

Springer Proceedings in Business and Economics

Jorge Marx Gómez  
Marie K. Aboujaoude  
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Tariq Mahmoud *Editors*

# Modernizing Academic Teaching and Research in Business and Economics

International Conference MATRE 2016,  
Beirut, Lebanon

# **Springer Proceedings in Business and Economics**

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Khalil Feghali • Tariq Mahmoud  
Editors

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# Preface to the Conference Proceedings

It is our pleasure to present to you the Proceedings of the International Conference “MATRE 2016,” held in Beirut, Lebanon, on September 8–9, 2016.

This conference entitled “Modernizing Academic Teaching and Research in Business and Economics” was organized by the Lebanese University in collaboration with Oldenburg University in Germany and has been foreseen as a final network event within the MATRE (Modernizing Academic Teaching & Research Environment in Business & Economics at Lebanon and Syria) project. This project is funded by the European Commission under the TEMPUS IV–Sixth call for Proposals (Project Number: 544001-TEMPUS-1-2013-1-DE-TEMPUS-JPHES).

The main objective of the Conference was to bring together researchers for a corporate discussion about the contemporary issues in research, academic teaching, and education in the context of globalization. Another purpose of this event was to provide an international forum for the exchange of knowledge over the broad spectrum of fields covering the following topics:

1. Leadership and Sustainability in Higher Education
2. Quality and Governance of Higher Education
3. Internationalization of Higher Education
4. Labor Market and the Modernization of Business Education
5. Contemporary Trends and Challenges in Business Schools
6. Forging Research Links Between Business and Academia

The abovementioned topics have resulted in twelve accepted and presented papers including one industrial paper. These papers are arranged in the order of presentation in the conference.

We would like to take this opportunity to express our gratitude to all those who have made this conference possible and successful. We would like to express our sincere thanks to all authors who submitted their papers to the conference, to the board of reviewers, to our partners in international program committee, and to all speakers, session chairs, and attendees, national, regional, and international, for their active participation and support of this conference.

We hope that the papers contained in these proceedings will inspire more research in this field and will prove helpful toward modernizing academic teaching and research in business and economics.

Finally, it is our pleasant duty to acknowledge the support from the European Commission which is the project's funder and one of the drivers behind this conference. Our hope is to make this conference a recurring event in years to come.

Oldenburg, Germany  
Beirut, Lebanon  
Beirut, Lebanon  
Oldenburg, Germany

Jorge Marx Gómez  
Marie K. Aboujaoude  
Khalil Feghali  
Tariq Mahmoud

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# Contents

<b>Seeds of Sustainability in Lebanese Universities: An Empirical Study . . . . .</b>	<b>1</b>
Mireille Chidiac El Hajj, Ghassan Chlouk, and Richard Abou Moussa	
<b>Supply and Demand for Information System (IS) Core Knowledge in Non-IS Business Occupations: Fresh Graduates' and Professionals' Perceptions and Perspectives . . . . .</b>	<b>25</b>
Marie K. Aboujaoude and Khalil Feghali	
<b>Higher Education and Employability: Building Student's Self-confidence and Efficacy . . . . .</b>	<b>47</b>
Claude Chammaa	
<b>Using Data Mining and Business Intelligence to Develop Decision Support Systems in Arabic Higher Education Institutions . . . . .</b>	<b>71</b>
Mohamad Hamed, Tariq Mahmoud, Jorge Marx Gómez, and Georges Kfour	
<b>An Investigation of Students' Social Entrepreneurial Intentions in Syria: An Empirical Test . . . . .</b>	<b>85</b>
Olga Medyanik and Farid Al-Jawni	
<b>Review of Leadership Research in Higher Education . . . . .</b>	<b>115</b>
Ahmad Zein	
<b>The Determinants of Business Students' Faculty Performance: Evidence from a Private University in Syria . . . . .</b>	<b>123</b>
Sulaiman Mouselli, Kinaz Al Aytouni, and Kinan Naddeh	
<b>Adopting Mobile Business Solutions in the Modernization of Business Education . . . . .</b>	<b>133</b>
Giedrius Cyras and Vita Maryte Janusauskiene	

