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## **Insights to redesign post-COVID19 business education for a sustainable future**

or

## **Insights to redesign business education in a COVID19 world for a sustainable future**

Ana Simaens<sup>1</sup> and Florencia Librizzi

### **Abstract**

Higher education institutions in general, and business schools in particular, are under increasing pressure to include sustainability in their teaching. The 2030 Agenda and the Sustainable Development Goals (SDGs) have pushed the debate globally, across geographic and sectorial borders, while allowing for a more holistic and systemic view of sustainability. The emergence of sustainability concerns and the need for more responsible leaders and managers has only become more evident with the COVID-19 pandemic. On the one hand, COVID-19 has boosted the online learning environment, opening new possibilities for higher education institutions and their students; but on the other hand, it has revealed profound inequalities in terms of education. The present chapter contributes to this debate with insights to redesign post-COVID-19 business education for a sustainable future, by exploring the literature and the field to answer the following research questions: 1) *Why* does business education need to be re-designed; 2) *What* can business schools do to redesign their education in terms of content and learning environment, and 3) *How* can they do it in terms of tools, methods, and resources. The methodology includes the content analysis of mainstream academic research literature and documents published by international institutions. We

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examine efforts that have shaped the sector by advocating for the inclusion of sustainability into higher education in general, and business schools in particular. This chapter contributes to the literature on the integration of sustainability into higher education, while shedding light on the challenges and opportunities posed by COVID-19 to higher education.

### **Keywords**

Business education, COVID-19, higher education, sustainability, sustainable development goals

### **Bios**

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**Florencia Librizzi** is a sustainability and education professional and international attorney, licensed to practice law in Argentina and New York. As Head of Program and Partnerships, she leads the SDG Academy, flagship education initiative of the UN Sustainable Development Solutions Network (UNSDSN). She was appointed Co-Chair of the UN Higher Education for Sustainability Initiative (HESI), where she aims to scale up the impact of higher education for the SDGs by bringing together and mobilizing key stakeholders on strategic pathways for sustainable development. Previously, she devoted over six years to building the Principles for Responsible Management Education (PRME) initiative, United Nations Global Compact Office, which under her strategic leadership reached 730+ participants in 90+ countries. She has also served as a research consultant for the International Center for Transitional Justice (ICTJ), advising on issues of post-conflict societies and addressing human rights violations through truth, memory, reparations, justice, and other measures. She has practiced law since 2006 advising business and non-business clients on a wide range of legal and sustainability issues. She has taught several courses and seminars at Universidad Empresarial Siglo 21, Universidad Nacional de Córdoba (UNC), NYU School of Law, and Columbia Institute for Study of Human Rights; and actively contributed as a member of the UNC Institute for Environmental Law and Policy. She graduated from the Conservatory of Music as a Professor of Piano and received her first law degree magna cum laude from Universidad Nacional de Córdoba, School of Law. She earned her Masters of Laws (LL.M.) at NYU School of Law, where she was granted the Dean's Award and distinguished as a Transitional Justice Scholar. She served as a graduate editor for the NYU Journal of

International Law and Politics, has published several articles, book chapters, and expert reports (for NGOs and the UN); and is a Ph.D. candidate at UNC. She has addressed issues of education, policy, and leadership for sustainable development to diverse audiences on every continent of the world.

## **Introduction**

Higher education institutions in general, and business schools in particular, are called upon to integrate sustainability in their teaching. This was true before the launch of the 2030 Agenda and the Sustainable Development Goals (SDGs) and has become even more urgent as the SDGs are increasingly pushing the sustainable development agenda globally, across geographic and sectorial borders, while allowing for a more holistic and systemic view of sustainability. With the outbreak of the COVID-19 pandemic in 2019 (WHO, 2020), the emergence of sustainability concerns and the need for more responsible leaders and managers has become all the more evident. On the one hand, it has boosted the online learning environment, opening new possibilities for education; but on the other hand, it has revealed profound inequalities in terms of access to education and the curricula thereafter. The present chapter focuses on the need to redesign post-COVID-19 business education for a sustainable future. To address this issue, we organize the discussion in three sections. First, we explore the question *why* business education needs to be re-designed. Second, we address *what* can business schools do to redesign their education in terms of their content and learning environments. We then delve deeply into *how* business schools should rethink their resources, tools, and methods. Our methodology<sup>1</sup> includes a systematic literature review of papers that address the key topic of this research, as well as an extensive search of data from international organizations and think tanks related to business schools and broader higher education.

## **Discussion**

### **Why does business school education need to be re-designed?**

#### ***Contextualizing in higher education and sustainable development***

Over the last two decades there has been greater agreement that higher education has a crucial role in advancing sustainable development, which is the greatest challenge of our time. The 1987 Brundtland Report, also called “Our Common Future”, introduced the notion of sustainable development as “...development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (United Nations, 1987, p. 43). This call for a sustainable and inclusive world is not only still relevant as it constitutes the foundation of the 2030 Agenda and the 17 Sustainable Development Goals (United Nations, n.d.), it is also urgent. Adopted by 193 United Nations member states in September 2015, the SDGs provide a shared global framework to achieve peace and prosperity for people and the planet, seeking to eradicate poverty and hunger, reduce inequalities, drive sustainable economic growth, and protect the environment while promoting peace and good governance globally. Achieving these ambitious goals and targets requires deliberate actions from all sectors of society (government, private sector, civil society, academia), substantial investment, and strong partnerships since no single actor or country can tackle these challenging issues alone (United Nations, n.d.).

If the relevancy and urgency of advancing the SDGs was clear before, it is now even clearer since the outbreak of the pandemic, by which the distress that our world is experiencing became still more evident. The challenges that we face are massive and include a climate change emergency, rapid destruction of biodiversity, rampant inequalities, poverty, armed conflicts, and many other issues. In addition to this, the pandemic is a setback for sustainable development globally, as is explained in the Sustainable Development Report 2021 (Sachs et

al., 2021) developed annually by the United Nations Sustainable Development Solutions Network (SDSN),

for the first time since the adoption of the SDGs in 2015, the global average SDG Index score for 2020 has decreased from the previous year: a decline driven to a large extent by increased poverty rates and unemployment following the outbreak of the COVID-19 pandemic... The pandemic has impacted all three dimensions of sustainable development: economic, social, and environmental (Sachs et al., 2021, p. vii).

