



Linkages with Micro Small Medium Enterprises (MSMEs) for Sustainable Higher Education in Management

19

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19.1 Introduction: The Role of Universities as Knowledge Producers

Universities are progressively predictable in developing links with the business community. At the same time, micro small medium enterprises (MSMEs) need to improve their skills and knowledge via collaborative work with the knowledge community. Improving competitiveness of innovative ideas for the business community is determined through a healthy relationship with the knowledge community and leaders. Collaboration between the university and the business community provides a win-win situation for both parties. Many researchers suggest that the development of that relationship and linking agendas lead universities to have a greater number of job opportunities. In the contemporary higher education sector, the greatest challenge faced by a higher education institution is to create job opportunities. Graduates seek jobs from the government. Many graduates have a negative attitude toward private employment, and most are job seekers rather than job creators.

One of the problems behind this issue is that universities do not seriously concern themselves with the relationship between the knowledge community and practical workers. But just producing management graduates will not lead to creating jobs in the market. During their studies, it is essential to motivate students to create and collaborate in job opportunities. The university is a social institution with a long history. It has gone through many stages in growth. University is considered an institution with the mission of teaching, learning, and researching, it has developed collaborative work with the business community to enhance knowledge through research and innovations. In recent years, universities have been expected to have

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393

another role that contributes to the social and economic sector. The faculties in universities have responsibilities in their output of human capital that services society. To achieve the sustainable development goals in the twenty-first century, human capital should also have the ability to contribute to the economy for sustainable development.

MSMEs would like to hire graduates who have an impact of innovativeness on the firms and hire those with management training backgrounds and who have significant positive impact on the frequent organizational changes. The low demand for graduates in the private sector reflects the barriers that restrict the hiring of graduates, but more important is stagnation in terms of technical and organizational change. The flow of graduates into industry is the most powerful mechanisms through which knowledge creation at universities can contribute to innovation in business (Brundenius et al. 2009). The University, facing global challenges that extend well beyond the economy, innovation, and entrepreneurship provides a way forward by building sustainable development, creating self-employment, reducing unemployment, generating renewed economic growth, and advancing human welfare. The triple helix model states that a knowledge-based organization can play an enhanced role in innovation in increasingly knowledge-based activities (Etzkowitz and Leydesdorff 2000).

19.2 Education for Sustainability

Sustainability can be deconstructed into three pillars: environmental (the planet), social, and economic. These need to be considered in a balanced way in order to achieve a sustainable outcome. Environmental sustainability includes issues surrounding transport, energy, water, biodiversity, resources such as computer paper and ink, and other resources and packaging. Environmental sustainability addresses issues that environmental education covers. Yet, increasingly, social sustainability plays a significant role in the sustainability agenda (Hammond and Churchman 2008). Social responsibility includes issues surrounding the well-being of staff and students, such as workplace health and safety, ethics, inclusive community, interconnectedness, quality of life, Democratic integrity, respect, partnerships, and the ability to work in teams as an opportunity to listen to and understand others' viewpoints. A national sustainable development strategy can be defined as a coordinated participatory and iterative process of thoughts and actions to achieve economic environmental and social objectives in a balanced and integrative manner.

The principle of sustainability is the foundation. The three pillars are also informally used to describe profit, people, and the planet. Social sustainability includes cultural and corporate sustainability and sometimes economic sustainability. Cultural sustainability includes issues surrounding the diversity of staff and students, equity in recruitment to the workplace, and promotion acceptance for all staff and students. Inclusive communication provides a cross-cultural and international outlook. Economic sustainability includes consideration of the short- and long-run costs that are not only financial. For any faculty, economic sustainability

specifically means having a viable number of students in each unit or course so that the university will be sustainable in the long run. However, like any corporation, the cost for a university in maintaining any number of students depends on how assets and services are managed and ensuring that all staff and students are able to do their job and study well, with access to training needs and support.

Education for sustainability is to equip all people with the awareness, knowledge, skills, values, and motivation to live sustainably in order that future generations can meet their own needs. Education is fundamental to enabling people to achieve this goal. Many universities are starting to address these ideas. With the many definitions of sustainability education, grown from environmental education, it is important to offer explanations for environmental, social, economic, cultural, and corporate social responsibility.

