Preface

Unequal distribution of wealth. Poverty. Pollution. Gender inequality. These are just some of the problems we face and struggle to eliminate to achieve a collective semblance of euphoria. Sustainable development offers a long-term holistic solution to these problems. It is a multidimensional global phenomenon which encompasses environmental, social, and economic theories, practices and policies. In its simplest sense, sustainable development basically involves meeting the needs of the current generation without endangering the capability of future generations in meeting their own needs.

The idea for this book surfaced from the discussion by the United Nations Decade of Education for Sustainable Development in 2006, which urges educational institutions, more specifically higher education institutions, to take responsibility and lead by example by practicing what they teach through sustainable investments and facilities that are integrated with learning and education. Sustainable education or education for sustainability is a transformative learning paradigm that prepares learners and provides them with knowledge, ethical awareness, skills, values, and attitudes to achieve sustainable goals. As there is a need for a deep understanding of this subject, this book adopts an integrated approach designed specifically to allow access to all the aspects of sustainability including environmental, social, economic, philosophical and cultural perspectives.

This book outlines the fundamental challenges and opportunities under the most recent global phenomenon, the increasingly pressing sustainability agenda. It intends to inform and inspire the current generation to take actions towards a sustainable future by fostering a culture of sustainability, seen against a backdrop of the education sector in the developing countries. The chapters present discussion and debates on a wide-range of topics covering key development issues, new pedagogical approaches, curricula, implications, and policies relevant to sustainability. This book appeals to educators, researchers, students, policymakers and all those who care about our planet.

This book provides a platform for researchers and scholars where they discuss, debate and share their ideas on the increasingly critical topic of sustainability. It is a means of addressing the multiple strands that feed into our understanding of sustainable development by fostering a culture of sustainability through learning and education. Moreover, this book aims to highlight the power and nature of intergenerational education, and how it might shape the future of our planet. Developing countries were selected as the context of the study due to the unique social and environmental challenges they face, and which differentiates them from their more developed counterparts. The target audience of this book are academics, researchers and professionals working in the field of education and learning, and more specifically, those who are concerned with education for sustainable development. Moreover, this book could be of interest to professors, lecturers, teachers, students, educational institutions, government institutions, policymakers, and NGOs.
ORGANIZATION OF THE BOOK

The book is organized into eighteen chapters and covers various topics including green buildings, philosophical orientation of sustainable developments, online learning, big data, sustainability curricula, and knowledge management in the education, healthcare and financial sectors. A brief description of each of the chapters follows:

Chapter 1 evaluates the current sustainable education practices among the universities in Bangladesh and proposes a revised multi-level framework in order to enhance sustainability education practices among the universities in Bangladesh. Based on the opinion of the staff and students of top 10 public and private universities (according to the University Grant Commission report 2018) in Bangladesh, the study found that there is some evidence of the inclusion of sustainability issuesonto the faculty’s mission and vision statements, but very few are incorporated into the program curricula. Besides, lacking sustainability training to the teachers provokes their failure of providing education for sustainable development. Finally, considering the findings, this chapter proposes the importance and role of regulatory authorities, teachers, students, professionals, and corporate people enhancing sustainable education practices at the university level.

Chapter 2 critically looks into the theoretical framework of the concept of greening business as a new strategic philosophical approach that has become reliable in various organizations, and the reasons behind the adoption of these green initiatives in the course of companies work and the benefits achieved. Thus, universities in different countries of the world have adopted a strategic approach to the environment, sustainability and green direction in their work. As a result, there are many measures to achieve green directives for universities, such as reducing environmental pollution, recycling, increasing green spaces in universities, conserving water, and so on.

Following green universities, chapter 3 highlights topics related to online learning and teaching on Higher Education Institutions and deals with topics related to: “The Rise of Distance Education in the 21st Century”, “Online Learning and Future of Teaching in Higher Education”, “Mobile Learning”, “Advantages and Disadvantages of Mobile-Learning Technologies” “Project Based Learning in Virtual Environment”, “Blended Learning”, and “Adaptive learning technology” were covered. In recent years, the rapid developments in the field of science and technology have profoundly affected the social lifestyles and have led to significant changes in the process of producing, sharing and communicating information. The acceleration in the growth rate of knowledge as a result of developments in science and technology has made it necessary to constantly update the existing information. Parallel to this, the necessity of the people to follow the information constantly and to continuously update itself in order to keep up with the speed of information that changes every day has been at the top of the agenda. This situation increased the use of information and communication technologies and the Internet in the field of education, resulting in the spread of online environments.