<b>Relationship Between Sustainable Leadership and Organizational Trust: Empirical Evidence from Private Higher Education Institutions in Syria . . . . .</b>	<b>143</b>
Serene Dalati	
<b>The Effect of Good Governance on Higher Education in Syria, Lebanon and Jordan for the Period (2000–2011) . . . . .</b>	<b>157</b>
Chadi Azmeh	
<b>University-Business Research Collaboration in Syria: An Empirical Assessment and Suggested Conceptual Model . . . . .</b>	<b>165</b>
Alaa Salhani and Victoria Khnouf	
<b>Forging Research Links Between Academia, Business and Industry in Syria and Lebanon . . . . .</b>	<b>181</b>
Nabil Sukkar	

# Seeds of Sustainability in Lebanese Universities: An Empirical Study

Mireille Chidiac El Hajj, Ghassan Chlouk, and Richard Abou Moussa

**Abstract** Meeting the needs of the contemporary world, without jeopardizing the ability of future generations to meet their own needs, will not be actualized unless an educated population and an oriented workforce task are prepared to face the rapidly growing new challenges of the twenty-first century. Thus all Lebanese universities, public and private, are invited to integrate sustainability in their campuses. Our qualitative research demonstrates that seeds of sustainability are present in varying degrees in universities that have been continuously functional in the service of higher education in Lebanon for a period of 50 years or more. However, more is needed to prepare present students and the future community to rely on available sources. Change occurs when a sense of urgency for a relevant vision is created. Providing the right policies and resources can enhance sustainability practices. Nonetheless, many obstacles are found, like shortage in funds and human competence. Moreover, Lebanese universities are still not aware that sustainability may improve their profits. This point is crucial because it creates the motive for the private sector in Lebanon to cooperate with universities to support sustainability and form a partnership to convince the relevant public policy makers to adopt sustainability in their strategic plans. More universities are to be studied to extend the data and complement this research, and to allow further comparison of initial findings.

**Keywords** Sustainability • Lebanese universities • Change • Policies • Obstacles

## 1 The Framework

Nowadays, deteriorating environmental conditions, and natural resources depletion are prevalent. Meeting the needs of the present without compromising the ability of future generations to meet their own needs [1], will not be actualized unless an

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educated population and an oriented workforce task are prepared to face the rapidly growing challenges of the twenty-first century.

Many conferences around the world have recommended improvements of public and personal knowledge related to sustainability issues. The UNESCO reports are calling for elevating education and are covering topics concerning sustainability in different domains: in Business, Science, Health, Agriculture, Engineering, and others. Yet, few of these recommendations have been fully implemented in some countries, especially in Lebanon, where the lack of awareness, and lack of initiatives are currently leading to widespread environmental problems; “jeopardizing the ability of futures generations to meet their own needs” [2].

Important guidelines that identify implementable educational strategies related to sustainability have been issued since the last quadrant of the past century. However, so far in Lebanon, little has been done in terms of recognizing the implications of environmental problems. Therefore, a close re-examination of conferences, such as the UNESCO Tbilisi conference held in 1977 [3], can help “bringing education nearer to the environment” and start the necessary momentum for addressing sustainability.

According to the 1977 Tbilisi conference, environmental education can be achieved through:

1. Developing an increased awareness and understanding of environmental problems among the general public (children, youth, and adults);
2. Preparing certain occupational groups whose responsibilities bear directly on environmental problems and opportunities (for example, engineers, planners, architects, medical personnel, teachers, administrators, industrial managers);
3. Training specialists for research or work related to environmental sciences.

Most specialists are formed at universities. Therefore, and in general, it is up to universities to shape the concept and define the guidelines of sustainability. Remodeling universities' curricula through the introduction of special courses and seminars on environmental issues, and preparing specialized educators and researchers who can cover sustainable development issues.

The main objective of this paper is twofold: (1) to investigate whether historically eminent Lebanese universities, that have been continuously serving higher education for at least 50 years, are integrating sustainability courses in their curriculum; and (2) to discern whether the universities' administrators are currently, or in the foreseeable future, addressing sustainability concepts and tools in their respective universities.