Sustainable education is often referred to as education for sustainable development (ESD), which allows every human being to acquire the knowledge, skills, attitudes, and values necessary to shape a sustainable future (UNESCO 2014): sustainable development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Given its primary role as a knowledge producer, higher education can serve as a powerful means to help create a more sustainable future. A university has the responsibility to teach in such ways that graduates have knowledge and skills necessary to live reasonably and also to help transform their workplaces toward sustainable practices (DEWHA 2009a; Ferrer-Balas et al. 2008). Ferrer-Balas et al. (2008) have suggested that the key characteristics of a sustainable university are transformative education, conducting inter- and transdisciplinary research, a societal problem-solving orientation, and networks, as well as university leadership and vision that promote proactive responses to society's changing needs. Transformative education is interactive and learner-centric with a strong emphasis on developing critical thinking skills; this prepares students to become capable of addressing complex sustainability challenges, whereas transmission education is often a one-way process of learning and may not develop, assess, or reward these attitudes in students.

The degree to which sustainability is duplicitous in actions that are the results of giving advantage to groups in society, often dishonestly, in order to give an appearance of fairness (Sherren 2006) is easily checked by answering these questions: are the students learning and being assessed on knowledge about the topic, and are they becoming equipped with the knowledge, skills, and understanding necessary to make decisions based on their full environmental and social implications? Sustainable higher education will be transformative, as its goal is to equip all people with the knowledge, skills, and understanding necessary to make decisions based on their full environmental, social, cultural, and economic implications (DEWHA 2009b), rather than transmissive, with a goal to provide students with knowledge alone. It will not be specialized in content-driven units of study on sustainability but will be integrated across courses and units. Education for sustainability and education for sustainable development have gained international usage (Shrivastava 2010). It is in this context that new educational programs, research institutions, and scientific publications with an emphasis on sustainability in higher education have

emerged (Wang et al. 2013; Scott 2012; Sterling and Scott 2008). A sustainable curriculum is based on seven principles: education for all and lifelong learning, system thinking, problem-solving, critical thinking and reflection, participation, and partnership for change (DEWHA 2009b).

Sustainability is a paradigm that requires educators and learners to examine their own values, hidden assumptions and motivations, beliefs, and actions (Holdsworth et al. 2008). How educators and learners live and work impact on environment, economy and people in the society at local, regional, national as well as global levels. We build respect for the planet and what it provides for us; conserve and manage resources for present and future generations; build respect for life in all its diversity; use active, reflective, transformative, and participative learning strategies; use correct case studies of local, national, and global examples; allow and instigate discussions that expose students to diverse viewpoints; devise viable solutions to complex problems rather than one single way of doing things; consider the consequences of possible actions; and accept responsibility for creating a sustainable future. Lang (2007) suggests that the ideal approach to designing and providing a curriculum related to sustainability is to embed the values and principles of sustainability through a whole-school approach that reorients the existing curriculum rather than through an add-on approach, a theme, or a special event. This style of curriculum design is holistic and integrated.

There are many practical ways that a curriculum can be designed to enhance student participation in thinking about these issues, solve problems, reflect on their own practices, and more. Pedagogies for sustainability include any strategies that equip students with such decision-making skills and enhance their understanding from environmental, social, cultural, economic, and political viewpoints. They include cooperative, problem-based, and experience learning.

Sustainability is an ongoing learning process that actively involves stakeholders in understanding (DEH 2005). Desha et al. (2009) list three core phases for curriculum renewal: an ad hoc exploration initiated and driven by staff, a flagship approach that is market driven, and an integrated approach that is institution driven. Several universities are grappling with ways to teach social responsibility to students because decision-making is complex with its number of technical, economic, environmental, social, and ethical constraints (El-Zein et al. 2008). Recognition of the integrated nature of indigenous cultural values and understanding of the environment (DEH 2005) would be an important addition to some units and courses.