Chapter 4 aims is to clarify the role and importance of Big data in achieving sustainability of higher education in the Arab world, also understanding the challenges of higher education sustainability in universities. To achieve these objectives, reference was made to previous studies and relevant research in order to set a proposed framework for the development of higher education in universities in the Arab world and highlighting the role of big data in the sustainability of accounting education.
Chapter 5 examines the effects of quality education on sustainability in developing countries will be studied. There are different categories of developing countries, namely highly developed developing countries, low developed developing countries but have huge resources, and simply low developed developing countries. The concentration in this chapter is on the third category of low developed developing Countries due to the fact that the people in those countries need to develop. In section 1, an introduction of the essential issues in this paper will be summarized. In section 2 the main problems of achieving quality education in low developed developing countries are given, while section 3 discusses the negative effects of low quality education on sustainability are introduced. Some solutions will be proposed in 4 and in 5 the positive effects of quality education on sustainability in low developed developing countries are then illustrated. In 6 recommendations are given and in 7 the conclusion for this paper is explained. Finally, the used references, additional reading list, and some definitions will be given.

The purpose of chapter 6 is to evaluate the relative efficiency of universities using data envelopment analysis (DEA). The authors developed a map of efficiency indicators of universities depending on the three main functions of any university: i.e., teaching, research, and community service. Using hypothetical data of 27 universities in a given country, the authors developed the inputs and outputs for each of the three main functions of the universities. The DEA revealed some interesting results concerning the efficient and non-efficient universities, and how to improve the non-efficient ones. Moreover, the DEA was better than the traditional accounting method for performance evaluation. The authors concluded with some recommendations to improve efficiency of universities through the teaching, research, and community service activities. Finally, some implications for the Arab countries were discussed.

Creating a generation with knowledge, abilities, and skills to meet the challenges of economic, environmental, and social sustainability is very important. Chapter 7 looks into the context of the education of sustainable manufacturing, and how curricula should be directly related to sustainable manufacturing and its requirements. However, universities in the world in general and developing countries, in particular, are still mostly lacking in such initiatives which represent from the need of sustainable manufacturing education in their curricula. Therefore, the purpose of this chapter is to provide insights into the significance of sustainable manufacturing education in curricula among universities and its contributions to building an educated generation and carries sustainable thoughts. The results of the chapter indicate a low level of interest in the education of sustainable manufacturing into the curricula of universities.

In addition, Chapter 8 discusses the education of sustainable architecture. Cities are developing rapidly, and with this rapid development, the world has witnessed a significant change in the environment. Unfortunately, this change is deteriorating to the worst, which imposes the need for education for sustainable development crucially. The higher education institutions have to take their responsibility in leading the community to respond to challenges. Universities are the place where the minds of future leaders are shaped to face future challenges. Consequently, they have to be genuinely prepared by a deep understanding of environmental issues and sustainable development at the level of the theoretical and practical framework. This chapter aims to provide a guide for Architecture educators on the possible learning approaches that can be used to improve students’ sense of sustainable responsibility to qualify them to be connected to their communities and contribute to solving local social, cultural and environmental problems.

Chapter 9 also invites universities to adopt the perspectives of sustainable development in media education through applying different mechanisms such as class discussions, issue analysis, storytelling by offering specific courses for mass communication students to shape their sustainable planning skills.
Furthermore, the chapter aims at providing guidelines for education and research institutions to identify priority topics and issues related to sustainable development which can inform research agendas and stimulate educational innovation in teaching and research. Integrating sustainable development in media can help to identify research needs and gaps, encouraging media education programs and institutions to engage with the inter-linkages between culture, environment, society and economy in education, training, teaching and learning activates processes and arrangements.

Organizations such as CEAPRL, UNESCO, PNUD have predicted that development and consumerism are imminently destroying the environment, the earth, life itself, and that it is necessary that education prepare humans to create another model of life. This development should be based in solutions and alternatives that look for an equilibrium between social equality and economic development and a respect for the environmental limitations of the ecosystems that compose the biosphere. Chapter 10 highlights the importance of studying everything that sustainable development would propose in the classroom as in any other space available, starting with the agreements of the program of the millennium of the PNUD to achieve an inclusive and quality education. Education is one of the most powerful motors and guaranteed of sustainable development, the intersection of social, economic, and environmental problems. The most viable conclusion is that compromise is necessary, from the States through educational entities in each country, to non-governmental organizations and civil society.

Chapter 11 aims to identify the pricing determinants of school tuition fees due to the nature of education’s humanitarian practices. Education is the standard of the development of societies, it is so important to improve the lifestyle of people. On the other hand, it is considered as a cost-effective humanitarian activity, and if the State has often borne this burden, especially in the modern era, it can no longer bear this cost alone. Especially as this cost is increasing continuously, so the private sector must contribute to this, not as a “charity”, but as an investment project for the owner of capital. After the Ministry of Education approved the licensing of many educational institutions, private education became more required, and the complaint about the tuition fees and their unjustified rise appears, however, they are controlled by the agreement between the contracting parties and by signing the contract, the parent has agreed to pay these fees annually. On the other hand, the owners of educational establishments complain about the economic recession in the current crisis, which affects the profits of their enterprises. So, because of the complaints of the parties to the supply and demand, it was important to study the pricing determinants of the tuition fees, to clarify how the owners of educational establishments put the fees, and whether these numbers are acceptable or not.