In other words, our world is experiencing major distress that requires urgent action to put us on track with regard not only to progressing with the sustainable development goals, but also to successfully tackling the pandemic. In that sense, The Lancet COVID-19 Commission, an interdisciplinary initiative encompassing the health sciences, business, finance, and public policy was created in the midst of the pandemic to address four main themes that seem to illustrate quite well the magnitude of the endeavor we have in front of us (The Lancet COVID-19 Commission, 2021). These themes include suppressing the pandemic; addressing the humanitarian crisis resulting from the pandemic; addressing the financial and economic crises arising from the pandemic; and rebuilding an inclusive, fair, and sustainable world (The Lancet COVID-19 Commission, 2021).

### ***Calls from UN international frameworks***

Education for Sustainable Development (ESD) including Global Citizenship Education (GCED) is a crucial enabler for all 17 SDGs (UNESCO, n.d.-c), and is also a key driver to better equip the world for future crises like COVID-19 (Giannini, 2020). ESD has been deemed essential to make sustainable the global efforts to “build back better” or “build forward better”, as it is often referred to as the attempt to transcend this pandemic in a sustainable, just, and

inclusive way (UNESCO, 2021). ESD is captured by SDG 4, Target 4.7., which requires that by 2030 we “...ensure [that] all learners acquire knowledge and skills needed to promote sustainable development, including among others through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship, and appreciation of cultural diversity and of culture’s contribution to sustainable development” (UNESCO, n.d.-b).

The pandemic has prompted our realization of the importance for individuals and societies to have the ability to understand and respond to unexpected risks in a resilient manner. This requires “the ability to understand complexity, to anticipate different scenarios, to negotiate trade-offs, to be ready to act quickly based on limited information, and to collaborate in finding the best solutions” (UNESCO, n.d.-c). ESD has long advocated to develop the knowledge, skills, values, and attitudes to equip learners with the ability to make informed decisions and actions and tackle the most important challenges of our time, such as the climate crisis, social injustice, and many others. An important aspect of ESD is GCED, which works to empower learners of every age “to understand that these are global, not local issues and to become active promoters of more peaceful, tolerant, inclusive, secure and sustainable societies” (UNESCO, n.d.-a). While ESD was already recognized by many as an essential vehicle to achieve all SDGs, this understanding seems to be on the rise. The 40th session of the UNESCO General Conference adopted a new global framework called “Education for Sustainable Development: Towards achieving the SDGs” or “ESD for 2030”. This framework aims to scale up action from the United Nations Decade of Education for Sustainable Development (2005-2014) and the Global Action Programme (GAP) on ESD (2015-2019). UNESCO also published “A Roadmap for ESD for 2030” (UNESCO, 2020).

Mission 4.7. (Mission4.7, n.d.), a new multi-partnership initiative focused on advancing transformative education as per SDG Target 4.7., was launched in December 2020 at the



seventh annual Vatican Youth Symposium (SDSN, 2021) with messages from its patrons, former UN Secretary-General Ban Ki-moon and UNESCO Director-General Audrey Azoulay as well as His Holiness Pope Francis. Mission 4.7. is co-founded by the SDG Academy, SDSN, Global Schools, UNESCO, the Ban Ki-moon Centre for Global Citizens, and the Center for Sustainable Development at Columbia University (Mission4.7, n.d.).

The Higher Education for Sustainability Initiative (HESI), a partnership between UN agencies, not for profit organizations, businesses, HEIs, and other actors in the space, was created in 2012 in the run-up to the UN Conference on Sustainable Development (Rio+20) (HESI, n.d.) to mobilize higher education for sustainability. HESI produced the HESI Statement to the Education post-COVID-19 on the occasion of the Extraordinary session of the Global Education Meeting (2020 GEM) stating that,

In this era of uncertainty that has caused the biggest education disruption due to the COVID-19 pandemic, HESI looks forward to working with others to address some of the most pressing questions, including how can we redesign higher education in support of sustainable development, a green recovery, and regenerative pathways for education while also ensuring the quality of education, equity, and gender equality everywhere, to build the world we want (HESI, 2021).

Similarly, there is a growing consensus that business schools and other HEIs should align curriculum, research, organizational practices, dialogue, and partnerships to the SDGs and teach responsible management education (RME) (PRME, n.d.-a) in order to equip their students with the knowledge, skills, and mindset needed to address the challenges and opportunities that we face today and contribute to creating more sustainable, inclusive, and prosperous societies. For instance, the Principles for Responsible Management Education (PRME), an initiative supported by the UN, engages business and management schools through Six Principles to

provide “future leaders with the skills needed to balance economic and sustainability goals, while drawing attention to the Sustainable Development Goals (SDGs) and aligning academic institutions with... the UN Global Compact” (PRME, n.d.-b). During the pandemic the initiative has used its blog to feature examples of how schools have addressed the “new normal” (Weybrecht, 2020a).

### *Calls from the Business Schools ecosystem*

The COVID-19 pandemic has also clearly affected the business school ecosystem, impacting teaching and learning, researching, and organizational and campus practices, as well as forcing schools to rethink the resource allocation, finances, and overall business model for the future (De Novellis, 2020). The “new normal” for this sector will require profound changes that demand thinking about the role of digital technology in this transformation (Hepner, 2020). Input from this ecosystem seems to point to a number of calls for rethinking and redesigning business education going forward, including redefining leadership (Cornuel & Johnson, 2021; Davidson, 2020; Whitwell, 2021), and reconsidering teaching and learning content, program design, the use of technology, assessments and evaluations (Roos & Ladd, 2021), and student and community engagement (AACSB Business Education Intelligence, 2020).

Business schools themselves, and their stakeholders, when influenced by the pandemic, have recognized the increasing need for more responsible education. For instance, Mousa showed that COVID-19 has positively changed the perspective of students, academics, and trainers in this respect (Mousa, 2021). Other authors have pointed out the need for reinvention and for developing innovative skills and entrepreneurial mindsets (Vellani, 2021).