## **2 Universities Play a Major Role in Inspiring and Teaching Sustainability Concepts**

### ***2.1 Can Higher Education Independently Implement Sustainable Development***

Many institutions of higher education worldwide are attempting to become more sustainable by signing different declarations and by providing courses, conferences and tools to prepare students to deal with sustainability issues. Over the last decade, a growing number of committed universities have ensured the integration of sustainability in their curricula, and across disciplines that were not traditionally associated with sustainability [4–7]. Thus they materialized the multidisciplinary approach to sustainability where all can benefit from such a framework. Integrating sustainability in universities arose mainly as a result of signing and implementing policy statements and agreements, such as The Talloires Declaration stated by UNESCO to “provide leadership and to mobilize internal and external resources so that their institutions respond to this urgent challenge” [8]; or The Halifax Declaration [9] which indicated that universities play a “leadership role” in improving the capacity of countries to face environment and development issues, and to contribute to sustainable development on local, national and international levels. Charters were also influential, like the Kyoto Declaration [10] and the Copernicus Charter [11], which contain important guidelines for sustainable development in Higher Education. But the dilemma still exists. For example, while some international universities are currently implementing The Talloires Declaration within their institutions, and some others are incorporating the umbrella principles of the declaration; yet the majority of signatory universities did not implement The Halifax Declaration, and only a few incorporated its general concepts and value statements [12].

Even if some universities provide varying forms of such environmental education, others are not responding to change. To support sustainability development over time, tight collaboration is needed with the governments, enterprises, NGOs, syndicates [13, 14], mass media [3], and even students and other relevant entities to fully raise awareness, urge cooperation, and implement a general strategy for sustainable development. Evidently, universities alone cannot achieve the desired objectives. Rather, multi-sector partnerships including the private and public sectors can more effectively tackle sustainability problems. Accordingly, “because of their potential to combine resources, skills, and knowledge from a wide range of stakeholders to address the challenges of creating a sustainable planet [13], universities are called to play a major role especially in inspiring and teaching sustainability concepts. Yet, to teach, one should first know. Questions can be asked whether universities in Lebanon “know”; whether they have the required system thinking; whether they have an internal shared vision to deal with the sustainability concept; whether they are convinced of the need for a move towards sustainable development.

## ***2.2 Developing Organizational Learning at Universities***

Authors such as Argyris and Schon [15] focused, through their loops models, on organizational learning as a tool to qualify learning and learning outcomes; and implied that “learning systems” institutions must be invented [16], but they did not create a model for group or system learning. Peter Senge discussed system thinking and shared vision in his Learning Organizations and offered a model in his Fifth Discipline [16], which best depicts how the whole university’s climate can nurture learning. Five cornerstones enhance the university’s capacities: personal mastery, mental model, shared vision, team learning, and system thinking that integrates all other components, fusing them into a coherent body.

A shared vision develops awareness and commitment to scan and solve issues. It empowers organizations to develop an image of the required future. It helps the stakeholders to believe in the organization’s projects, not because they “have to” but because they “want to.” With team learning, the whole system develops a greater ability to address and solve problems, and, through dialogue, the team members enhance their capacities as they “suspend assumptions and enter into a genuine Thinking together” [16, p. 10]. The practice of team learning highlights solutions for problems, and pushes towards action. This leads us to another pillar of Peter Senge’s Organizational learning: the mental models. They “are deeply ingrained assumptions, generalizations, or even pictures or images that influence how we understand the world and how we take action” [16, p. 8]. The presence of a vision-appropriate mental model is at the heart of transformation in any organization [17]. The last cornerstone, the “personal mastery”, is essential to Learning Organizations and is associated with an energetic commitment to and capacity for learning. Thus, a “special level of proficiency” is produced [16, p. 7]. Hence, Senge’s approach offers universities, the framework for their learning process.

However, creating Learning Organizations requires a change in prevalent perspectives, and results in a transformation in the universities’ approaches to education and administration. The success of such renovations is dependent on the accomplishment of several phases. John Kotter [18] draws a roadmap for successful change that starts with three necessary and sequential steps: establishing a sense of urgency [for the issue]; forming a powerful coalition; and creating a relevant vision (and communicating it at a following phase). Kotter’s phases resonate with Senge’s model for a Learning Organization, but more importantly they guide the discerning eye to possible gaps in the successful launching of innovative and transforming concepts like sustainability.

