Integrating global sustainability elements into accounting programs: UAE University Business Education case study

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Keywords
Accounting for Sustainability, Accounting Education

Abstract

Sustainability nowadays is on many organizations and governments' agendas. Addressing sustainability challenges and transforming them into opportunities for value creation is part of the DNA of tomorrow's successful companies. As a result, more organizations integrate sustainability into their business strategies and the traditional role of accountants is expanding to provide sustainability reporting and assurance services. In response to this need, graduates of accounting should equip with new skills, knowledge and competences related to the sustainability. The accountancy education and accounting curriculum should raising awareness of the importance of accounting for sustainability, helping to prepare accountants for the organizations they serve and supporting developments in thinking as well as practical tools and guidance as the new accounting graduates should and need to know how to measure and report sustainability activities in the organisation's activities.

The objectives of this research study are two-fold in the first place, to see how far Accounting program in UAE universities have come in integrating sustainability into their various curricula. To do so, the researcher survey the content of the study plan in the Universities offer accounting degree. Second to build model of integration the sustainability into accounting programme either as a stand-alone course or integrating as part of other accounting courses.

The snapshot results of current practice in teaching sustainability in Accounting programmes in UAE universities offering Accounting degree within business education as undertaken by the authors to obtain by searching the University's public website and/or online study plan (whichever held more information about the programme). After doing the content analysis for the study plan the researcher found none of the Business College offer a sustainability Accounting course in Accounting program as a standalone course. All the Business College offer global Awareness course either Compulsory College requirement or General Education or Compulsory supporting courses

1. Introduction:

As the current world population of 7.6 billion is expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100 (United Nations, 2017). This growth will increase demand for limited natural resources that cannot be met if production and consumption remain the same as today. This future trend is creating major challenges in environmental sustainability and social welfare and barriers to sustainable growth in society and business. For developing and emerging economies, which account for 85% of the world's population, sustainability can be very different than it is for developed economies, leading to different priorities. As the McKinsey Global Institute estimates that the world could save $2.9 trillion every year by the year 2030 if it eliminated waste - put simply: if businesses used their resources (raw materials, labour and energy) more efficiently.

Accountants have a leadership role to play in embedding sustainability factors into an organization's strategy and decision-making processes to achieve sustainable value creation and being more transparent and informative on how value is created for stakeholders. Accounting summarizes and submits this information in reports and statements. The reports are intended both for the firm itself and for outside parties.

In other words: Accounting job to provide information to support the decision makers either inside or outside business. The objectives of professional accountants work to the highest standards of professionalism attain the highest levels of performance meet the public's interest. A professional

accountant is expected to present financial information fully, honestly and professionally. Sustainability accounting (also known as social accounting, social and environmental accounting, corporate social reporting, corporate social responsibility reporting, or non-financial reporting) was originated about 20 years ago and is considered a subcategory of financial accounting that focus on the disclosure of non-financial information about a firm's performance to external parties such as capital holders, mainly to stakeholders, creditors and other authorities (Ackers, 2019). These represent the activities that have a direct impact on society, environment, and economic performance of an organisation. Sustainability accounting in managerial accounting contrasts with financial accounting in that managerial accounting is used for internal decision making and the creation of new policies that will have an effect on the organisation's performance at economic, ecological, and social (known as the triple bottom line or Triple-P's; People, Planet, Profit) level. The topic is new and being led in Europe.

Sustainability Accounting is a tool used by organisations to become more sustainable. The most known widely used measurements are the Corporate Sustainability Reporting and the triple bottom line accounting. These recognise the role of financial information and shows how traditional accounting is extended by improving transparency and accountability by reporting on the Triple-P's.

As a result of the triple bottom level reporting, and in order to render and guarantee consistency in social and environmental information the GRI (Global Reporting Initiative), was established with the goal to provide guidelines to organisations reporting on sustainability. In some country's guidelines were developed to complement the GRI. The GRI states that reporting on economic, environmental and social performance by all organizations is as routine and comparable as financial reporting. In order to help finance teams and accountants embed sustainability into their accounting, The Prince of Wales set up The Prince's Accounting for Sustainability Project (A4S) in 2004.