Major business school accreditation entities have started to incorporate issues of responsibility and sustainability before the pandemic. For instance, AACSB’s vision focuses on transforming “business education globally for positive societal impact” (AACSB, n.d.). Its

values include quality, diversity and inclusion, global mindset, ethics, social responsibility, and community (AACSB, n.d.). In a similar vein, EFMD's EQUIS accreditation has included governance, ethics, responsibility, and sustainability among the key issues and standards that schools are benchmarked against (EFMDGlobal, 2018). Since the outbreak of the pandemic, we have seen a reinforcement of those standards. For instance, on 1 July 2021, AACSB updated the 2020 Business Accreditation Standards, adding Table 9-1 as an option for schools to categorize their societal impact and related outcomes, using examples related to SDG's contributions while explicitly noting that this could be "used or omitted at the school's discretion" and that "the school may choose to use another framework for organizing this table (e.g., environmental, social, and governance framework)" (AACSB, 2021, p. 58).

Similarly, we have seen some changes in the wording of the EQUIS standard to include references to "digitalization" and "the increasingly global world", followed by a request for schools to summarize their policies pertaining to the use of personal information; asking schools whether they have embraced an open ecosystem to "participate in co-creation of knowledge taking advantage of possibilities offered by digitalised work environments in academia and business"; and a new requirement "to report on how they are contributing to the global environmental protection agenda – including monitoring of own carbon footprint" (EFMD, 2021, p. 6).

### ***Calls from the areas of knowledge and application***

Several authors have made a call for HEIs in general, and often business and management-related education in particular, to strengthen their approach to sustainable development in their education in various areas of knowledge or applications in the context of COVID-19. For instance, Anholon et al. (2020, p. 1271) discuss the need to "bridge the gap between engineering knowledge and the needs of society", which has been reinforced by

COVID-19. In terms of areas of application, one of the sectors is Tourism (e.g. Benjamin et al., 2020; Higgins-Desbiolles, 2020). Even though the article by Higgins-Desbiolles (2020) does not directly address management schools and their post-COVID approach, it does so indirectly when discussing how COVID-19 has reignited the recognition of the limits of the planet and the discussions about the impacts of tourism on sustainable development. If on the one hand there are the “Boosterists of tourism” who advocate for tourism growth, on the other hand there are the “pro-limits critics of tourism”, who consider the potential negative impacts at various levels. Part of the discussion in academia centers around the extent to which the “pro-limits” should teach tourism students at universities, or even whether tourism academics should “serve” the industry with a growth perspective (Higgins-Desbiolles, 2020). Of interest to the analysis in this chapter is that the recognition of the impacts of industry on sustainable development, reinforced by the effect of the COVID-19-driven global slowdown, raises the debate about the way these disciplines should be addressed in academia. As Higgins-Desbiolles (2020, p. 566) concludes, “[t]he COVID-19 crisis inspired transformational thinking among some tourism academics as a moment of great potentiality”. On a similar note, Benjamin et al. (2020, p. 477) state that “[a] resilient post-pandemic tourism must be more equitable and just, in terms of how it operates, its effects on people and place, and how we as scholars teach, study and publicly engage the travel industry – particularly in preparing its current and future leaders”. Finally, Tiwari et al. (2020) highlight tourism educators’ perspectives on emerging tourism issues and strategies to rebuild and revitalize tourism education in the future.

These calls for re-design of the offer also relate to the needs of the job market. Al-Youbi et al. (2020) study the importance of aligning the educational programs with the changing needs of the market as a way of minimizing the impact of COVID-19. According to their study in Saudi Arabia, new needs seem to differ according to the sectors, but the new skills could

determine the chances of workers to retain their jobs, especially in the service, healthcare, and education sectors (Al-Youbi et al., 2020).

The future is unknown and undoubtedly the COVID-19 pandemic has dramatically changed the priorities in terms of education and development, suggesting the need for readjustments at all levels of education, including higher education, to ensure the alignment with the SDGs (Lewin, 2020). In the next section we shed some light on what business schools can do to redesign their education.

### ***What can business schools do to redesign education?***

The COVID-19 has brought major challenges to business schools, but it has also offered some hope based on the ability to face changes. As noted by Sarah Birrell Ivory from the University of Edinburgh Business School, business educators may use these lessons “to teach and influence the rebuilding of our society and economy... so that we can avoid the worst outcomes, and better cope with the now unavoidable impacts of the climate crisis.” (Johnson, 2020). This section of the chapter illustrates key areas identified in the literature in which business schools can redesign their education in line with the calls presented above.

### ***Redefining leadership***

A number of articles and publications have addressed a series of leadership traits that must be embodied by leaders. In an article titled “A Human Approach to Leadership” published in EFMD’s Global Focus, Eric Cornuel, President of EFMD Global, and Mike Johnson, Chairman and Founder at FutureWork Forum shared their own learnings about leadership in the time of COVID-19 (Cornuel & Johnson, 2021). Their understanding is that leadership requires an enhanced human approach that underlines traits such as resilience, agility, humility, authenticity, trust, empathy, and kindness (Cornuel & Johnson, 2021).

Similarly, a report by CEMS – Global Alliance in Management Education (CEMS, 2020) surveying 1,711 individuals across 71 countries, indicates the need for new sets of skills and competencies for leaders to succeed in a complex and changing environment. These skills include “openness, empathy, resilience, and the ability to communicate” (Whitwell, 2021). It was demonstrated that before the pandemic only 13 percent of the respondents would have considered “resilience” as a necessary leadership skill with an increase to 34 percent since the pandemic. Other top leadership competencies needed to thrive are “core humane skills” such as altruism and mindfulness (Whitwell, 2021). Respondents have also emphasized that business leaders need to invest in human capital, including in training and education, noting that leadership development activities provided by business schools “should expose students to multicultural experiences and help them build their global networks” (Whitwell, 2021).

Some university presidents have shared perspectives that are consistent with this trend. As part of the AACSB Presidents Panel: Leading Beyond COVID-19 (Davidson, 2020) in Higher Education, a menu of leadership traits was identified as key to navigating the uncharted territories of the pandemic. These traits included the ability to deal with ambiguity, being flexible and demonstrating compassion while maintaining effective communication, an entrepreneurial drive, the ability to motivate people, resilience and humility (Davidson, 2020) all relevant and important to instill in our students as current and future leaders.

