a school that has not yet realized the sustainability imperative.

Bard MBA alums now work as entrepreneurs, sustainability consultants, and sustainability professionals within companies, and most commonly bring a mission focus to conventional business positions. The Bard MBA was created to drive the revolution in business, and its graduates are getting it done. At the end of the day, if the students are not working, changing the world at scale, and in a hurry, Bard would have failed in its mission. A 2020 survey of graduates found that 88% were working in jobs where their mission alignment was Great or Good.

Every December, Bard student teams face off against teams from Bangladesh, Palestine, Kazakhstan, Spain, and elsewhere to compete for entrepreneurship prizes in Disrupt to Sustain. Students use RebelBase, a tool that guides new entrepreneurs to create viable businesses that embed sustainability and disruption into everything they do. Built by Bard entrepreneurship professor Alejandro Crawford, it embeds the approaches used in teaching the competing classes (PoSuM, Accounting, Entrepreneurship, and Marketing). This allows teams from around the world to learn how to entrepreneur and launch the sorts of businesses that will bring greater equity and environmental justice to all peoples. Bard student teams have also won pitch competitions on transforming energy systems at Columbia and were even invited to Patagonia's headquarters in Ventura to present their winning entries in that company's competition.

In the spirit in which the Bard MBA was created, they're still figuring this out as they go. This year, the winners of Disrupt to Sustain will be featured in a "shark tank" for sustainability reality TV series launching in 2021. The program has always highlighted the social as well as the environmental side of sustainability, embedding anti-racist leadership skills training across the curriculum. The Bard MBA also integrates the principles of Regenerative Capitalism into courses.

The COVID-19 pandemic hit many academic programs hard. The Bard MBA was able to pivot rapidly to virtual classrooms given that it was already a hybrid program. Even in lockdown, applications increased. That said, Bard sure is looking forward to returning to its classrooms in New York City and even more to its twice-annual weekends at the beautiful Bard campus up the Hudson River, where they gather at a campfire at Chungin and Eban's house overlooking the Catskill Mountains. As the

students toast S'mores, Eban and Hunter retire to the shadows to sip whisky and remember that snowy night in Denmark when it seemed impossible to change the world. And they committed to doing it anyway.

VERMONT: GOING ALL IN— THE SUSTAINABLE INNOVATION MBA PROGRAM

When Sanjay Sharma joined the University of Vermont (UVM) as the dean of the business school in 2011, he had reinvention on his mind. The business school had a traditional MBA program, developed in the 1970s, which focused on mid-level managers at area companies and UVM employees looking to “get their ticket punched.” But by 2011, enrollment in the MBA program had declined significantly as the largest company in Burlington—IBM—had cut their headcount by more than half in the previous decade.

Facing declining enrollments and revenues, Sharma convened an ad hoc faculty committee to analyze the situation and explore options for the program. Ultimately, Sharma and the faculty committee decided that the best option was to shut the existing program down and develop a new and specialized MBA program focused on addressing the world's sustainability challenges—environment, climate change, poverty, and inequality. Such a program had the benefit of being distinctive and entirely consistent with the culture and ethics of the university and the State of Vermont. And while Sharma had to deal with some pushback at the university board level, he was ultimately successful in getting the green light to proceed. The faculty unanimously approved this recommendation in 2012, and the planning for the new program, which was initially named the Sustainable Entrepreneurship MBA (SEMBA), began.

Starting with a Clean Sheet

It was at this point that the dean first invited Stuart to get involved, and he leaped at the opportunity—he had been working for the past 20-plus years to bring environmental and sustainability concerns into MBA programs—at Michigan, University of North Carolina, and Cornell—but had succeeded only in developing centers, elective course sequences, and dual-degree programs without ever fundamentally changing the core DNA of the MBA programs themselves. The SEMBA

offered the chance for the first time to go beyond saddlebags and fundamentally alter the horse itself!

It was the opportunity he had been waiting for—the chance to start with a clean sheet of paper with the aim of creating a model for the purpose-driven MBA program of the 21st century, focused entirely on the knowledge, skills, and capabilities needed to harness the power of business for a sustainable world. Appointed as a part-time “adjunct” faculty member by the dean in 2013, Stuart started making regular visits to UVM to work with the faculty on this new enterprise.

Since the idea was to create a 1-year (12-month) program rather than the typical 2-year-with-summer internship MBA, they knew that the design of the curriculum would have to depart significantly from the norm. In fact, all the coursework would need to be completed in just *nine months* since the program was designed with an experiential learning project—the 8-credit Practicum Project—as its capstone experience in the final three months. And to break the mold even further given the constraints of the graduate school, the program needed to start in August and be finished one year later, in August. This meant that the MBA program would miss the usual MBA recruitment cycle that followed the conventional academic year calendar.