Over the past decade, deans and CEOs have come to acknowledge the importance of sustainability as a strategic concern that should form part of all management education (Hommel et al, 2012). The term 'sustainability' has been long been associated with the Brundtland Commission's definition (WECD, 1987:16), sustainable development "meets the needs of the present without compromising the ability of future generations to meet their own needs", but it has gained momentum over the years, and is now used as an umbrella term that encompasses all the dimensions that contribute to sustainable business operations. As such, it covers organisations' social, environmental and economic performance (Kiron et al. 2012, p. 70), or in other terms, their concern for the triple bottom-line of people, planet and profit (Ten Bos and Bevan, 2011, p. 288).

Higher education is entering a period of demanding challenges, both globally and nationally. Sector bodies and individual institutions are already developing leadership, governance and management systems that actively build on existing experience, but which also drive and support new investment, productivity, service delivery and quality of performance right across the sector. They are developing systems that both reflect past achievements and strengthen the sector through the diversity of institutional missions. Potentially, one important contribution to developing those systems is to be found in what has become known as sustainability accounting. This is a new accounting discipline, emerging from a respected longer-term body of work on environmental accounting, which strives to introduce methods for accounting for social and environmental impacts (positive and negative) that are normally not included in traditional financial accounting processes. The objective is to give a clear and complete picture of the real costs and benefits arising from decisions about allocating resources – financial, human or physical. Since the publication of the DfES Sustainable Development Action Plan and considering Universities UK's draft statement of recommended practice on accounting in further and higher education, higher education will need to be seen to be responding to a wide range of stakeholders on its sustainability performance.

Not everything can be quantified, of course, but using financial systems to help us integrate some non-financial information into reports is an important tool for management and for communication. The purpose of this sustainability accounting enables non-financial (ie environmental and social) considerations to be integrated into traditional financial accounts. Trials of techniques for integrating environmental considerations into traditional accounts have been under way for some years. Methods for broadening these techniques to include social and other non-financial considerations is at an early stage. Sustainability accounting embraces social, economic and environmental dimensions, and strives to

address all three dimensions at the same time. Achieving sustainable development means progressing all the dimensions together.

Sustainability accounting is based on existing financial accounting frameworks. In the UK this is based on a combination of company law, accounting standards from regulatory bodies such as the Accounting Standards Board and the customs used by accounting professionals. These are drawn together in the UK General Accepted Accounting Practice (UK GAAP) and made specific to individual sectors in a Statement of Recommended Practice (SORP). Now, conventional financial accounting and conventional economic measurements do not capture all the consequences of economic actions.

2. Literature review:

2-1 What is the Sustainability?

Many definitions of sustainability and sustainable development exist, but arguably the foremost, and most widely accepted, is from the Report of the Brundtland Commission: Towards Sustainable Development, which states: "Sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs."

Public recognition of the importance of sustainability and sustainable development is changing business culture and society. Two critical global challenges include dealing with national accounting systems that do not comprehensively reflect this progress, and ensuring that organizations embrace their performance on three levels:

1. Economic: goes beyond financial performance to reflect an organization's wider impact on the economy, and recognize that profitability, growth, and job creation lead to compensation and benefits for families and to tax generation for governments;
2. Environmental: relates to the natural resources consumed in delivering products and services, and the environmental impact of the organization's operations; and
3. Social: reflects an organization's impact on people and social issues, which include health, skills, and motivation on the people side, human relationships and partnerships on the social side, and business conduct and ethics.

From a business perspective, achieving sustainable value for investors and stakeholders means that organizations must do more than only complying with external laws and regulations. Taking a sustainable path requires organizations to give back more than they take in relation to critical economic, environmental, and social factors that their business models depend upon.