## ***2.3 Reviewing Some Existing Tools of Assessment***

The literature reveals that universities can attain sustainability practice through the five criteria of David Orr’s measurement system [19]:

1. What quantity of material goods does the university consume on a per capita basis? (e.g., how much paper, water or CO<sub>2</sub> is used/released per student)
2. What are the university management policies for materials, waste, recycling, purchasing, landscaping, energy use, and building?
3. Does the curriculum engender ecological literacy? (e.g., do graduates know the “stories” behind their food, water, and discarded materials? Are there opportunities to restore local rivers and degraded lands?)
4. Do university finances help build sustainable regional economies? (e.g., do food purchases come from regional farms? Are endowment funds invested in enterprises that employ sustainable practices and produce goods that truly benefit society?)
5. What do the graduates do in the world? (e.g., does the work they do contribute to a sustainable culture?)

Orr’s report provides tools of assessment and indicators that can serve as a learning curve in raising awareness of sustainability issues at both micro and macro levels. Based on these tools, The Penn State indicators report [20] divided sustainability practices in universities as follow:

1. The university has a comprehensive strategy to adopt sustainable practices; high profile issue with strong leadership.
2. The university has taken many significant measures to adopt sustainable practices but still lacks a comprehensive strategy.
3. The university has taken only limited measures to adopt sustainable practices.
4. The university has taken no significant measures to adopt sustainable practices.

Orr’s indicators ignore both the link among the university, the students and the regional economy, and viewing sustainability as a whole perspective that links educational activities to operational ones: for it is said that universities can optimize their role as agents of change for a sustainable future by adopting a whole-of-university approach to sustainability [21]. Although they are not exhaustive, those indicators are still adequate to help researchers understand what universities are doing, and how they are doing it, in terms of sustainability [22].

Therefore, when assessing tools to measure sustainability, universities should define how to provide learning experience to students, how to sparkle creative projects, how to build leadership and how to develop the students’ skills to permit soft transitions to sustainability [21, 23, 24]. There is a great need to develop a broadened vision of educational goals to meet the challenge of a rapidly changing world in an information-intensive age, and to achieve the goals of quality education [25].

The above administrative actions ripple to the pedagogical practices at universities. The Halifax Declaration [9] provided an action plan based on eight practical tasks for clear sense of direction in a number of core activities. One of these tasks is to review curricula and research agendas to see how sustainable development might be integrated in and between disciplines. The courses’ content, perspectives, process, context, and design should prepare students with the “knowledge, skills, and



values they need for creating more sustainable places and communities” [26]. Burns model of sustainability pedagogy offers a practical model, comprised of five key dimensions. The course seeks by its content “to increase learners’ systemic understanding of complex sustainability issues. It provides learners, through perspectives, with opportunities to think critically about ecological and social issues. It enhances learners’ civic responsibility and intentions to work toward sustainability through active participation and experience. It increases learners’ understanding of and connection with the geographical place and the community in which they live. And finally, it utilizes an ecological course design process that weaves the other four dimensions together to create transformative learning experiences” [26].

### 3 Research Methodology

#### 3.1 *A Qualitative Study*

This qualitative study followed a multimodal design for explorative and recommendation purposes:

1. Online research method is adopted to identify courses in the universities’ curriculum. This secondary research approach permitted the selection of existing data.
2. Then, based on literature and online research methods European and USA universities that have sustainability practices were screened in order to compare them with Lebanese universities to indicate the gap and to deduce possibilities.
3. Finally, face-to-face semi structured interviews were conducted with several administrators to obtain primary data from historically prominent Lebanese universities. This in-depth qualitative interviewing helped us compare relevant data among universities in order to detect and recommend eventual strategies that can be adopted for sustainability.

#### 3.2 *The Sample: Higher Education in Lebanon*

Lebanon’s higher education was shaped in the nineteenth century. Its aim has been to provide education to youth and freedom for thought, influenced by foreign models and sectarianism. The changing national, regional and international context at social, economic and political levels has always had a profound effect on its development. Liberalism resulted from the limited contribution of the Lebanese government in establishing higher education organizations, and the close cooperation of private and public sectors, represented solely by the Lebanese University [27].

Third-level education in Lebanon is referred to as the “Higher Education” (HE), governed by the Ministry of Education and Higher Education (MEHE) and

“protected under the Constitution” [28], through a main law passed in 1961, and composed of two groups: vocational and non-vocational. In addition, “Higher Education is divided into three categories: universities; faculties, necessarily attached to a university; and institutes which may be independent or attached to a university or a faculty” [27].