Besides green strategies, quality of education and sustainable curricula this book looks into knowledge management systems for sustainable development. For instance, Chapter 12 applies the semi-structured discussion approach to organizing seminars in higher education using an undergraduate Health Economics module as a case study. It provides the theoretical rationale by re-investigating the different roles of lectures and seminars in learning and teaching. Evidence shows that it significantly improves the students’ engagement and active thinking in a social learning environment, because a dialectic discussion involving both students and tutors results in a deeper understanding of welfarism and alternative value system, which are the fundamental principles underlying people’s decision-making related to trade-offs between outcome efficiency and procedural fairness. Therefore, this approach is believed to improve the long-term holistic development of students’ values and attitudes towards social, economic, environmental and cultural matters.
Chapter 13 further emphasizes on the barriers in adopting and inter-operating of electronic health records (EHRs as this is an important research gap that needs addressing: limited adaptability negatively effects medical decisions. Though practitioners who use EHR must deal with information overload, they continue to complain that EHR is underutilized. No wonder, medical errors and healthcare (HC) costs are on the rise. Also, there is scant literature evidence on how knowledge management (KM) systems are applied for enhancing the adoptability and interoperability of EHR. On the contrary, researchers focus on adapting electronic patient record (EPR) within KM. HC KM is a very important tool to facilitate interoperability and adaptability of EHR. Its advantages have been proven in other areas. This paper proposes a solution - a conceptual HC KM infrastructure for EHR interoperability and adaptability. This solution reduces EHR adaptability barriers by improving interoperability and enhancing user interaction using KM tools within an e-health environment.

Healthcare (HC) initiatives like electronic health record are promising but due to adaptability and interoperability concern proved a failure. On the other hand, HC initiatives like social networking were reported facilitators of patient care thru innovative decision making (DM) in Virtual Communities (VCs). Chapter 14 assess the relationship between innovation and DM; hence this is the first literature review attempt assessing the relations between social capital, innovation, and DM in virtual environments.

Moving on to the financial sector, managers claim that fresh graduates are unequipped to meet market demands. The aim of this study is to investigate the perception of employers in retail Islamic banks of Bahrain on newly graduated business students. The Singaporean Model of Employability Skills was implemented, to ascertain the mean ratings of employability skills in terms of their importance and the competency of business graduates. Chapter 15 implements a deductive research approach initiated with a literature review that identifies research gap and a model which was tested via a self-administration adopted survey by collected data from 220 senior employees at retail Islamic banks of Bahrain. The systematic of convenience sampling technique was used in selecting 161 samples and the researcher received only 85 completed questionnaire forms. Findings initiate that employers appreciated the importance of teamwork, risk management and decision-making skills. Their main recommendation was that employers should establish a durable bond with universities to enhance employability skills.

Moreover, Chapter 16 studies one of the irreversible factors of the international competitiveness of the companies that are related to the entrepreneurial economic intelligence. The originality of this research lies on the assimilation of the actions related to the identification and the exploitation of opportunities and thus, the entrepreneurial orientation, as an integral part of the entrepreneurial economic intelligence which is able to stimulate the international competitiveness of the companies in the specific case of Tunisia.

Chapter 17 is exploratory research in nature as it aims to explore the impact of Islamic finance on sustainable reporting, the mediator role of green accounting. Sustainability focuses on creating a balance between the present and future consumption to ensure that the basic needs of the coming generations will be met. The mediator role of green Accounting could have a positive impact on sustainable reporting. The paper employs content analysis approaches to explore the environmental impact of Islamic finance on sustainable reporting. Sustainability enhances future environmental aspects of reducing costs and risk management. The mediator role of green accounting is crucial for connecting the Islamic finance funds and the sustainability reporting. The proposed model is designed based on the literature review to conceptualize the mediator role of green accounting, the role of Islamic finance industry and sustainable reporting. The paper adds value to the literature on green accounting, sustainable reporting by looking at role of Islamic finance in promoting friendly environment.
The banking sector plays a critical role in economic development while their activities are also equally responsible for social and environmental damage such as violation of human rights, loss of biodiversity, climate change in Bangladesh. Chapter 18 provides a careful examination of investing and financing activities disclosed in annual reports of 35 selected banks suggest that, while banks are taking several in-house and external green initiatives, many of them are also actively investing and funding projects like shipbreaking that are a threat to environmental sustainability and prone to the human rights violation. This study urges the government, policymakers, and central bank in developing policies and regulating banks; stakeholders in understanding banks’ commitment and actions to safeguard the environment and human rights, and managers in measuring, reporting and mitigating the social and environmental impact through their current and future lending policies.

Finally, Chapter 19 concludes and delves into sustainable development partnerships for the future of our societies. The issue of sustainable development is an urgent question facing future challenges and is recognized alongside with the efforts made to promote qualitative changes, aiming at the adaptation, activation, organization and optimum use of efforts, capacities, and available potentials. So much is said about development, its characteristics and related considerations. However, main features remain to show in this contest. These include objective participation of society, the endeavor towards adapting the features of advanced societies, together with observing social, economic and environmental specifications, and the changes which aim to fulfill essential needs, together with observing issues emanating from social changes.

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