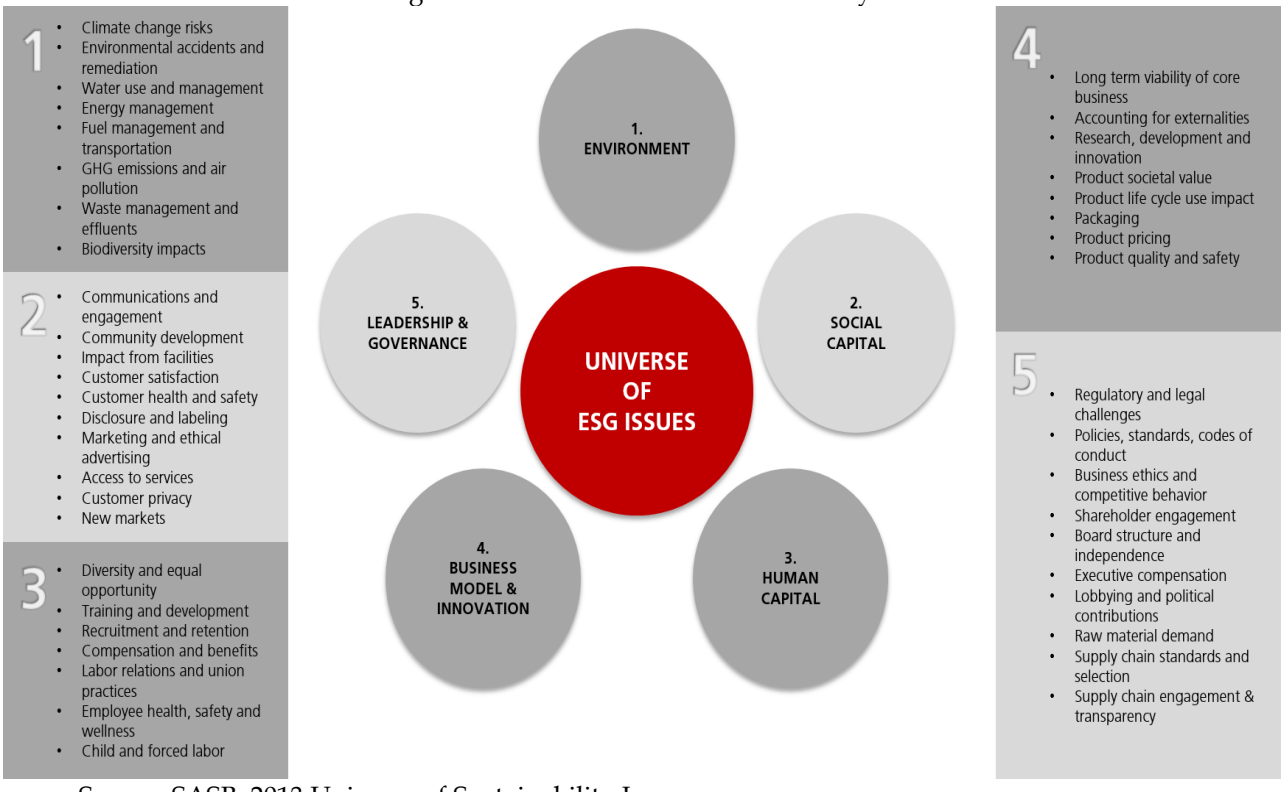
The Sustainability Accounting Standards Board (SASB), 2013 refers to environmental, social and governance (ESG) dimensions of a company's operation and performance. More specifically, sustainability includes both the management of a corporation's environmental and social impacts, as well as the management of environmental and social capitals necessary to create long-term value. It also includes the impact of environmental and social factors on innovation, business models, and corporate governance. Therefore, SASB's sustainability topics are organized under five broad sustainability dimensions consistent with the original ESG nomenclature:

1. **Environment:** This dimension includes corporate impact on the environment, either through the use of non-renewable natural resources as input to the factors of production (e.g., water, minerals, ecosystems and biodiversity) or through environmental externalities or other harmful releases in the environment, such as air and water pollution, waste disposal and greenhouse gas (GHG) emissions.
2. **Social Capital**: This dimension relates to the perceived role of business in society – or the expectation of business contribution to society in return for its social license to operate. It addresses the management of relationships with key outside stakeholders, such as customers, local communities, the public, and the government. It includes issues around access to products and services, affordability, responsible business practices in marketing, and customer privacy.
3. **Human Capital:** This dimension addresses the management of a company's human resources (employees and individual contractors), as a key asset to delivering long-term value. It includes factors that affect the productivity of employees, such as employee engagement, diversity, and

incentives and compensation, as well as the attraction and retention of employees in highly competitive or constrained markets for specific talent, skills, or education. It also addresses the management of labor relations in industries that rely on economies of scale and compete on the price of products and services, or in industries with legacy pension liabilities associated with vast workforces. Lastly, it includes the management of the health and safety of employees and the ability to create a safety culture for companies that operate in dangerous working environments.

4. **Business model and innovation**: This dimension addresses the impact of environmental and social factors on innovation and business models. It addresses the integration of environmental and social factors in the value creation process of companies, including resource efficiency and other innovation in the production process, as well as product innovation and looking at efficiency and responsibility in the design, use-phase, and disposal of products. It also includes management of environmental and social impacts on tangible and financial assets – either a company's own or those it manages as the fiduciary for others.
5. **Leadership and Governance:** This dimension involves the management of issues that are inherent to the business model or common practice in the industry, and that are in potential conflict with the interest of broader stakeholder groups (government, community, customers, and employees), and therefore create a potential liability or worse, a limitation or removal of license to operate. This includes regulatory compliance, lobbying, and political contributions. It also includes risk management, safety management, supply chain and resource management, conflict of interest, anti-competitive behavior, and corruption and bribery. It also includes risk of business complicity with human rights violations.

Figure 1: SASB Universe of Sustainability Issues



Source: SASB, 2013 Universe of Sustainability Issues

2-2 Why is Sustainability Important?

The world population will grow from seven billion people in 2012 to nine billion in 2050. This growth will increase demand for scarce natural resources that cannot be met if production and consumption remain as they are today—creating major challenges in environmental sustainability and social welfare and barriers to sustainable growth in society and business.

The importance of sustainability and corporate responsibility are gaining wide recognition and are increasingly embraced by international institutions, governments, regulators, and growing numbers of investors, stock exchanges, and organizations.

Organizations that embrace sustainability can enhance both their reputation with stakeholders and their value over the longer term. In the Impact of a Corporate Culture of Sustainability on Corporate Behavior and Performance, published by the Harvard Business School, "high sustainability" companies dramatically outperformed the "low sustainability" companies in both stock market and accounting measures, over an 18-year period.

How organizations manage sustainability factors will increasingly determine how well they perform financially and whether they can deliver sustainable business value to shareholders and other stakeholders.

2-3 Global Perspectives on Sustainability

Numerous international frameworks, standards, and benchmarks cover the various elements of sustainability. At least ten global treaties to protect the environment have been negotiated in the past three decades, and the number of regional and bilateral agreements is even higher.

For the past 20 years, corporate sustainability has been largely defined by people and institutions in the west, particularly Europe. But with the current global shift in economic balance, countries like India and China are redefining the landscape. Multinational corporations have a significant role to play in incentivizing sustainable development in many economies. For developing and emerging economies, which account for 85% of the world's population, sustainability can be very different than it is for developed economies, leading to different priorities. Many developing and emerging economies are attempting to balance green growth with inclusive growth; while green business initiatives can inhibit inclusion of the poor, these two elements of sustainable development should be linked to address the multiple challenges in low-income markets. In some jurisdictions, corporate governance requirements are being expanded to require directors to take a longer-term perspective and to incorporate a wider range of stakeholders and issues in their decision making and accountability. For example, the premise of the King III Corporate Governance Framework in South Africa is that business strategy, corporate governance, and sustainability are inextricably linked.