The four most prominent universities in Lebanon are the American University of Beirut (AUB), founded in 1866 by a Presbyterian mission, the American School for Girls (ASG), established in Beirut in 1835 by the American Presbyterian missionaries, and later in 1994 become the Lebanese American University (LAU), Saint Joseph University (USJ) founded in 1875 by “La compagnie de Jesus”, and the Lebanese University (LU), founded in 1951 as the only public-sector university in Lebanon. In addition, and according to the official page of the Ministry of Education and Higher Education [29], there is a growing number of new universities, of up to more than 36 universities, 8 higher education institutions including L’École Supérieure des Affaires (ESA), and 3 institutes of formation and religious studies, lately licensed by the Council for Higher Education. The expansion of higher education is posing a problem because it is neither related to the needs of development of higher education, nor to the needs of a population of 4.5 million [30].

Overall, the academia baggage in Lebanon is homogeneous. The HE in Lebanon is contributing to building Knowledge-based society, social integration, and equal opportunities, and to providing students taxonomy of critical thinking and moral reasoning skills [28]. It shows “through the application of the US higher education system, the LMD system and the adoption of curricula and fields of specialization” [31].

However, within this research context, higher education suffers a threefold problem [30]:

1. The national policy of public and private higher education is not consistent with international guidelines. This is why many universities are in the process of adding a new system of external quality management to the national level, through accreditation systems;
2. Teaching in Lebanese universities focuses almost exclusively on academic issues and concerns. It hardly covers social changes or environmental challenges and hardly prepares students to cope with current issues;
3. The partnership frameworks and communication between educational institutions and enterprises is almost nonexistent.

Therefore, in the absence of a unified strategy, the objective of this paper is to explore how the aforementioned subject is deployed by each of the Lebanese universities under study, in order to answer the two following questions:

1. Are historically prominent universities in Lebanon teaching and drawing strategies and pedagogies to cover sustainability in their curriculum?
2. And more specifically, are historically prominent universities in Lebanon already providing students a learning experience that can permit a safe and smooth transition towards sustainability?

Results regarding these issues can be broken down into three key findings detailed below.

## 4 The Findings

### 4.1 *Sustainability and the Current Curricula in Lebanese Universities*

Online research concerning the integrated courses in the universities' curricula revealed that the topic can be split in two: (1) The American University of Beirut; (2) all other universities. AUB seems to be a pioneer in the field of sustainability in Lebanon: it has departments, units and courses that cover sustainability issues. This is made possible with the support of the International Development and Research Center (IDRC). AUB is the only university that has already established, since 2001, the Environment and Sustainable Development Unit (ESDU) with the main objective of promoting collaboration for sustainable development and acting as an interdisciplinary R&D center specialized in community development and sustainable agriculture.

Furthermore, at AUB the sustainability approach is integrated in other disciplines. Courses on responsible leadership, relying on Business Ethics and Corporate Social Responsibility and Social Entrepreneurship in the BBA, MBA, and EMBA programs, are ensuring the building of the next generation of "Responsible Leaders". Their objective is to build corporate social responsibility (CSR) awareness and to train students and professionals to develop sustainability practices within their organizations and engage them with their local community. The Faculty of Agricultural and Food Sciences is currently offering an interdepartmental Graduate Program, hosted by the Environment and Sustainable Development Unit, leading to the degree of Master of Science (MS) in Rural Community Development (RCODE, thesis or non-thesis). The Faculty of Engineering and Architecture offers courses such as Climate Responsive to address sustainability and climate responsive architecture, site planning, and sustainable design strategies. As for the Environment Responsive Architecture, it integrates green strategies in natural, rural and design settings. In addition, a set of online courses within a Pro-Green diploma, targeting candidates who work, are based on green economy, green technology and sustainable environments, water treatment, and energy efficiency. As for the faculty of Health Science, a special program weaves public health together with sustainable development in graduate programs.

As for all others universities, a quick look at the current curricula shows that all these universities adopt certain courses on sustainability in their curriculum, but have neither special units, nor specialized departments to teach it. Which reminds us of McMillin and Dyball's [21] statement critiquing most of the universities as "tackling sustainability issues in a compartmentalized manner, where sustainability education is only confined to specific courses, and where education is often isolated from research, and is likely to be linked to sustainable campus operations". In some