### ***Rethinking the curricula and content***

The COVID-19 crisis has forced business schools to critically question their syllabi, as noted by Nicholas McGuigan and Alessandro Ghio from Monash University (Johnson, 2020). As these scholars observe,

The reliance on one global market, economic rationality and the standardised approach to organisational governance and accountability leaves us vulnerable.

Just like planted crops, a globalised economic monoculture cannot withstand an invasive virus. Human strength comes from diversity – ideas, systems, economies and people – business education syllabi will need to evolve to provide such diversity. (Johnson, 2020)

The calls from the tourism field presented above have also led to suggestions of contents that can be reshaped. Tiwari et al. (2020) believe that COVID-19 can be seen as an opportunity to review the Triple Helix Model in tourism education, which allows organizations to deal with incremental innovation, with anticipation of future demands, and finally, radical innovation through cutting edge curriculum.

Indeed, as highlighted by Regina Abrami from The Wharton School of Business, “[u]ncertainty is everywhere. The teaching of managing uncertainty will increase, but as a field of expertise no longer owned solely by financial modelers, sentiment scrapers, and other data scientists” (Johnson, 2020). Likewise, Robert Sroufe from Duquesne University reinforces that “[w]e need to develop and deliver courses that help decision makers model and deal with complex problems and uncertainty” (Johnson, 2020). As the faculty continues, “[w]e can shape the evolving educational landscape to help business leaders of the future make better decisions that do not contribute to complex problems, but instead enable the United Nations’ 17 Sustainable Development Goals” (Johnson, 2020).

When studying entrepreneurship education, Kaminsky (2021) highlights the challenges faced by higher education when trying to implement digital entrepreneurship education, particularly useful in contexts such as living with COVID-19. As the author notes, besides skills related to complex systems analysis,

[i]t is necessary to develop and implement training programs for entrepreneurship education with a greater approximation to the content of digital technologies and digital transformation of the economy: students should

be taught comprehensive logic (computational thinking), including both modelling tools and methods of data analysis and information gathering.

(Kaminsky, 2021, p. 211)

A reinvented learning experience requires flexibility, adaptability, and life-long learning (Timis & Kodjabachi, 2020). Some experts consider that in the future curriculum design could see “a shift toward the division of programs into credentialed micro-learning segments”, allowing students to “patch together” their education from a “menu of options,” and employers could allow their workers to access these credentialed micro-learning segments, enabling a continuous retraining and upskilling of the workforce” (Timis & Kodjabachi, 2020).

Matching the curriculum with the market needs is indeed key. Based on their multi-stakeholder study during COVID-19, on the need for alignment of the educational programs with the needs of the market, Al-Youbi et al. (2020) identify a set of skills that HEI should develop. This is in line with the view of Jadranka Skorin-Kapov from Stony Brook, who asserts the need for Business education to “give more space to teaching about societal impacts and humanistic concerns... This also involves educating students to be better prepared for job changes due to technological and societal shifts” (Johnson, 2020).

### ***Learning environment***

According to Huda et al. (2018), the learning environment can generally be divided into three categories: traditional face-to-face; virtual or online; and hybrid. The term Modern Learning Environment has recently gained traction as it refers to the use of digital technology tools to modernize the learning and teaching process (Huda et al., 2018).

With the outbreak of COVID-19 the transfer from traditional face-to-face education to online teaching and technology became widespread (e.g. Al-Jaber & Al-Ghamdi, 2020; Cavus et al., 2021; Edelhauser & Lupu-Dima, 2020; Huang et al., 2021; Rodriguez-Segura et al.,



2020). Not just classes and admissions interviews – support and careers services are also being delivered online. The stronger technology infrastructure and experience acquired through this process will enable schools “to seamlessly switch between offline and online methods of delivery post-pandemic” (De Novellis, 2020).

As noted by Edelhauser and Lupu-Dima (2020, p. 1), “eLearning is now much more than virtual education, and in the context of the COVID-19 pandemic, it became a social phenomenon.” Nevertheless, as noted by Cavus et al. (2021), despite the multiple Learning Management Systems (e.g. Blackboard, Moodle, Canvas), the fast migration to online formats comprised various challenges that risked affecting the effectiveness and sustainability of the educational activities. In their study, Cavus et al. (2021) explored how Social Networking Sites can be used in formal education and have advantages when compared to Learning Management Systems in the era of COVID-19. Rodriguez-Segura et al. (2020) report on the transition from traditional face-to-face to emergency remote teaching through Teams, chosen on the basis of features compared to other web-based platforms for virtual learning, which ensured the continuity of the educational process.

Worth noting is the study of student self-assessment of eLearning in a Romanian university during COVID-19 undertaken by Edelhauser and Lupu-Dima (2020, p. 2) finding that “students seem to desire a mixed balance of synchronous and asynchronous delivery methods when engaging in the online environment. This is an important factor to consider when thinking about the overall benefits of online education in meeting sustainability goals”. Some would argue that “in the post-pandemic world, a hybrid model of education is better positioned to respond to the existing challenges, take advantage of opportunities, and expand access to quality education for millions of people around the world” (Timis & Kodjabachi, 2020).

Contrary to studies that reveal that education technology maintains or amplifies inequities, Kizilcec et al (2021, p. 1) demonstrated in their study in the United States that online

platforms had the potential to “democratize access to knowledge and skills that are in high demand, which supports job security and facilitates social mobility”. While accessibility is one of the key features of online education, it has also been pointed out as a major limitation, since “not all faculty are comfortable with virtual teaching and not all students have a digital infrastructure that allows them to continue their education online” (Timis & Kodjabachi, 2020). In addition, the limitations in bandwidth capacity in some regions had affected the learning experience and value of education (Timis & Kodjabachi, 2020).

Al-Jaber & Al-Ghamdi (2020, p. 371) also seem to regard COVID-19 as an opportunity when they emphasize that “[i]n the post-Covid-19 world and in alignment with the global orientation towards sustainability, it is essential that we explore the synergy between distant learning models and sustainable development.” In a similar vein, Al-Jaber & Al-Ghamdi (2020, p. 372) mention that “[t]he COVID-19 pandemic has shown that distant learning methods can be a sustainable solution for ensuring the continuity of research and education activities at higher education institutes.” Also, Edelhauser and Lupu-Dima (2020, p. 2) highlight that “[o]nline course delivery can be an effective way of obtaining multiple goals in sustainable education. It offers the benefits of educational access for a wide array of potential students, while also limiting the carbon intensity of course delivery.” With an exploratory case study of an Italian school of management the work of Agasisti et al. (2020, p. 2) “highlights how digital innovation can contribute to foster sustainability through quality education, by widening its accessibility and equity, and how it can reinforce the knowledge on sustainability matters, often addressed in the digital contents delivered by the School.”

