

## Developing Skilled Accounting Graduates through Sustainability Accounting Education for Improved Sustainability Reporting in South Africa: Challenges and Prospects

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**ABSTRACT** This study, rather than attempting to outline a grand curriculum design or plan for implementing a sustainability accounting education for South African universities, identifies key issues inhibiting its inclusion in the accounting programmes. Nonetheless, the study discusses efforts by the University of Limpopo accounting school to promoting sustainability accounting education, including the challenges inhibiting its development and acceptance among academics and students alike. Findings revealed that developing skilled accounting graduates to sustain the provision of sustainability reporting in South Africa is at its lowest ebb. One major reason is the very few accounting academics involved in sustainability accounting discourse. Developing future accounting graduates with relevant skills to provide sustainability financial and non-financial information will have great influence on how social, economic and environmental issues are reported in companies' annual integrated reports in South Africa. This is also relevant to countries that have either implemented sustainability reporting or plans to implement it in the near future. Developing skilled accounting professionals is the key to ensuring credibility and reliability of sustainability reports for the sustenance of the King III Sustainability Reporting Code of Governance in South Africa.

### INTRODUCTION

The growing awareness in national and international policies of the need to integrate sustainability into both business and educational arenas, is a major issue in the twenty-first century (Rusinko 2010b). This growing awareness has encouraged organisations to develop an interest in hiring sustainability literate graduates (Lozano et al. 2013). Increasingly, organisations are being required by stakeholders to address sustainability by exploring and implementing sustainable business practices to improve both the environment and their own competitiveness (Rusinko 2007). Since sustainability reporting has become a major issue for organisations around the world due to increasing policy pressures to be accountable and transparent about sustainability activities (Gray 2001), higher education certainly has a role to play by exploring means to integrate sustainability in higher education curricula (Rusinko 2010a). While there have been a growing number of studies on how to integrate sustainability in higher education over the past years, some had focused on individual courses or programmes (Rusinko 2010a; Stephens and Graham 2010; Brundiers and Wiek 2011). There is a dearth of

studies on integrating sustainability into accounting education in South Africa. Hence, De la Harpe and Thomas (2009) reiterate how ideally and well-placed universities are as change agents to address long standing issues about climate change impact, environmental protection and sustainability problems.

Organisations around the world are expected to document and report their sustainability activities to stakeholders (GRI 2013). It is expected that through the sustainability reports, stakeholders can assess the organisations' sustainability performance against sustainability targets. Indeed, the Global Reporting Initiative (GRI) is the dominant Corporate Social Responsibility (CSR) whose regulations are used by organisations around the world (GRI 2013). The consequences of global climate change have made both internal and external stakeholders to increase pressures on organisations to measure and report on their social and environmental performance, over and above the usual financial reporting measures (Sarkis et al. 2010). Pressures from capital market regulators such as the Dow Jones and the Johannesburg Stock Exchange (JSE) have increased pressures on organisations to make non-financial disclosures about growth in their socially responsible investment (SRI)

(Ballou et al. 2006). However, prior to 1997, social and environmental performance reporting from organisations were considered diverse, incompatible, varied, inconsistent, incomplete, incomparable, irregular, non-standardised, and time-consuming (Willis 2003).

The GRI was developed to elevate sustainability reporting practices to a level equivalent in rigour, comparability, auditability, and general acceptance to that of financial reporting (Willis 2003). Nevertheless, the strength of the GRI is its ability to attract a broad section of businesses to its process. In contrast to the global trends in sustainability reporting in Europe and America, South African companies' key motivation for providing integrated sustainability reporting is centred on the listing requirement of the JSE (Integrated Reporting and Assurance Services (IRAS) 2012). Sustainability reporting is not just about providing stakeholders with a published document for compliance purpose (Gao and Zhang 2006), but a process that takes a closer look at the impact of business operations in relation to its environment and society, reporting those negative and positive impacts to the stakeholders, and setting achievable goals to help the organisation move towards more sustainable business practices (GRI 2013). This study addresses the need to develop sustainability reporting skills in South Africa through sustainability accounting education. This has become necessary to develop and ensure the continued provision of sustainability literate accounting graduates to organisations for more accountable, transparent and reliable sustainability reports and credible sustainability cost data for improved decision-making about issues of social and environmental safety while remaining competitive at the same time.