The Global Seminar (GS) model provides a broader notion of teaching and learning for sustainability that incorporates greening and education for sustainability into the curriculum. This participatory model shows the emerging shift toward a new paradigm for teaching and learning for sustainability in academia (Savelyeva and McKenna 2011). It is recognized that there are many drivers of curriculum development—most importantly the needs and desires of employers for educated people who have the skills and competencies that can help their organizations survive and succeed. Employers constitute the ultimate marketplace for the output of educational institutions (Dubicki 2010). Good practice identified in the incorporation of sustainability within the curriculum is to use a problem-based approach supported

by real-life projects to enhance the students' authentic leaning experience. Good practice for successfully incorporating sustainability into the property is to have a clear vision of what it has planned to achieve and to ensure that there is a balance between sustainability and value for money (Poon 2017). Integrating a framework for addressing sustainable development in the university curriculum, research engagement activities, and operations consistently and comprehensively through a whole institutional approach identifies the challenges and lessons on effective change management and leadership for sustainability transformation initiatives in universities and colleges (Mader et al. 2013).

The execution of university sustainable programs enables national and global level sustainable achievements (Su and Chang 2010). There is a widely held belief that sustainable development policies are essential for universities to successfully engage in matters related to sustainability and are an indicator of the extent to which they are active in this field. Good sustainable practices in universities contribute to models of economic growth consistent with sustainable development (Leal Filho et al. 2018). The level of incorporation depends on the nature of the course or unit, largely driven by the initiation of individual academics.

Quality higher education has spilled over at the macro-economic level. The role of universities in social and economic development cannot be refuted. Tertiary education equips individuals with skills to fit the job market. It is now recognized that improving university education has a positive impact on gross domestic product.

Numerous policy announcements have been produced over the past 20 years calling for higher education institutions to give greater focus on social, cultural, economic, and environmental sustainability in their curriculum, research engagement activities, and operations. However, there has been much less attention paid to establishing how to ensure these desired developments are successfully initiated, implemented, and sustained.

19.3 Sustainable Higher Education

Acceptable education is an alteration of informative thinking, which develops and demonstrates the theory and practice of sustainability in a way that is aware. It is a transformative paradigm that values, sustains, and realizes human potential in relation to the need to attain and sustain social, economic, and ecological well-being, recognizing that they must be part of the same dynamic (Sterling 2001).

The higher education system is designed to redesign the value system, families, and study system in terms of maintaining quality of life (Bateson 1997). Sustainable education is often referred to as education for sustainability development that allows human beings to obtain new knowledge, skills, attitudes, and values necessary to shape sustainable future (UNESCO 2014). Education for sustainable development means including key sustainable development issues into teaching and learning. It also requires participatory teaching and learning methods that motivate and empower learners to change their behavior and take actions for sustainable development. Education for sustainable development therefore promotes competencies like

critical thinking, imagining future scenarios, and making decisions in a collaborative way. Education for sustainable development requires far-reaching changes in the way education is often practiced today. There is need for new pedagogy for the sustainability education, owing to that fact there is broad consensus that it requires a shift toward active participative , and experience based learning, methods that engage the learner and make the real difference in their understanding and thinking ability to act.

Researchers have identified five pedagogic elements that cover a host of pedagogical approaches or methods that can be used in higher education in management for achieving suitability:

1. *Critical reflection*, including old-style lecture methods, thoughtful accounts, learning journals, education journals, and deliberations groups
2. *Systematic thinking and analysis*: the use of MSME case studies and critical incidence, project-based learning, stimulus activities, and the use of field visits as a source of learning about current industrial trends
3. *Participatory learning* with a group or peer learning, developing dialogs, experiential, and developing case studies with local community groups and businesses
4. *Thinking creatively for future scenarios* by using role play, real-world inquiry, future visioning, problem-based learning, and providing space for emergence
5. *Collaborative learning*, including collaborative guest speakers, work-based learning, interdisciplinary and multidisciplinary working, and collaborative learning and coinquiry.