One of the expected effects of COVID-19 lockdown on the ability of the university to contribute to sustainability was that it would allow the school to reduce its own impact in terms of campus operations as a result of the shift to the online format. Still, in their study of a UK

university, Filimonau et al. (2021, p. 9) found that “online teaching/learning can be less climate-friendly than it is anticipated to be. Indeed, given that work/study from home can generate as much carbon footprint as the University commute, a large share of the carbon savings achieved by moving education online in pursuit of avoided student and staff mobility can be effectively negated.” As Filimonau et al. (2021, p. 9) put it, “[t]his scientific evidence should not be ignored in the emerging scholarly debate on the relative climate-friendliness of the ‘traditional’ on-campus and ‘novel’ online education models.” Hence, the environmental impact of working or studying from home is something to be further considered as well when redesigning education, with the premise that this is a multi-impact basis evaluation that should account for local conditions of the university (Filimonau et al., 2021).

Also, scholars have pointed out the need to nurture more collaborative environments as part of the virtual teaching and learning sessions since “digital settings have revealed the inadequacies of the traditional classroom lecture” (Timis & Kodjabachi, 2020). In this moment of crisis, when connections of our social fabric are straining and we face immense challenges, business schools have the opportunity to rise to the occasion and provide insight and guidance. Business schools must teach the importance of global cooperation and embrace science-based teaching and learning (Hepner, 2020). In that sense, as noted by Frattini, “the institutions that were best prepared for this transformation had already demonstrated that they understand that online teaching requires pedagogical models and approaches that are completely different from traditional methods” (Frattini, 2021). In this transformation, the digital will be key, which will require “universities and business schools to undertake profound reflection as well as an acceleration of investments and experiences in applying digital tools across their programmes” (Frattini, 2021).

Another aspect highlighted was the opportunity to increase access to education “beyond campus and beyond borders” (Timis & Kodjabachi, 2020) due to the increase of content digitization, micro-learning, and professional certificates, all of which can promote higher rates of enrollments for universities as well as facilitate access to high-quality lifelong learning educational opportunities. In that sense, many highly regarded MBA programs have already embraced online learning in an attempt to increase accessibility, leveraging the development and growth of Open Educational Resources (OER) (Timis & Kodjabachi, 2020). Possibilities to create “shared learning ecosystems” with a consortium of local and international partners have also been pointed out as opportunities to enhance curriculum, bring diversity, and enable “more cultural openness through trans-border collaboration” (Timis & Kodjabachi, 2020).

When possible, hybrid formats seem to be an option that can accommodate the best features of the in-person and of online learning environments. At IE University they have embraced hybrid format and what they call “liquid learning”:

Flexible, adaptable, intensive, user-friendly, even entertaining: these are the hallmarks of liquid learning, combining online learning, synchronous and asynchronous, with a classroom-based approach. The advantage of liquid learning is that it can keep the learning momentum going by adapting to the circumstances of the learner. It also allows for greater interactivity with other participants. (Davidson, 2020)

More than ever, business and higher education will likely rely more on hybrid delivery modalities, combining online and in-person teaching and learning and course content delivery, since “while this is a trend that was accelerated by necessity, it will persist because of its efficacy” (Hepner, 2020). Ultimately, with proper instruction delivering course content in a remote fashion can be a suitable and effective complement to in-person teaching. Some scholars have ensured “well-designed hybrid courses give students the best of both online and

in-person learning modalities” and therefore “students should perform better” (Hepner, 2020). Furthermore, some have predicted that “with improved learning outcomes and enhanced faculty effectiveness, hybrid course delivery will eventually become the new norm” (Hepner, 2020).

### ***How can business schools change their content and delivery?***

As part of the COVID-19 pandemic response, teaching and learning switched overnight to online. Nowadays, with this new reality we have the opportunity to reflect and embrace a new paradigm. In that sense, as Hurst and Beckman (2020) remind us, “The question is no longer, ‘Can we do online learning?’ We have demonstrated that we can. The new question is, ‘How can we provide an excellent and sustainable online learning experience?’”. In order to ensure that experience, courses and programs need to embody “solid educational values and flexibility, thoughtful course design, development, and delivery” (Hurst & Beckman, 2020). This section of the chapter provides examples on how business schools can redesign their education content and delivery in line with the calls presented above.

### ***Tools and methods***

In a wider study that includes business school faculty and students in other sectors, Sharma (2021) concludes that co-learning in terms of tools and methods leads to institutionalization and co-innovation, which benefits all the parties.

Huang et al. (2021, p. 2) present a pilot study, the “Online-Merge-Offline (OMO) learning mode in China’s post-pandemic era”. According to these authors, “[t]his mode of learning uses ClassIn X, a newly developed smart tool that extends the learning space by merging the physical classroom space with the online space using Open Educational Practices

(OEP).” As Huang and colleagues argue, “[t]his approach provides more flexibility for teachers to teach both online and offline students at the same time.” (Huang et al., 2021, p. 3).

To teach either online or offline, collaboration among students is key. Based on their study at a Romanian university, Edelhauser and Lupu-Dima (2020, p. 27) conclude that a set of steps need to be followed to allow a real collaborative platform that is useful and comprehends complex functionalities from recruiting and selecting IT specialists to managing a digital library. In a similar vein, Singh et al. (2020) studied the attitude toward use of digital collaborative platforms (Zoom, Dingtalk, Lark, Hangouts Meet, Teams, Skype, Google classroom) that support online learning among Indian higher education students to make inclusive sustainable education more robust during the COVID-19 outbreak. The authors concluded that the attitude toward use of digital collaborative platforms is influenced by their perceived usefulness, interactivity, and cost effectiveness, leading to the intention to adopt it in the near future. The perceived ease of use does not seem to influence the attitude toward its use (Singh et al., 2020).