The Sustainability Accounting Standards Board (SASB) which provides sustainability accounting standards for use by publicly listed corporations in the U.S. in disclosing material sustainability issues for the benefit of investors and the public. SASB standards are designed for disclosure in mandatory filings to the Securities and Exchange Commission (SEC), such as the Form 10-K and 20-F. SASB is an independent 501(c)3 non-profit organization and is accredited to set standards by the American National Standards Institute (ANSI). In 2013, SASB issued conceptual framework sets out the basic concepts and definitions behind SASB's sustainability accounting standards (the SASB Standards) and serves as additional guidance for the adoption of the standards by corporations and the use of material sustainability information by investors.

Australian Research Institute in Education for Sustainability. (ARIES). (2010) report Sustainability in key professions: Accounting. An action research program. This report provides the outcomes and recommendations emerging from an action research program which aimed to create change for sustainability in the accounting profession and in the operations of accounting schools and disciplines within accredited institutions.

2-4 The Role of Accountants and the Accountancy Profession

Accountants have a leadership role to play in embedding sustainability factors into an organization's strategy and decision-making processes to achieve sustainable value creation and being more transparent and informative on how value is created for stakeholders.

Accounting for sustainability is fundamentally about improving business decision making in:

- Responding to uncertainty and risk, and seizing growth opportunities through developing existing and new markets;
- Innovating processes, products, and services that can provide societal benefits;

- Driving operational efficiency and lowering costs by way of lean operations; and
- Inspiring people including employees, customers, and suppliers.

Accountants' and finance professionals' roles in this area are increasing, primarily among larger organizations and at senior levels. For example, in a 2012 Deloitte Touche Tomatsu global survey, 26% of CFOs said that they are accountable to the board for their company's sustainability strategy—a 9% increase over 2011. Most CFOs (53%) said their involvement in sustainability increased in the previous year; even more (61%) expect greater involvement in sustainability over the next two years.

According to various surveys, including the IFAC SMP Quick Poll, accounting practices are increasingly providing sustainability services to their clients. These services include advisory, accounting, and assurance, with the former the most common.

In response to this need, the accountancy profession is raising awareness of the importance of accounting for sustainability, helping to prepare accountants and the organizations they serve, and supporting developments in thinking as well as practical tools and guidance. In conjunction with others, the profession is leading multiple initiatives to help accountants, clients, and organizations embrace management practices and processes that help integrate sustainability into decision making.

IFAC works closely with the Prince of Wales' Accounting for Sustainability Project (A4S), which emphasizes the importance of the connection between accounting and sustainability, and The Economics of Ecosystems and Biodiversity (TEEB) for Business Coalition, which is developing guidance to successfully incorporate natural capital into strategy and decision-making processes. In addition, IFAC is significantly involved with the International Integrated Reporting Council (IIRC), which is developing an international framework to help organizations report how strategy, governance, performance, and prospects lead to the creation of value over the short, medium, and long term. IFAC also supports the Climate Disclosure Project's Climate Disclosure Standards Board, which issued the Climate Change Reporting Framework, and the Global Reporting Initiative.

In 2011, CIMA report on Sustainability and the role of the management accountant, this report looks at a 2010 survey of managing directors, accountants and sustainability managers, working for a range of organisations in New Zealand. The survey found that only a minority of accountants were involved in setting their company sustainability strategy, as most continued to be seen under their more traditional role of financial specialist, rather than for their ability to collaborate towards sustainability goals. The report also highlighted that as there is a worldwide move toward 'integrative' reporting incorporating non-financial as well as financial data, management accountants are ideally placed to provide the alignment mechanisms and collaborate with senior management in producing fully integrated reports, reflecting sustainable strategies adopted by organisations which fulfil the needs of stakeholder groups.