### **Theoretical Framework**

Emerging literature on sustainability in higher education is varied and dominated by empirical and descriptive studies of specific approaches, strategies, and initiatives at specific institutions (M'Gonigle et al. 2006; Stephens and Graham 2010). In South Africa, sustainability accounting related studies is at its lowest ebb. According to Tibury and Wortman (2004), sustainability education needs to be customised for individual learners in all disciplines. This means that various disciplines need to develop a peculiar

approach to teach sustainability to its learners. In that case, there is need to approach sustainability in a manner that allows higher education institutions to shape issues that concern our common future (WCED 1987). Sustainability within the context of this study means: "Development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED 1987). The concept of sustainability is anchored in social, economic, and environmental balances for current and future survival of the planet. As such, efficient resource usage will ensure that future generations have resources they need to survive. Adopting sustainability practices throughout all aspects of human endeavour, especially in business operations, will promote a safe environment for both society and businesses as well (Daily and Huang 2001). However, business sustainability involves the management of the triple bottom line, a process through which organisations manage their social, economic and environmental risks, obligations, and opportunities (Aguilera et al. 2007). Even more, there are a number of best practices to ensure that sustainability practices are embedded into organisational strategies. Some of these best practices include stakeholders' engagement, environmental management systems (EMS), life cycle analyses, and reporting and disclosure. Under these circumstances, the demand by regulations for organisations to consistently provide sustainability reports as part of annual integrated reports require the integration of sustainability principles and concepts into universities' accounting programmes.

### **The Higher Education Sustainability Initiative for Rio+20**

The United Nations Conference on Sustainable Development (UNCSD) in 2012 provided a forum where leaders of the international academic community declared their commitment to the development of sustainable practices for Higher Education Institutions (HEI) (UNCSD 2012). This is to ensure that efforts are geared to ensure sustainable development for the benefit of present and future generations (WCED 1987). Accordingly, the HEI initiative seeks to secure commitment and to provide assessment on progress made on sustainable development in order to address new and emerging challenges

in its implementation (UNCSD 2012). With this intention, the HEI is considered an important avenue for sustainable development because higher institutions have the role of training future decision-makers for the workplace. Notwithstanding, this initiative is to promote sustainable development by disseminating new knowledge and insight to students and to develop their sustainability capacity through research and teaching (UNCSD 2012). Besides, this is a positive indication to ensure that higher education institutions are well positioned to provide the needed leadership for sustainable development. Consequently, higher education institutions will be able to provide sustainability education to students that aims to ensure they acquire the necessary values, skills, competencies and knowledge so that they too can contribute to building a more sustainable society.

There have been many studies on the role of the university in sustainability education (Lozano 2006; Mulder 2010; Stephens and Graham 2010). Likewise, sustainability education is in response to a growing societal concern about environmental degradation and the need to ensure a sustainable society (Stephens and Graham 2010; Sisaye 2012). However, the growing awareness for a sustainable society has witnessed a shift in governments' policies from mere legislation to the need to integrate sustainability education into educational curricula (Djordjevic and Cotton 2011). Hence, universities, as traditional institutions, have a distinctive organisational culture that values and fosters change through interactions of the different individuals on campuses that are best placed to promote learning that can potentially improve understanding of the interface between organisational as well as environmental and societal change (Lozano 2006; Stephens and Graham 2010). Universities, as providers of education and training, have a huge responsibility to embed sustainability into their curricula across all disciplines. Such sustainability education needs to transcend academic disciplines by preparing new accounting graduates with necessary sustainability skills to deal with future sustainability reporting challenges that will likely affect the society.