The 2013–2014 “design year” turned out to be an exercise in “building the bridge as you walked on it” since the existing business school faculty lacked the full spectrum of knowledge and experience needed to deliver on the vision for the program. Sharma, Stuart, and faculty took an inventory of current course offerings and titles, both within the business school and across the university, as a way to identify prospective faculty and courses. Ultimately, this included faculty from the Rubenstein School for the Environment, Community Development, and Applied Economics, the Engineering College, the Gund Institute for the Environment, and Vermont Law School.

People from the world of practice who had a history and/or passion for working with students were identified. These individuals were engaged in workshops about the vision for the program, and the founders worked with them to explore how their current teaching might be adapted to the program’s needs. If the typical 3-credit-hour course structure was kept, then the faculty’s tendency would be simply to rename their existing courses without significantly altering the course design.

The traditional mold had to be broken by organizing the curriculum around a larger number of intensive 1- and 2-credit courses, which would require faculty to innovate their course designs and also allow for more diversity in content. Ultimately, the result was four half-semester modules of courses—two in the fall and two in the winter/spring—with the experiential learning-based practicum as the capstone experience during the summer.

The faculty also realized that the original name of the program—the Sustainable Entrepreneurship MBA—was limiting potential student interest. The next year, they changed the name to the Sustainable *Innovation* MBA (SI-MBA) to better recognize that the program was focused on not only start-ups and ventures but also purpose-driven business and corporate transformation. This wider program scope was captured by the tag line “Transforming Today’s Business, Creating Tomorrow’s Ventures.” The rather audacious mission of the new SI-MBA program was stated thus:

To reinvent business education, and develop and launch a new generation of leaders who will transform capitalism to solve the world’s most pressing sustainability challenges.

Since its launch in August 2014, the program has steadily grown, both in applications and enrollment. This in contrast to the trajectory of “conventional” MBA programs which, for nearly a decade, have been experiencing declining applications—even among the top 20 “incumbent” players such as Harvard, Stanford, Kellogg, MIT, Cornell, Tuck, Wharton, and Michigan. Several “second tier” MBA programs have even been forced to shut down due to declining enrollments. The increasing applications for SI-MBA can be interpreted to mean that this is the beginning of a wave that will sweep business education in the years to come—the creative destruction of the shareholder primacy-based MBA from the 1980s.

SI-MBA has also gained growing recognition—the program received the 2015 Page Prize for Sustainability Issues in Business Curricula and has been ranked the No. 1 Best Green MBA Program in the United States by The Princeton Review since 2018. Corporate Knights also ranked SI-MBA No. 1 in the United States and No. 4 globally in their Better World MBA Rankings for 2019. Professor Chuck Schnitzlein also led a team of SI-MBA students to victory in the inaugural Wharton School Total Impact Portfolio Competition (TIPC) in 2019. Prospective students who align with the program’s focus and values pay even more attention to these rankings and achievements than to the conventional MBA rankings by Fortune, Business Week,

and US News and World Report, which place primary emphasis on how much more money students make after graduating.

Doing More in Less Time

Traditional full-time MBA programs take *two* years to complete, with the first year dedicated largely to “core” courses and the second year dedicated to electives in an area of functional specialization. So how does the SI-MBA program, which received AACSB accreditation in 2015, deliver the obligatory core MBA content while also developing the 21st-century knowledge, skills, tools, and capabilities needed to achieve sustainable innovation?

Since the SI-MBA program was designed from a clean sheet, this allowed the faculty to select the most critical sets of core knowledge, skills, and capabilities that every MBA graduate must know while also infusing these with the perspective of sustainable innovation. All SI-MBA students are required to complete a suite of self-paced online tutorials before they start in-person classes in late August. This brings all incoming students up to speed on basic concepts in accounting, statistics, economics, and finance, regardless of their prior education or business experience. This type of basic material often occupies an inordinate amount of time in the first-year core curriculum of traditional MBA programs.

SI-MBA then takes a critical perspective with regard to the traditional tools and techniques of business—functionally oriented courses not only ensure competence but also examine the *toxic side effects* of applying traditional business tools such as industry analysis, competitive strategy, marketing strategy, supply chain optimization, discounted cash flow, internal rate of return, and financial reporting. What do the traditional tools miss? What are the blind spots? What unintended negative consequences result from their uncritical application?

Next, the SI-MBA curriculum adds courses focused on the emerging knowledge, skills, and capabilities that will be crucial for creating the sustainable and inclusive businesses of tomorrow. These include content that would typically not be found in traditional MBA programs—World Challenges, the Sustainable Development Goals, Planetary Boundaries, Climate Change, Natural Capital, Circular Economy, Poverty and Inequality—as well as “next practice” tools and capabilities like materiality assessment, life cycle design, systems thinking, biomimicry, impact investing,

base-of-the-pyramid business models, deep dialogue, appreciative inquiry, and co-creation skills.