In 2013, ACCA brought together a group of sustainability professionals and practitioners to discuss the business benefits of sustainability reporting in Singapore. During the roundtable, participants strongly advocated for management ownership of the sustainability reporting process and emphasized the fact that reporting has the most benefits for companies when it is strategic and reports specific targets, such as improving diversity or reducing energy consumption. A misunderstanding of the objectives of reporting may cause the production of reports of limited value to consumers and stakeholders, but reporting frameworks provide a valuable benchmarking tool for companies and stakeholders. Also, there has been little momentum observed towards reporting in Singapore, with neither companies nor stakeholders pushing for reporting as a practice or goal. The benefits of sustainability reporting are not clearly understood within companies, either by leadership or employees.

There is a skills gap between what is required to create a comprehensive sustainability report and what companies have available and are willing to commit to the task. While frameworks can be useful for stakeholders, there is confusion over the number and variety of frameworks.

ACCA report recommended to educate companies and stakeholders on the relevance of sustainability issues. Arguably, this responsibility lies with the organisations and institutions which want to see increased sustainability disclosure, such as responsible investors, NGOs, special interest groups, consumers, governments, and stock exchanges. Also, to build awareness that the process of reporting is integral to the long-term strategic goals of companies. Companies and regulators should continue to raise

awareness of sustainability and the benefits of sustainability reporting as mandating sustainability reporting may not be conducive to the production of comprehensive and useful reports.

2-5 Purpose of sustainability accounting and disclosure

The purpose of sustainability accounting is to evaluate the environmental, social and governance performance of companies through an account of their management of various forms of non-financial capital associated with sustainability– environmental, human and social – and corporate governance issues, which they rely upon for sustained, long-term value creation1. Ultimately, the goal of sustainability accounting and disclosure is to inform development of an integrated business strategy for corporate management and assess sustainability risks and opportunities inherent to investment decisions.

Sustainability accounting and disclosure is intended as a complement to financial accounting, such that financial information and sustainability information can be evaluated side by side and provide a complete view of a corporation's performance and value creation, both financial and non-financial, and across all forms of capital.

2-6 Approaches to integrating sustainability within the business school curriculum

Increasingly, universities are addressing environmental sustainability issues by modelling ecologically sound practices and supporting the integration of sustainability into the curriculum (Bacow and Moomaw, 2007; Burritt, 2012).

In a seminal paper on sustainability in higher education Sterling (2004) proposes three potential levels of response by educational institutions to the challenge of teaching sustainability:

1. Educating about sustainability – an accommodative response
2. Education for sustainability – a reformative response
3. Capacity building – a transformative response

The first level is the most basic, with sustainability modules being added to the educational offer. The second level takes this further, with the institution itself being transformed by the adoption of more sustainable approaches. The third level is much more substantial, making the educational institution a place where students are transformed by the adoption of skills for sustainability. Muff et al (2013) criticise existing outcome measures for business schools and propose that their aim to be amongst the best business schools in the world should be revised to be the best for the world. The problem that emerges from the available models for integrating sustainability into the curriculum is that it suffers from some of the persistent problems haunting all management education, which can be described as its 'science-envy', its myopic orientation, and the existence of specific drivers such as accreditation, publishing criteria and rankings (Painter-Morland, 2015). Furthermore, Hühn (2013) has demonstrated that the MBA education fails in several ways. Firstly, students learn tools in their MBA education to solve cases, yet they do not reflect reality. They are encouraged to adopt a 'value-neutral' approach and to solve cases as facts; these are often made to fit the theory.

International Federation of Accountants (IFAC) study on how accountants can contribute to business sustainability (Accounting for Sustainability. From Sustainability to Business Resilience, 2014) which highlights the important role accountants can, and must, play in embracing sustainability challenges. It also provides guidance on how to ensure that the organisations that accountants serve are resilient, by linking these challenges to a broader business agenda and strategy. IFAC suggests eight practical ways for accountants to make a difference and fulfil their role as business partners:

Identify and connect key trends and impacts to the organisation's strategy, business model and performance.