The knowledge economy needs institutions with the ability to discover new knowledge, develop innovative applications of these discoveries, and transfer them into the marketplace through entrepreneurial activities. Knowledge accumulation is increasingly at the core of a country's competitive advantage. During the last two decades, an increasing concern has been expressed about the quality of university education. The World Bank (2009) reiterated that the establishment of a quality assurance system for the higher education sector was of great importance. The value added to the curriculum with management decisions is embraced by management students. They also begin to comprehend how environmental literacy, as well as outdoor educational experiences, can be integrated into higher education efficiency (Lo Mun Ling 2013). In this ever-fluctuating world, handling our natural systems and making a maintainable future seem to be one of the main tests facing humanity.

This challenge is further enhanced by the ignorance or apathy of people toward the concept of sustainability. In most cases, students, who are our future cohort, are left without any insights, promise, or even understanding of their part and accountability toward creating any meaningful beliefs and actions related to sustainability. Sustainability teaching is becoming significant mainly for the young so that they have a comprehension of concepts such as economic affluence, resource equity, energy use, and environmental health and concern (Sengupta et al. 2020).

Sustainability is about lowering our ecological footprint while concurrently refining the quality of life that we value as livability in society (Newman and

Kenworthy 1999). Education for sustainability is both present and future oriented. It is learning; it is designing and implementing actions for the present, in the knowledge that the impact of these actions will be experienced in the future. In this way it leads to students developing an overall capacity to contribute to a more sustainable future in terms of environmental integrity, economic viability, and a just society for present and future generations (UNESCO 2009). In an era marked by concern about the future of the planet, education for sustainability can be empowering. It equips students to act individually and collectively in ways that can contribute to sustainability. It provides the opportunity for students to explore and evaluate contested and emerging issues, gather evidence, and create solutions for a sustainable future. Education for sustainability can enable students to become effective citizens and active change agents by helping them to deal with complexity and uncertainty. It can also help them understand that there is rarely a single solution, because new knowledge is continuously generated, and diverse viewpoints exist in society. Embedded in this curriculum framework is the principle that education for sustainability is not simply the acquisition of knowledge or skills but the total approach that generates motivation and commitment to take sustainability actions for improved outcomes for a sustainable world.

19.4 Sustainable Higher Education in Management

Over the last decade, educators in postsecondary institutions have launched numerous courses, programs, and initiatives in sustainability in management (Caeiro et al. 2013; Rands and Starik 2009). Thus, an increasing number of management educators have contributed to transforming the method of training of future business leaders and managers based on the assumption that companies need to recognize their pivotal roles and responsibilities in achieving sustainable societies. Waddock (2007) points out that this shift toward sustainability challenges educators in existing firm- or organization-centered management programs to take both the environment and society into account in their teaching. Erskine and Johnson (2012) summarize that the business is embracing a triple bottom line (TBL), and higher education institutions need to prepare students for triple bottom-line thinking.

Higher education is expected to play a pivotal role in sustainable development, economic growth, recent work, gender equality, and responsible global citizenship in all regions. Higher education and its role are considered as a debate agenda (Adom̄bent et al. 2014). The promotion of education on sustainability in higher education is key to building a sustainable future while also bringing youth to the center of sustainability concerns (Wals 2014; Leal Filho et al. 2015; Guerra et al. 2016). Thus, education for sustainability as a matter of environmental education shares knowledge and experience and stimulates environmental awareness and ethical behaviors (Teixeira 2013; Leal Filho et al. 2016; Guerra et al. 2016). There has been a growing demand from societies on higher education institutions regarding actions of sustainability, therefore turning these institutions into agents of change (Stephens and Graham 2010; Lozano et al. 2013a, b; Ramos et al. 2015; Leal Filho

et al. 2015). Consequently, having upheld this status, an increasing number of HEIs are becoming aware of their roles in building a sustainability paradigm (Hancock and Nuttman 2014; Lozano et al. 2015a, b; Ramos et al. 2015; Verhulst and Lambrechts 2015). It has been recognized by many scholars that higher education with sustainable education is essential for building sustainable societies by adopting and institutionalizing sustainability in their systems (Lozano et al. 2013a, b, 2015a, b; Foo 2013; Romas et al. 2015; Verhulst and Lambrechts 2015).