Social media have been identified as useful tools as well. According to the literature review conducted by Cavus et al. (2021, p. 13), “[s]tudies that focused on effective strategies indicated how using SNSs [Social Networking Sites] enhances active learning, improves academic performance, and helps students and teachers to stay connected while apart”. These Social Networking Sites included social networks such as Facebook, Whatsapp, Twitter, and Youtube. On a similar note, López-Carril et al. (2020) present their quasi-experimental study on the use of TED Talks as well as social media (Linkedin and Youtube) as a valuable element for teaching and learning in creating an online learning environment. On a different note, Wu et al. (2020) defend the need to reshape the higher education makerspaces that will support a new generation of skills training and innovation, which include solving complex commercial

or social problems. Indeed, one of the methods that has been used and that can be useful for education for sustainable development is problem-based learning and project-based learning, as well as extracurricular activities to improve students' understanding and engagement (Anholon et al., 2020). Another is presented by Mavlutova et al. (2020), who explore innovative multidisciplinary approaches and techniques in entrepreneurship education that use automatic digital tools suitable for distance learning contexts such as the one caused by COVID-19. Specifically, the authors integrated machine learning in software, which is an artificial intelligence based digital tool to assess business ideas. The software evaluates “business plans based on past data, economic environment, business and industrial statistics as well as qualitative data provided by business experts”, providing other suggestions such as financing sources or possible partners (Mavlutova et al., 2020, p. 729).

As sustainability education has gained traction in business schools, academics are not only engaging in research solutions to address real-world problems on sustainable development, but also “designing and piloting new teaching formats to empower and motivate the leaders of tomorrow to be proactive change makers who will create sustainable and resilient economies and societies” (Aprea & Edinger-Schons, 2021). Recently we have seen an increase in innovative teaching formats that help students to get involved and engaged, including game-based learning tools (Aprea & Edinger-Schons, 2021) and other tools and methods. Online content such as courses and video lectures can be posted on learning management systems or other platforms so students can access them and watch them as many times as needed. Faculty can also incorporate online content from discipline experts such as videos, podcasts, etc. in hybrid or purely online classes. Hybrid courses, however, preserve the opportunities for in-person interactions with the faculty as well as with other students. For this reason, hybrid courses seem to offer some of the best features of both the face-to-face and virtual learning

environments (Roos & Ladd, 2021). A blended or hybrid education delivery combined with the flipped classroom approach —where students study course content online (e.g. video, podcast, report, book, etc.) by themselves before working and putting learning into practice in class— seems to be the model that many schools are increasingly adopting (De Novellis, 2020; Lockett, 2020). Extending the use of digital teaching and learning provides increased opportunities for cross-campus collaboration as well as for innovation when it comes to assessments, through online exams and other online assessment methods (Lockett, 2020; Roos & Ladd, 2021).

Some authors have pointed out the need to re-evaluate content and methodologies to include opportunities for learning by doing and experiential learning. This includes assessing the content and programs that are more suitable to support students, alumni, and the community during the pandemic (Weybrecht, 2020b). Mentorship (Weybrecht, 2020b), coaching (Hurst & Beckman, 2020), a “buddy system”, and business consulting activities (Weybrecht, 2020b) are examples of the possibilities that can still take place in a remote environment.

It is important to nurture an environment that “encourages idea development, analysis, critique, and collaboration between students” (Hurst & Beckman, 2020); for that, it is important that prior to beginning the course faculty and students “agree to rules of confidentiality, engagement, and academic integrity. Learning discussions are facilitated, with academic coaches highlighting areas of agreement, disagreement, and the space to contribute and develop new ideas together” (Hurst & Beckman, 2020).

An important point raised by scholars is that in order to implement technology solutions, careful involvement of all stakeholders is needed (Friedl, 2021). As we continue to learn about technology-enabled learning, stakeholder engagement as well as remote work arrangements we will most likely be better positioned to enable deeper and more effective remote working and learning environments in the future (Davidson, 2020).



Many efforts have taken place to support students and communities during the pandemic. Authors have warned of the importance of prioritizing their communities and mobilizing leadership, administrators, and risk management teams to map the situation, activate contingency plans, and to communicate frequently with their stakeholders (Weybrecht, 2020b). Support measures have included online workshops and IT support, ensuring the accessibility of resources, including libraries, providing opportunities to stay connected, and focusing on the health and wellbeing of the community (Weybrecht, 2020b). Some authors have remarked on the importance of developing collaborative projects to foster innovation (Thomas et al., 2020).

An important aspect to the shift to online teaching and learning has been to provide activities beyond the virtual classroom. For instance, some faculty have organized workshops to help students manage the changes, online recruitment conversations, training for interviews and other synchronic use of technology have allowed faculty to support their students during the pandemic. Furthermore, some schools have tapped their alumni for support to provide internships, jobs, or consultancy projects for students (Yan, 2020). Some authors have also highlighted the opportunity of extended university activities, including lifelong learning opportunities, and the sharing of resources and research that can benefit governments, businesses, and the general public to manage crises (Weybrecht, 2020b).

### ***The role of faculty***

Regardless of the format of the course content (e.g. video, podcast, lecture, class notes, quiz, etc.) “the presence of the professor is part of the course, even when the content is not explicitly delivered by the professor”, and therefore, even in an online format the professor is not separate from the learning environment, but rather an important part of it. In order to ensure the presence of the professor, some authors consider that faculty must “design, build and

publish their entire course before it begins” (Hurst & Beckman, 2020) this helps to ensure that “the course is viewed as a whole, and the teaching presence can be seen throughout the entire course”, ensuring that “both the cognitive presence and social presence are integrated and solid in the environment” (Hurst & Beckman, 2020).