### **Improving Sustainability Reporting through Sustainability Accounting Education**

Sustainability reporting is a means through which organisations communicate their social, environmental and economic activities and per-

formance to their stakeholders (Deegan 2002). According to AICPA (2013), sustainability accounting involves linking sustainability initiatives to company strategy, evaluating risks and opportunities, providing measurement, accounting, and performance management skills to ensure that sustainability is embedded in the day-to-day operations of the organisation, hence the concept of sustainability accounting education. In this study, the concept of sustainability accounting education involves the development of sustainability curricula within the higher education system specifically to develop sustainability skills among accounting graduates to generate quality sustainability information about an organisation both in monetary and physical terms. This is to ensure that sustainability reporting among companies, especially in South Africa, is consistent and comparable. The requirement to report on the social, environmental and economic activities to stakeholders annually by South African companies are on the increase through an integrated reporting system which contains conventional financial information, operational data, and sustainability information (IOD 2009). More importantly, an integrated reporting system is designed to incorporate social, environmental, and economic performance reports into the existing conventional financial reporting system to external stakeholders (Gray 2006). To this end, the International Integrated Reporting Council (IIRC) encouraged a revolutionary change in the reporting systems of organisations to its stakeholders by including their environmental activities in current reports (Soyka 2013).

In South Africa, the King III sustainability reporting is an initiative that requires organisations to report on an annual basis their environmental activities to stakeholders (IOD 2009). But there are skills shortages among existing accountants to provide organisations with reliable sustainability financial and non-financial information for inclusion in their annual reports (Jinabhai 2005). For this reason, the future sustenance of the King III sustainability reporting requirement in South Africa may therefore be under threat. Hence, in order to sustain this sustainability reporting requirement trend, a more holistic approach is needed to ensure that future accountants are well educated to meet the skills demand for generating accurate financial and non-financial sustainability information.

Moreover, this step will ensure that organisations are consistently provided with adequate sustainability financial and non-financial information to enable business managers make sound environmental decisions. Anyway, the need to transform business strategies into KPIs to effectively measure corporate sustainability practices cannot be over-emphasised since organisations are increasingly requested to publish separate sustainability reports annually. Actually, this report should highlight an organisation's environmental impact on society. Indeed the development and application of sustainability reports add credibility to social, environmental, and sustainability reporting by organisations worldwide (GRI 2013).

Integrating sustainability accounting into universities' accounting programmes may be a good strategy to help develop new and sustained skills to achieve the sustenance of the King III sustainability reporting initiative in South Africa. Such a strategy will help to lift awareness within learner groups and educators. Sustainability accounting education will help to emphasise the linkages and interdependencies of the social, environmental, and economic dimensions in accounting professionals (Schaltegger and Burritt 2010). The teaching of sustainability accounting to accounting learners will assist the accounting learner to understand and acknowledge the interrelationships of the accounting profession, the organisation, and the environment in which they exist (Burritt 2005). Specifically, providing sustainability information in annual reports will help the accounting professional underpin the relationship between the way in which organisations use and share resources and the impact of its activities on the environment. Moreover, the non-inclusion of sustainability accounting in South African universities' accounting programme may limit the development and sustenance of new skills to sustain the King III sustainability reporting initiatives. Specifically, organisations may provide sustainability reporting to stakeholders for some of the following reasons: *Good corporate image*: the ability to provide both financial and non-financial data on an organisation's sustainability activities in its annual financial report will improve the organisation's corporate image and sustainable performance (Dey et al. 2011). *Legitimacy*: it ensures that organisations are compliant with the requirements of the King III on

sustainability reporting (Castelló and Lozano 2011; Du and Vieira Jr 2012). *Stakeholders' retention*: since most investors have become environmentally conscious, a good report and analysis of an organisation's environmental and sustainability impacts in its annual financial reports will ensure that investors remain loyal to the organisation (Lee 2012). *Fulfil ethical and corporate social responsibility*: as part of an organisation's ethical and Corporate Social Responsibility (CSR) reporting on its environmental impact and its effort to reverse its negative impact helps to promote its social responsibility (Carroll and Shabana 2010).

In South Africa, the focus has been on sustainability reporting as championed by the King III sustainability reporting requirement for all listed companies on the Johannesburg Stock Exchange (JSE) (IOD 2009). This requirement ensures that companies report their environmental footprint to stakeholders in conformity with GRI. The King III code of governance is a regulatory requirement of the Johannesburg Stock Exchange (JSE) for organisations to provide sustainability reports (IOD 2009). This reporting initiative is designed to shift the focus of corporate accountability and its reporting approach towards integrated reporting, both in reporting form and purpose. The major goal of this reporting shift is to encourage corporate sustainability practice among organisations and to promote sound and quality sustainable decisions (IOD 2009). But the quality of sustainability decisions depends on the quality of sustainability information available to managers. Consequently, the manner in which an organisation's sustainability reporting is captured and reported may have profound implications for future sustainability practices among business entities.