Education in environmental matters for the young generation as well as adults, giving due consideration to the underprivileged, is essential in order to broaden the basis for an informed opinion and responsible conduct by individuals. Universities have a moral obligation to act and behave according to socio-environmental concerns (De Vega et al. 2008; Zhang et al. 2011). Several authors have highlighted the importance of developing and implementing an internal agenda of sustainability in these institutions by adopting administrative processes and campuses to effectively establish sustainability-based strategic planning that seeks to identify the economic environmental and social viability of institutions (Lozano et al. 2013b; Waheed et al. 2011; Zhang et al. 2011; Kościelniak 2014; Gómez et al. 2015; Ramos et al. 2015; Mintz and Tal 2014; Coral et al. 2003). Sustainable management of internal factors in higher education institutions (HEIs) can enhance productivity and efficiency by utilizing resources such as energy, water, etc.; stimulating sustainable waste management and recycling practices; reducing the institutional ecological footprint; and enhancing market visibility (Rauen et al. 2015; Adom̄ent et al. 2014).

Through the involvement of the people in the sustainable environment, higher education institutions can make a positive impact on students, professors, and other staff members, making them mindful about the importance of reducing water and energy consumption, teaching them to diminish waste production and to recycle, and changing their habits into more sustainable ones (Katiliūtė et al. 2014). These changes in institutional routine require planning and strategies to be implemented, leading it to be a process of societal transformation (Waheed et al. 2011; Ferrer-Balas et al. 2010; Velazquez et al. 2006). According to the literature, the implementation of sustainability in HEIs goes beyond the need to educate its members. It focuses on internal processes, establishing and following an institutional agenda of sustainability.

Sustainability is a relatively new area in management education. However, studies have shown, for example, that there is evidence of a positive correlation between stock price and sustainable business practices (Holliday 2010; Seidman 2008; Waddock and Graves 1997). Sustainable practices may even offer a new proxy for management performance (Bradbury 2003; Nicholson and DeMoss 2009). In addition, as regulatory compliance becomes more complex and costly, sustainable practices may enable organizations to comply more readily with these more comprehensive regulations (Rands 2009). By broadening their vision to sustainable development, business leaders are recognizing the impact of the organization on the social and natural environment.

The process of change in labor market and shifts in the world economy demand a radical reshaping of HEI provision if universities are to be the vehicle for meeting

this need. The consequence of this is a reassessment of the relationship between higher education and small firms and the entrepreneurial sector. In order to meet the emerging needs of society, HEIs have had to change, for example, by expanding student numbers, introducing new learning styles and processes, altering and adding to the curricula to meet the needs of businesses and industry, improving accessibility and openness, and introducing a more diverse academic program. This process of transition is underway but not complete, and it is clearly the case that different HEIs are responding individually to these forces of change. Over the past 20 years, the knowledge base in the field of university-SME linkage has grown immensely. There are many examples of initiatives that seem to work, and these have been captured in a variety of manuals and publications with a view to disseminating best practices to other potential providers. However, it is fair to say that these descriptions of best practice have had a reduced impact because the developers of specific initiatives are often closely involved in the review process. The number of publications with titles, such as lessons from experiences, is exhaustive and does little to raise academic debate.

19.5 Linkage with MSMEs

For boosting multidimensional productivity, a holistic national process ensures that management graduates are linked with the MSMEs to learn and live with the business society and take a role as a manager for sustainable business outcomes in future.

Universities and MSMEs both recognize the mutual benefits and potential spillovers to the economy. Universities know that, if they are to remain relevant, they need to train graduates to fit the job market and concretize and test the concepts created in the real world. Many industries now acknowledge that, to successfully innovate, they cannot exclusively rely on internal research and development. They know that universities could open up great opportunities to an enormous global pool of talent and skills. The challenges are how to close the gap between the two. The barriers include the fact the match-making process can be problematic.

Universities and industries have different expectations. Universities are interested in chasing linkages and technology transfer but do not know where to look for companies that need certain technologies. For their part, industries may find it difficult to get expertise from universities. This makes engagement ad hoc, fragmentary, and short term. MSMEs can get up-to-date expertise and networks of contact in academia. The university obtains reality-based knowledge and connections to the business sector. Students can complete a degree and gain research-related work experience at the same time. Universities should have a framework for tracking alumni who have joined the world of business. While higher education institutions require practical attachments for their students, there is little follow-up after attachments.