Faculty can use different tools and techniques based on their needs, preferences, and disciplines. An effective use of these tools differs from “merely putting a bunch of PowerPoint slides online with or without voiceover”, or “simply recording a professor lecturing as a ‘sage on the stage’ or even having a professor assign a task and watch students struggle with it as the ‘guide on the side,’ although one could employ any of those techniques” (Hurst & Beckman, 2020). An academic coaching method combined with peer collaboration is crucial for effective engagement. Faculty ought to be prepared to enable asynchronous learning as well as to support students to explore ideas, discuss the application and implementation of ideas, and other implications (Hurst & Beckman, 2020). On the flip side, it is important to ensure that students participate in all the class activities including not just responding to questions posed by the lesson, but also being actively involved in the learning conversations with fellow students. Some authors have been adamant that “[i]f a student does not actively participate, they cannot pass the course” since they need not only to demonstrate the mastery of the discipline studied but also that the collaborative and academic skills have been developed (Hurst & Beckman, 2020). Another challenge mentioned is the lack of “personalization and real-life experimentation” of online classes, a difficulty to properly assess and keep students accountable and for general opportunities for dialogue.” (Timis & Kodjabachi, 2020).

While the importance of the content, technology platforms, tools, and resources is generally agreed upon, Santiago Iñiguez, President of IE University, insists that “the key to success in any educational format is not the technology, nor the content (...) platforms may be the princess, content the queen, but the experience provided by the faculty is the empress”.

(Davidson, 2020). In this view “the preparation, dedication, and commitment of our faculty were central to achieving this transition” (Davidson, 2020) even when at his institution they already offered hybrid programs before the pandemic, combining in-person sessions with high-quality online content delivered synchronously. This experience helped the institution to ensure a smooth shift to a hybrid format across all IE University programs as the pandemic hit (Davidson, 2020). Ultimately, at the core of the learning experience is “the need for a safe, collaborative learning environment” (Hurst & Beckman, 2020), which the faculty is positioned to create.

The swift move to online education has also highlighted the need to redesign learning experiences “to rely less on traditional lecture formats and [so that] instead faculty will serve students better by acting as mentors and coaches who empower learners as co-creators in their own development” (Whitwell, 2021). As per the CEMS–Global Alliance in Management Education survey of 1,711 individuals across 71 countries, respondents also recommended that schools provide opportunities for experiential learning, cross-cultural interactions, and faculty digital learning technology upskilling (Whitwell, 2021).

Despite the recognized need to redesign education, much of it coming from the viewpoint of the external stakeholders, it is important to understand the point of view of the educators. Reminding us that educators are primary “change agents” in society, Kulikowski et al. (2021) found lower motivation among academic teachers during the forced COVID-19 e-learning than before, highlighting potential unintended consequences of the pandemic-forced e-learning and the need to pay attention to educators. As the authors put it, “socially sustainable e-learning must not only provide access to high-quality education for students and solve organizational problems for university managers, but also should take into account academic teachers’ points of view and strive to maintain their high job motivation” (Kulikowski et al., 2021, p. 4).

## *Resources*

While online teaching and learning, including distance learning, have been around for a long time (Simonson & Berg, 2016), we have seen in the last years, and especially since the COVID-19 pandemic hit, an ongoing attempt to create and curate online teaching and learning resources, tools, and guides to help business schools and HEIs integrate RME, ESD, and sustainable development into teaching and learning. We share below some key pre- and post-pandemic examples of 1) guides to help integrate the SDGs into teaching and learning; 2) online resources; 3) case study compilations; and 4) global initiatives and programs focused on SDG related research, leadership, and peer learning that can help to achieve these aims.

### 1) Guides to help integrate the SDGs into teaching and learning

- *Getting started with the SDGs in universities*, published in 2017 by SDSN Australia/Pacific, is a guide for universities, higher education institutions, and the academic sector to help integrate the SDGs into teaching and learning. It is available at <https://resources.unsdsn.org/getting-started-with-the-sdgs-in-universities>.

- *Blueprint for SDG integration into curriculum, research and partnerships*, published in 2020 by PRME, is a roadmap for business schools at any stage of their SDG integration journey, available at <https://primetime.unprme.org/2020/06/23/the-launch-of-a-blueprint-for-sdg-integration-in-business-schools/>.

- *Accelerating Education for the SDGs in Universities*, launched in 2020 by SDSN, is a guide to help HEIs implement education for the SDGs, launched together with a case study website with nearly 50 innovative and inspiring examples of universities globally. It is available at <https://resources.unsdsn.org/accelerating-education-for-the-sdgs-in-universities-a-guide-for-universities-colleges-and-tertiary-and-higher-education-institutions>.

## 2) Online resources

- *Digital Learning for Sustainable Development* (<https://dl4sd.org/>) compiles online resources and online courses from Hamburg University of Applied Sciences to support the integration of the SDGs into higher education teaching and learning.

- *SDG Impact Assessment Tool* (<https://sdgimpactassessmenttool.org/en-gb>) is a free online tool to evaluate how an activity, organization, or project affects the SDGs.

- *Sulitest* (<https://www.sulitest.org/>) is an online platform that offers a set of tools to measure and increase sustainability literacy.

- *Global Education Coalition for COVID-19* (<https://globaleducationcoalition.unesco.org/>) is a UNESCO platform for collaboration and exchange to protect the right to education, bringing together more than 175 members from the UN, civil society, academia, and the private sector.

- *Aim2Flourish* (<https://aim2flourish.com/>) is an initiative that supports business and management schools to teach students about the SDGs by implementing a professor-facilitated curriculum focused on business and positive impact.

- *UN CC:Learn* (<https://www.uncclearn.org/>) brings together 36 multilateral organizations to provide guidance and quality learning resources to understand, adapt, and build resilience to climate change.

- *The SDG Academy* (<https://sdgacademy.org/>) is the educational flagship initiative of SDSN, which creates and curates online educational content on the SDG including 35+ Massive Open Online Courses (MOOCs), a video library and podcast series.

- *The UN Global Compact Academy* (<https://academy.unglobalcompact.org/learn>) provides Participating companies of the UN Global Compact with several resources on sustainability.

- *UN SDG:Learn* (<https://www.unsdglearn.org/>) is a UN initiative that brings relevant and curated learning solutions on sustainable development topics, including courses, tutorials, podcasts, and analytical and other tools related to the SDGs.

- *The FAO e-learning Academy* (<https://elearning.fao.org/>) offers a wide range of free content on food and nutrition security, social and economic development, and sustainable management of natural resources, etc.

- *LabXchange* (<https://www.labxchange.org/>) is a free digital-learning platform for science education and offers a library of diverse content applying science to real-world issues.