Despite efforts by most organisations in South Africa to provide sustainability reporting as part of the integrated reports, an increasing demand for sustainability disclosure poses a great challenge to measurement and assurance of sustainability reports (Eccles et al. 2012). In the same way, the requirement for a sustainability report challenges the role of accounting education in providing required qualified accounting graduates with sustainability skills to business and society. Specifically, South African universities accounting schools and departments have the responsibility to provide the requisite training for would-be accounting profes-

sionals. In contrast, the shift in universities in various parts of the world is the integration of sustainability education into curricula of various disciplines including accounting (Cussik 2009; Rusinko and Sama 2009). Similarly, there have been a growing number of studies on how to integrate sustainability education into higher education and training in South Africa; some of these researches have focused on science, social work, and general studies (McGrath and Akoojee 2009; Ferguson and Smith 2012). Indeed, sustainability accounting has remained a relatively underdeveloped curriculum in South African universities. If this be the case, the situation is a threat to the survival of the King III sustainability reporting requirements for organisations. The accounting profession is becoming increasingly important in providing financial and non-financial information to organisations' managers on sustainability activities and impacts for sound strategic decisions (Yakhou and Dorweiler 2004). Therefore, the non-inclusion of sustainability accounting in universities' curricula can jeopardise the objective of the King III sustainability reporting initiative.

#### METHODOLOGY

This study, rather than attempt to outline a grand curricula design or plan for implementing a sustainability accounting education for South African universities, identifies key issues inhibiting its inclusion in accounting programmes. Nonetheless, the study discusses efforts by the University of Limpopo accounting school at promoting sustainability accounting education, including the challenges inhibiting its development and acceptance among academics and students alike. This study addresses the need to improve and sustain required sustainability reporting skills in South Africa through sustainability accounting education in universities. An analysis of findings based on interviews and an inquiry through telephone calls to accounting programme coordinators and a search through relevant material on accounting curricula in these universities' websites was juxtaposed to provide arguments for the inclusion and integration of sustainability into accounting education to develop future generations of sustainability skilled and literate accountants to provide quality sustainability reports.

#### OBSERVATIONS AND DISCUSSION

##### **Sustainability Accounting at the University of Limpopo**

Until recently, concepts of environmental and sustainability accounting have never been taught at the University of Limpopo. Nevertheless, with the recent change in the accounting programme at the university, a research focused niche area had been developed which require that exit level (honours) students do a mini-research linking sustainability accounting to any of the core areas of the accounting discipline. However, this strategy did not include the development of specific materials to integrate the teaching of sustainability accounting to specific modules because academics who were generally interested in sustainability issues did so only for research purpose. Owing to this fact, sustainability accounting related issues focused on working with the Environmental and Sustainability Management Accounting Network (EMAN) through a process to encourage students (honours and masters) and academics to show interest. Currently, the School of Accountancy at the university have set up an African Centre for Sustainability and Environmental Management Accounting (ACSEM) to promote the study of sustainability-related issues. Eventually the centre proposes to, where necessary, in the nearest future to integrate environmental and sustainability aspects into existing and new curricula. But without the resources to support this proposition in terms of interested academics and because of the high rate of staff mobility, the initiative may languish.

The initiative suffered for want of sustained motivation for the few academics involved as some of them have been lured to other institutions. Although, there was enthusiasm from the academics who were directly involved, extending the interest and opportunities to other staff members within the accounting programme through staff training and development have proved difficult. Some of the interested academics were able to integrate sustainability accounting into the master of business administration (MBA) curricula to broaden the sustainability accounting literacy.

##### **Challenges and Prospects**

The study identifies a clear need for training in sustainability accounting education. This study provides an understanding that, while it

is expedient to have good legislation to promote compliance with sustainability values, there is need to have a corresponding scheme to develop new skills in sustainability accounting to generate the required sustainability information in annual reports on a regular basis (IOD 2009). Developing such required skills will necessitate the training of accounting academics to develop the course contents and to ensure its sustenance.

