What Is the Worth of a Degree in Sustainability?
(Or, “Hey, can I help fix that for you?”)

By George Basile

If economics has been hampered by the label, “the dismal science,” then sustainability may be in the process of being pegged as “the problem science.” From climate change to global inequity, sustainability is often described as a cacophony of seemingly disparate and globally grand challenges to which the expectation of a tantalizingly simple solution is then attached, i.e., “Please do today, so that we can still do tomorrow.” With this rather heroic framing, what does an academic degree in sustainability mean? What is its role and value-proposition for those students who are—possibly quite naively—the brave pioneers in this emerging field? Given the expanding educational efforts, we have a ready answer, yes? Not quite.

In a recent meeting with a diverse group of academic leaders it remained challenging to readily identify the unique and high value contribution that a graduate in sustainability would bring to a company. Perhaps this was just us? Unfortunately, probably not, given the explosion in sustainability efforts without an equal explosion in clarity of what that means.

Some of this may be a misunderstanding of the state of the field. It is not uncommon after an introduction that involves sustainability to hear the jocular (and somewhat apologetic) addendum “whatever that is exactly.” Yet, even putting aside the library of works related to sustainability over the last decades and more, there has now been over a decade of specific research on the exact topics of sustainability, sustainability science, and sustainable solutions. Sustainability has both a broad and widely accepted definition supplied by the United Nations Brundtland Commission, as well as an increasing array of more detailed theoretical and pragmatic explorations. In addition, there is a growing library of examples and case studies of sustainability efforts at different scales. There are also a number of syntheses highlighting the definition of sustainability as a solutions-based, design-enabled and applied endeavor, including recommendations for education, research, and applications (for example, see Broman, Clark, and Matson). At the same time, the explosion of unmanageable sustainability challenges at all scales highlights the gaps between where we are and where we want to be.

It is in this gap between sustainability examples and emerging challenges that we can see the beginning of general approaches and specific skills that those who gain a sustainability degree should expect to be able to bring to bear. Here, sustainability graduates can exchange the saddle of problems for the empowerment of solutions. The challenge and opportunity is nowhere more on display than in multinational business where near-term pressures mix with global sourcing and markets. For example, a number of authors have reported that sustainability requires a solutions orientation and the ability to not only describe and weigh trade-offs for different solutions pathways, but to apply approaches that help to “design out” sustainability challenges while generating near-term gains. Sustainability graduates should be skilled in moving beyond a limiting focus on immediate problems and in constructively reframing challenges within complex systems in terms of overall success. In other words, sustainability graduates should have the ability to bound challenges not only in classic ways, such as the factory floor or institutional reach, but also in terms of success in both the short and long terms and small and large scales. In the case of a business, for example, a sustainability graduate should be able to map what a business actually does (not just what the organization thinks it does), understand how decisions are made and link both classic and novel drivers of success and risk for the business to new solutions pathways and mitigation opportunities using a sustainability lens.

Fortunately, sustainability graduates and those who might choose to employ them do not have to guess at what types of unique skills they should have. As with engineering, political science, biology, or medicine, a group of skills are critical for sustainability. A review by Arnim Wiek, et al., highlights the competencies required for solving sustainability challenges.
Editorial

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In the end, it may be most important to keep in mind that the world out there is filled with experts—and it is also increasingly filled with a growing class of sustainability challenges (and opportunities). We all find ourselves in an unsustainable pinch. It is clearly not simply a matter of doing more of what we already do and just doing it better. Indeed, it is rather easy to argue that doing more of what we are doing is exactly part of being unsustainable.

It is into this breach that the sustainability graduates can and must launch themselves. If sustainability education succeeds in creating the sustainability graduates we all need, then graduates should be able to help all of us: redefine planning boundaries and horizons in terms of sustainable success; understand and manage resource potentials; handle trade-offs while minimizing the creation of new sustainability problems; integrate the growing knowledge and tool-base for sustainability into increasingly robust and flexible strategic pathways; support cross-sector collaboration and cooperation; embrace uncertainties that are inherent in our emerging planning reality; and, while possibly the greatest challenge today, translate all of this given today’s context of unsustainable concepts and institutions.

Luckily, we don’t have to take this potential on faith. A growing group of graduates from new programs and longer-standing efforts are beginning to show all of us exactly how much a degree in sustainability is not only worth, but how much these graduates change the entire game. And, if sustainability is highlighting but how much these graduates change the entire game. And, if sustainability is highlighting one thing, it is this: The game has changed and we need better change too. Having some sustainability graduates on your side will be just the ticket.

References


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