### 3) Case study compilations

- *Accelerating Education for the SDGs* (<https://blogs.upm.es/education4sdg/>) is a case study website that contains case studies that are referenced in the SDSN guide “Accelerating Education for the SDGs”.

- *The PRME Blog* (<https://primetime.unprme.org/>) shares good practices from business schools related to teaching, research, campus practices, dialogue, and partnerships to mainstream RME and the SDGs.

- *International Sustainable Campus Network (ISCN) Sustainable Campus* (<https://international-sustainable-campus-network.org/>) has developed several reports bringing together best practices, for instance the Best Practice reports: 2018 WEF-ISCN Report: Educating with Purpose and the 2017 WEF-ISCN Report: Educating for Sustainability.

4) Global initiatives and programs focused on SDG related research, leadership, and peer learning

- *Global Business School Network (GBSN)* (<https://gbsn.org/>) is a non-profit organization that seeks to strengthen management education for emerging markets through a global network of business schools by fostering cross-border networking, knowledge sharing, and collaboration.

- *Global Responsible Leadership Initiative (GRLI)* (<https://grli.org/>) is a non-profit organization community of businesses, business schools, and educational institutions that aims to catalyze the global development of responsible leadership and practice.

- *Higher Education for Sustainability Initiative (HESI)* (<https://sustainabledevelopment.un.org/sdinaction/hesi>) is a partnership among many UN agencies, non-profit organizations, businesses, and higher education institutions aiming to provide higher education institutions with a unique interface between higher education, science, and policy making.

- *Principles for Responsible Management Education (PRME)* (<https://www.unprme.org/>) is a UN-backed initiative that engages business schools globally around six principles to teach, research, and engage in dialogue and partnerships to advance RME to achieve the SDGs.

- *Sustainable Development Solutions Network (SDSN)* (<https://www.unsdsn.org/>) mobilizes global scientific and technological expertise to promote practical solutions for sustainable development, including the implementation of the SDGs and the Paris Climate Agreement.

- *SDSN Youth – SDG Students Program* (<https://www.sdgstudent.org/>) is a global student hub network that brings together students to learn, engage, and take action to advance the SDGs.

- *SDG Academy Community of Practice* (<https://www.unsdsn.org/sdg-academy/community-of-practice>) nurtures a community of higher education institutions, NGOs, for-profit businesses, and governments to advance ESD.

## **Conclusion**

This chapter sought to contribute to the debate on the emergence of sustainability concerns and the need for more responsible leaders and managers – a need that has become even more evident with the COVID-19 pandemic. We have provided a number of insights to redesign business education in a COVID world for a sustainable future by presenting a systematic literature review and a search through materials from international think tanks related to sustainability, business, and higher education. The discussion was organized into three questions: 1) *why* does business education need to be re-designed; 2) *what* can business schools do to redesign their education in terms of content and learning environment, and 3) *how* can they do it in terms of resources, tools, and methods.

First, in terms of why business education needs to be re-designed, after contextualizing the role of higher education in promoting sustainable development, the chapter revisited multiple calls from UN international frameworks and from the specific business schools' ecosystem and areas of knowledge and application. The pressure and demand to integrate sustainability and new challenges to education have only increased with the COVID-19 pandemic, and the discussion presented was intended to heighten the awareness and willingness of business schools around the world to start, keep, or intensify their efforts in this journey.

Second, in terms of what business schools can do to redesign their education regarding content and learning environment, the first discussion was around the need to redefine leadership, which together with other pressing needs, has evident implications for business schools' curricula and contents. Also, the COVID-19 has forced education in general to move



online overnight. In this part of the discussion, changing patterns of learning environments and their implication to business schools were highlighted.

Finally, the chapter discussed how business schools can do it in terms of resources, tools, and methods. Besides revisiting the literature and the field inputs to the discussion of tools and methods being used and the crucial role of faculty in this process, the chapter provided an array of specific examples of guides to help, as well as online resources, case study compilations, and global initiatives and programs focused on SDG related research, leadership, and peer learning.

Despite the effort to be comprehensive, the methodology based on keywords does not allow an exhaustive search of the existing materials pertaining to scientific research and publications from the international think tanks on education and sustainability. Nevertheless, this chapter is a useful contribution to academia and, above all, to practitioners in higher education in general and business schools in particular.

### **Note**

<sup>1</sup> On the one hand, a systematic literature review (SLR) was performed to take stock of the literature that started appearing with the outbreak of COVID-19. In order to perform the SLR, the search protocol included the Web of Science and Scopus databases and the following search string: (Business OR Management) AND (Education OR learn\* OR teach\*) AND (COVID19 OR COVID-19 OR SARS-COV-2) AND (“2030 Agenda” OR Sustain\* OR “Sustainable Development Goals” OR SDG). Only journal articles written in English were considered, published in 2020 or 2021 (until mid-May) with no limits in terms of subject areas, or the keywords searched in title, abstract, and keywords. After the initial screening to remove

duplicates, the abstracts were screened. The inclusion criteria for abstract (round 1) selection were: 1) specifically referred to the COVID-19 era; 2) related to higher education in business-related areas. The full papers of the selected abstracts were analyzed and screened based on the initial two criteria plus an additional one: 3) addressed at least one of the questions that guide the research: Why do business schools need to be re-designed?, What can business schools do to redesign their education?, or How can business schools change their content and delivery? Hence, from the initial 289 documents retrieved (Scopus: 179 and WoS: 110 entries), 81 were duplicates, resulting in 208 unique entries. Of these, 153 were excluded in the first round (not in English: 3; other types of publication: 5; out of scope: 145), and 33 in the second round, resulting in a final sample of 22 papers included in the final analysis of the Why, What, and How questions. Round 1 of analysis was performed using Rayyan.ai (Ouzzani et al., 2016) and round 2 was performed using MAXQDA Analytics Pro 12. Also, an exhaustive search of materials from international think tanks related to sustainability and higher education was conducted. With that purpose, the field search included articles from key stakeholders including UNESCO, SDSN, SDG Academy, PRME, AACSB, EFMD, Aspen Institute, and other relevant organizations and the following same search string. Only articles or resources written in English were considered, published in 2020 or 2021 (until mid-May). 66 documents were retrieved, analyzed, and included in the final sample.

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