It is now widely accepted that, in a knowledge and global economy, graduate education is the primary driver of social and political progress (Mundy 2000). Education has been presented as a means of increasing the productivity of

individuals, communities, and nations (Collins and Rhoads 2008). The ability of the graduate education system to strengthen its leadership linkages with local communities is important for any university and society. The graduate education system produces individuals who possess the necessary context-specific and university-relevant capabilities to continue to develop in an interlinked global context (Lynn and Kantini 2015).

Universities, being seats of higher learning, not only produce highly qualified and skilled human resources; they also help in fostering new ideas and businesses. According to Tipple et al. (2012), higher education institutions should be contributing to students to place connection events for SMEs. These events could be linked with the student society to maintain continuity. University graduates and researchers are the key resources when it comes to the commercialization of new ideas based on technical and economic skills; cooperation with universities is of immense value to sustainable development (Tijana et al. 2013). The significance of this to the economy is obvious enough. In addition, the process of commercializing original ideas is a major issue in MSME development. Entrepreneurial universities have attracted the attention of policy makers and researchers of developing countries to discover human resource production of universities in order to acquire more important roles (Farsi et al. 2012).

MSMEs have been identified as an important strategic sector for promoting growth and social development. Over time, MSMEs have gained wide recognition as a major source of employment, income generation, poverty alleviation, and regional development. SMEs are the backbone of the economy: according to recent research, 45% percent of employment and 75% of total enterprises. The policy framework toward MSME development focuses on six key policy intervention strategies for creating a more conducive environment for the MSMEs, as well as the creation of regional balance and resource efficiency in doing business for entrepreneurial culture, skill development, and market facilitation. There is therefore a need for a specific study on MSMEs for graduates who seek employment opportunities. Studying entrepreneurship benefits students and learners from different social and economic backgrounds because it teaches students to cultivate unique skills and think outside the box. It creates opportunities, instills confidence, ensures social justice, and stimulates the sustainable economy. Linking with MSMEs also provides budding entrepreneurs with the skills and knowledge to develop business ideas and their own ventures. This will increase the intake of graduates into private sector employment.

Innovation is considered to be the most important driving factor for sustainable economic development. Knowledge transfer is widely recognized as a key element in the innovation process in knowledge-driven economies. The creation and transfer of knowledge are the basis for competitive advantage in organizations (Argote and Ingram 2000). For knowledge transfer, institutes of higher education are considered to be essential, and most enterprises cannot operate without external knowledge (Muizer 2003). A smooth transfer of knowledge is therefore crucial to ensure that the available knowledge reaches small organizations. Universities as sources of knowledge are important as well, though in a different way, because we expect them

to play an important role in addressing the needs of micro and small businesses. SME-size enterprises are not assumed to have the same absorption capabilities as have large organizations in order for them to be able to interact with universities in the same manner (Freel 2006). If universities have a more practical education approach with, for instance, compulsory internships for their students, closer relations with the industry should enhance their accessibility and approachability for small firms. Therefore, it is expected that colleges will have a higher collaboration level with SMEs than universities—large firms tend to be more often engaged in knowledge transfer with higher education institutions than are small-sized enterprises (Malecki 2008).

SMEs play an important role in any economy and are increasingly being encouraged to engage with higher education institutions (Lockett et al. 2008). SMEs are highly heterogeneous; they are a source of innovation and entrepreneurship, by which means they create healthy competition (Risseeuw and Thurik 2003). Given their significance, there is a vast and growing literature stressing the importance of university linkages, including with small firms (De Jong and Hulsink 2010; Lockett et al. 2008; Niosi 2006; Wright et al. 2004). However, these studies tend to focus on technological transfer and technology-based SMEs.