- Integrate significant natural and social capital issues into decision-making processes.
- Assess the benefits of tackling environmental and social issues (eg cost reduction; revenue generation).
- Organise internal systems and processes to ensure what matters is measured and managed.
- Link the strategy and resources to the creation of value for stakeholders.
- Drive efficiency by reducing waste and controlling costs.

- Provide credibility to the information and data produce through effective oversight and governance.
- Communicate clearly to ensure transparency.

The briefing examines the link between sustainability and business resilience, how integrating sustainability leads to better performance, and the key elements of developing a sustainable strategy and business model.

It also includes references and links to some of the many resources and tools available to help develop knowledge and skillsets.

3-. Research methodology

The objectives of this research study are two-fold in the first place, to see how far Accounting program in UAE universities have come in integrating sustainability into their various curricula. To do so, the researcher survey the content of the study plan in the Universities offer accounting degree. Second to build model of integration the sustainability into accounting programme either as a stand-alone course or integrating as part of other accounting courses.

Number of Licensed Institutions by Commission for Academic Accreditation (CAA) and MOHE Recognized Institutions: 79

Number of Institutions offer BA Business - Accounting: 35

Source: https://www.caa.ae/caa/DesktopModules/Institutions.aspx

4- Results

The snapshot of current practice in teaching sustainability in Accounting programmes in UAE universities undertaken by the authors to obtain by searching the University's public website and/or online study plan (whichever held more information about the programme).

The main questions are:

1. Does the course overview / introduction / summary mention 'sustainability'?
2. Is there a statement that sustainability is integrated into the curriculum (i.e. may be taught within modules not specifically about sustainability)?
3. Are there one or more individual modules with 'sustainability' in the title? If so, are they compulsory?
4. Where are they located in the programme?

After doing the content analysis for the study plan the researcher found none of the Business College offer a sustainability Accounting course in Accounting program as a standalone course. All the Business College offer global Awareness course either Compulsory College requirement or General Education or Compulsory supporting courses

Table: 1: List of Higher Education in different Emirates has CAA accreditation

United Arab Emirates	No of Universities	No of Universities offer Business/Management/Accounting degree
Emirate of Abu Dhabi	18	10
Emirate of Dubai	31	22
Emirate of Sharjah	7	4
Emirate of Ajman	4	3
Emirate of Ras Al Khaimah	3	2
Emirate of Fujairah	2	2
Emirate of Umm Al Quawain	1	1
Total	66	44

Source: CAA Portal www.caa.ae accessed 30th April 2019

5. Conclusion and implications

Some aspects of sustainability and accounting education are explored in this research. Literature research findings form the International Accounting bodies suggest that there is strong support for the inclusion of sustainability in business and accounting curricula. Sustainability should be integrated with

all accounting courses; Accounting program should offer more courses in sustainability as part of the University role to produce the graduates who are ethical and socially responsible and positive contributions to the society.

Further research needs to reveal that in sustainability teaching, real examples and case studies should be used. Embedding sustainability not just to an end develop future graduates who can articulate and act on societal challenges. Depth and quality sustainability in Accounting programme rather than introduction to everything through business courses or university general requirements as teaching the students to do the "right thing" and do the "thing right" in a complex world. Accounting educators should develop the capabilities of students to be future generators of sustainability value for business and society at large. Accounting educators should incorporate into academic activities and curricula the values of sustainability and should create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible graduates.

Accounting educators should interact with managers of business corporations to extend knowledge of challenges in meeting sustainability, social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges. Also, Accounting educators should facilitate and support dialogue and debate among educators, students, business, civil society organizations and other interested groups and stakeholders on critical issues related to sustainability within the social responsibility.

6- Further research

Studying details of the following Accounting and Finance courses to explore how they integrated sustainability within the course materials Financial accounting, Managerial Accounting, Cost Accounting, Auditing, Banking, Financial management, Financial Reporting.

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