What makes SI-MBA truly bold is the integration of sustainability and innovation content throughout the entire program and not just in a few elective courses. In other words, sustainable innovation is core to *every* course taught in the program—and every course taught in the program is “core.” Indeed, there are *no* electives in SI-MBA. Students experience the entire curriculum—24 courses across four modules—together as a cohort, building strong bonds and gaining deep experience in teamwork and leadership in the process (Table 4). Courses are supplemented by “Toolkit Workshops” which provide intensive training in emerging tools and methods, along with visits by “Innovators in Residence”—practitioners who can speak to the challenges as well as opportunities of pursuing a career focused on purpose and sustainable innovation.

Because the SI-MBA was designed from scratch, the program was not beholden to any non-essential legacy content. Starting with a “clean sheet” enabled the faculty to include only that material and content that was relevant to the mission of transformational innovation. The SI-MBA design process was like zero-based budgeting—faculty had to justify why a particular course or topic should continue to exist rather than simply rubber-stamping the continuation of the status quo. This “all in” redesign approach enabled the program designers to *remove* the non-essential legacy content of a bygone business era to make room for the next-generation content that would be critical to a sustainable and inclusive future.

Fall Semester	Winter Semester
<p style="text-align: center;">Module 1</p> <ul style="list-style-type: none"> • Business Strategy for a Sustainable World • Finance for Innovators I • Sustainable Brand Management • Teamwork for Sustained Innovation • Business Economics • Cost Models for the Transformational Enterprise 	<p style="text-align: center;">Module 3</p> <ul style="list-style-type: none"> • Sustainable Operations and Green Supply Chains • Data Analysis for Sustainable Business • Crafting the Entrepreneurial Business Model • Financing a Sustainable Venture • Driving Sustainable Change I • Sustainability Toolkit I

Fall Semester	Winter Semester
<p style="text-align: center;">Module 2</p> <ul style="list-style-type: none"> • From CSR to Creating Shared Value • Business Sustainability and Public Policy • Marketing Decision Making Under Uncertainty • Leading Sustainable Innovation • Finance for Innovators II 	<p style="text-align: center;">Module 4</p> <ul style="list-style-type: none"> • Driving Sustainable Change II • Driving Innovation from the Base of the Pyramid • Innovation Strategy: From Idea to Market • Accounting for a Sustainable Enterprise • Systems Tools for Sustainability • Law as a Framework for Entrepreneurial Business • Sustainability Toolkit II
	<p>Practicum Project</p>

Table 4: University of Vermont—Course Sequence for Students

Over the past seven years, the Grossman School of Business has been fundamentally transformed. SI-MBA has helped attract several new faculty members—in all functional areas—with a personal interest and passion for environmental sustainability and social inclusion. There is now a critical mass of faculty with a common focus on reinventing business, allowing this perspective to spread and gradually transform even the undergraduate business program in the school. Sustainable innovation has now been literally baked into the culture of the Grossman School of Business.

LOOKING AHEAD

It is high time that we moved beyond saddlebag sustainability in business education. Given its centrality to our current predicament, business education represents a high-leverage opportunity if we are to transform capitalism and the management of global sustainability in the years ahead. We desperately need new models of business education appropriate to the challenges we face in the 21st century, which include toxic inequality, structural racism, ecosystem degradation, and a looming climate crisis. We need transformative change and revolutionary new business models, not just adjustments around the edges. We need a focus once

again on business for the greater good and the nurturing of business as a true calling and profession, and we need to emphasize the skills required to imagine, co-create, launch, and scale game-changing new ventures that simultaneously lift the poor and leapfrog to new and environmentally sustainable ways of living.

Change has not come quickly to business schools as the battle between paradigms continues. Bennis and O'Toole (2005) questioned whether business schools had lost their way nearly two decades ago, and we are still raising this question in 2021. Despite decades of societal criticism, some schools may not even be aware of the harm they have caused, and those that do are not reversing the harm they have inflicted. Some have only recently begun to address social, environmental, and ethical issues in their coursework, and often do so outside the core curriculum (Doh & Tashman, 2012; Sharma & Hart, 2014). The three “tip of the spear” pioneering programs described in this article help create new markets and value networks that eventually might serve to disrupt the existing business school model, displacing incumbent programs and curricula. Doing so will enable institutional legitimacy and reputation, and gain momentum and scale with 21st-century business programs on a path toward a more sustainable and just society.

The years ahead represent a continuing struggle for the soul of business schools. Business schools currently produce functional specialists. Business recruiters want problem solvers (Graduate Management Admission Council, 2019). By integrating more sustainability in management education and contemporary pedagogy, problem solvers will become *change-makers* with interdisciplinary competencies to manage financial, human, environmental, and informational resources toward the creation of shared value decision making (Corazza, Cisi, & Scagnelli, 2018; Porter & Kramer, 2019).

As businesses of the future meet the curriculum of the future, the authors welcome others to share their stories of innovation in business education—how they have overcome obstacles and achieved success. Like Elon Musk providing Tesla's technology in the public domain, the authors hope that the accounts in this article can help accelerate the transformation of business education as more schools realize that they must either change or die.

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