Argote and Ingram (2000) describe knowledge transfer as the process through which one unit is affected by the experience of another. Colleges translate knowledge into applications for companies that affect such organizations. Simultaneously, these organizations create new knowledge and new contexts that can be used in HEIs, with each innovation that occurs. Small organizations expect new knowledge from students. This new knowledge can be shared as forms of joint supervision, guest lectures, joint research, and collaborative work (Bekker and Bodas Freitas 2008; Schartinger et al. 2002). Many SMEs expect informal contacts with the students during their studies; they believe that these contacts may bring sustainable development to their enterprises (Cohen and Levinthal 1990; De Jong and Hulsink 2010). University research centers also want to collaborate with industry because they increasingly need to find new ways of generating income since government intends to reduce research and development (R&D) funding. The universities that maintain industry-business linkages gain access to students as potential future employees and for aid on product development.

Universities provide major inputs for industrial innovation processes in terms of human capital, either through the education of graduates who become industry researchers or through personal mobility from universities to firms (Schartinger et al. 2002). The triple helix involves the state, academics, and industry and charts the relationships between them. University-industry interactions cover a wide range of relationships that include seminars, workshops, training contract research, consultancy, spin-offs, etc. Traditionally, universities have been reckoned as places of invention, education, and research (Wallmark 1997), while industry is the home of innovation. But with present trends, this is no longer the case as it has become clear that academics and industry must necessarily cooperate to bring about development. The new university functions have been described as the translation of knowledge into economic activity alongside research and teaching. A contract is drawn up

between the university research center and the contractor in which costs associated with the work are shared. The two parties can work together from the stage of R&D through to commercialization. There must be mutual benefits to industry and research centers, and commercially valuable data may be protected for a limited period. This provides some assurance that the best brains in the business will be brought together to focus on the problem and that there will be a balance between long-term, high-risk research and short-term work that can be promptly commercialized (Moses 1985).

Universities and SMEs are two players in a broad range of stakeholders, with stakeholder theory (see Freeman and Medoff 1984; Freeman et al. 1987; Donaldson and Preston 1995; Johnson 1998) as a potentially viable organizing model, and it allow us to move beyond a dual partner relationship to a multistakeholder relationship, including other potential stakeholders, such as governments, large firms, and banks (Wheeler and Sillanpaa 1997). Future development on loyal inclusive stakeholder relationship will become one of the most important determinants of commercial viability and business success.

Recent research has empirically found constraints on the linkage between a management faculty and MSMEs, using an institutional case study method (Shivany 2020, forthcoming). These constraints are reluctant participation in social contribution, lack of motivation on social participation, a curriculum not encouraging field visits, lack of infrastructure facilities, work overload with academic activities, instruction methods that do not facilitate voluntary social work, lack of awareness among staff and students about community-related work, lack of support from the administration, an immense gap that exists between the academic community and the business sector, and a negative attitude toward community participation. From the stakeholders' point of view, this study recommended eight approaches to linking MSMEs:

1. Altering pedagogical methods for students to center on learning with an industry-based curriculum
2. Incorporating field visits for the cocreation of knowledge
3. Motivating faculty-level centers for linking with MSMEs
4. Attitude-change programs inducing self-start-up businesses
5. Inviting stakeholder partners for networking and student leadership
6. Outcome-based measures for academic performance
7. Introducing an award for best solution-oriented thesis
8. Quality led approach for student involvement

These eight approaches are suggested to improve linkages with the MSMEs from the stakeholder perspective of a management faculty that produces management graduates to the society.

19.6 Conclusion

The old concept that management degree holders only work at large multinational companies is dead and gone. These days, many management graduates are opting for opportunities with micro and small business organizations. These enterprises are actively recruiting management and administrative graduates for prominent positions in their businesses so they can take advantage of the skills these professionals possess. Twenty-first-century enterprises look very different from their precursors—nimble, more transient, less graded, less steady. Yet management education has insulated change in organizations. To keep pace, management education needs new guidance to accomplish its aims. Sustainable development goals for educating future managers provide a solid framework for higher education in management. This framework develops sustainability via educating future managers who will manage enterprises which have more influence on sustainable developments.

Business and management are a means not an end. The purpose of management is to serve human needs; meeting those needs effectively is the ultimate measure of business success. We do not need to fetishize the tools of human collaboration; we should train our students in rigorous doubt about determining the best vehicle for accomplishing the ends of management. The skills needed to manage small businesses on a world platform are rather different from those of the traditional large corporation.

The world of organizations is changing radically, the world of management education, much less so. There is no better time to reconsider the ‘what’ and ‘how’ of management education for the twenty-first century. Training managers to use new tools of collaboration in the service of sustainable development goals, while energetically questioning the methods, will help create the world we want to live in.

Education for sustainable development (ESD) promotes the development of knowledge and skills and understands the values and actions required to create a sustainable world that ensures environmental protection and conservation, promotes social equity, and encourages economic sustainability. Educational institutions must consider this as their responsibility to deal intensively with sustainable development competencies and to develop the specific learning outcomes related to all sustainable development goals (SDGs). There is no one right way for a university to engage with SDGs. ESD aims to empower and equip current and future generations to meet their needs using a balanced and integrated approach to the economic, social, and environmental dimensions of sustainable development.

When MSMEs invest in management graduates, they know that they are getting an individual who brings a unique mix of classroom education and real work experience to their company. Many management graduates possess professional experience and a specialized degree in order to advance their career. The benefit that the MSMEs enjoy when hiring management graduates is immediate because these professionals can hit the ground running and be instant contributors to their workplace without a lengthy onboarding process. Therefore, to satisfy that expectation, business sector graduates should have prior knowledge and engagement with MSMEs during their studies.

MSMEs crave real-world experiences, and the knowledge these graduates possess is just as important. The knowledge that management graduates gain in universities provides them with an understanding of the essential roots of businesses and how businesses work. When hired, management graduates are then able to translate that knowledge into real-work applications for their small businesses. This knowledge can be used to create a company budgets, business plans, cost-benefit analyses, or marketing campaigns.

One of the greatest strengths unique to MSMEs is their ability to solve problems quickly and efficiently when compared to their larger corporate competitors. The education obtained at the universities empowers graduates with a skill set of best practices in problem-solving. In addition, their experience allows them to look at existing problems with a fresh eye, offering suggestions and instituting improvements for the betterment of the MSME. MSMEs know better than most that their successful operations require all staff members to wear several hats. Management graduates have been trained to recognize tasks that can be appropriately partnered, and they are able to work efficiently at accomplishing tasks successfully as soon as possible. While larger companies may worry that a given role does not provide enough challenges for a management graduate, MSMEs will benefit from the expediency that graduates possess.

Experts of the professional world know that earning a management degree is hard work and that only the most dedicated individuals accomplish this feat. While a management graduate is learning the skills they will take into the world of businesses, they are also learning the self-discipline necessary to accomplish the task of getting their degree. Discipline and dedication are traits that management graduates carry with them into their professional life, and both traits make them a perfect fit for the growing demands of MSMEs. Management graduates land in leadership positions in MSMEs because they have learned leadership skills as part of their curriculum in universities. These graduates should have such skills as part of their curriculum in universities. They should have the skills necessary to influence teams and have a lasting positive impact on MSMEs which hire them.

Universities are social institutions that have responsibilities in the sustainable development of their countries. They are knowledge producers and have an impact on the three pillars of sustainability. An education system that considers sustainable development can influence the sustainable future of a country. For these reasons, many universities are concerned about sustainability in their curriculums. Higher education in management faces challenges in employing people after graduation. Reducing unemployment and innovation for job opportunities come under sustainable goals for the twenty-first century. Management faculties of universities can enhance the employability rate of their graduates through linkages with MSMEs that have the power to create jobs—which leads to sustainability in society, economy, as well as environment.

Reflection Questions

1. What are the three core phases for curriculum renewal to link higher education in management with the current market needs?
2. How can environmental literacy, as well as outdoor educational experiences, be integrated into higher education efficiency in management teaching?
3. Why does higher education in management need problem-based approach supported by real-life projects to enhance the students' authentic learning experience?
4. What are the constraints and approaches for linkages with MSMEs?
5. Do graduates have engagement and collaborative experience with MSMEs during their studies with relevant knowledge to sustain their future?

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