#### ***Absence of Sustainability Accounting Literate Academics***

However, many South African universities' accounting programmes responsible for training accounting graduates do not have sustainability accounting as part of their curricula. This is due mainly to the lack of exposure to, and the unavailability of, sustainability accounting academics. Moreover, there are some significant limitations to integrating sustainability accounting into many of the universities' accounting programmes in South Africa. Findings revealed the lack of qualified and competent academics to train future accounting graduates on sustainability issues because of the apathy of accounting trainers in matters relating to sustainability. This response from one accounting academic confirms this assertion.

*'I do not understand the concept of sustainability before now. I was wondering how accountants fit into the picture since it is about climate change?'*

The need to train the trainers at the various universities has become imperative if the King III Sustainability initiative is to be sustained as reflected in the curricula of the 23 public universities in South Africa.

#### ***Little Sign of Sustainability Accounting Education***

Although there is a centre for sustainability studies at the Stellenbosch University in South Africa, sustainability accounting education is not included in its offering. Findings show no sign of sustainability accounting in any of the remaining South African universities' undergraduate accounting programmes, except at the University of Limpopo which had a centre dedicated to training researchers at the masters and doctoral level. According to one accounting academic:

*'Initially, I did not quite understand the need for accounting for sustainability. But after reading some articles on sustainability accounting, I became gradually interested in the concept and would like to do studies in this area.'*

The perceptions among undergraduate accounting students generally show the lack of understanding about the sustainability accounting concept. One of the students responded as follows when asked about his understanding of the concept of sustainability accounting:

*'I knew about sustainability but about the concept of sustainability accounting; that was a bit puzzling'*

The inclusion of sustainability in accounting curricula has therefore become imperative for South African universities if the King III sustainability reporting initiative is to be sustained.

#### ***Low Level of Sustainability Accounting Awareness***

However, the level of awareness and commitment in South African universities' accounting programmes need to be improved upon to provide quality sustainability accounting education that will ensure the sustenance of the King III sustainability reporting code of governance. Nevertheless, developing future accounting graduates with relevant skills to provide sustainability financial and non-financial information will have great influence on how social and sustainability issues are reported in companies' annual integrated reports in South Africa. Incidentally, over 400 JSE listed companies report on their corporate responsibility in South Africa at the moment (IRAS 2012). Consequently, for quality of material reported, consistency in reporting, and comparability of reports, it is necessary to educate and train on an on-going basis sustainability literate accounting professionals in the art of sustainability reporting. Hence, in order to sustain the trend of sustainability reporting, it is necessary to develop accounting professionals with specialised skills over and above that provided by regular accountants. Subsequently, the non-inclusion of sustainability accounting in the curricula of accounting programmes in universities will negatively impact the sustenance of the King III sustainability reporting initiatives both at present and in the future (Cussik 2009; Rusinko and Sama 2009).

### Implications for Practice and Society

A major significance of sustainability accounting education for practice and society is the improvements it will bring on social and environmental performance of organisations through the gathering and accessing of quality and reliable sustainability information. This will invariably improve organisations' sustainability practices as well as their sustainability strategy. While current sustainability reports are outsourced, organisations will, in the long-term, have adequately trained and skilled accounting professionals that can deliver quality sustainability reports. Consequently, these trained accounting professionals will be able to produce unbiased sustainability reports in comparison to that of a contractor. It can be argued that the integration of sustainability into accounting programmes curricula in South Africa will help sustain a continued supply of sustainability literate accounting graduates to organisations who are required to be accountable and transparent about sustainability activities as well as to adapt to future changes when necessary. Notwithstanding, for organisations to limit their environmental impact and make strategic sustainability changes and ensure sustainable business practices, adequate and reliable sustainability financial and non-financial information is needed by managers to make sound decisions. It is, therefore, imperative for universities to develop new skills through sustainability accounting education so as to meet the requirements for sustainability reporting and related challenges that may emerge now and in the future.

### CONCLUSION

The study highlights the lack of training opportunities to equip professionals with skills to sustain the King III sustainability reporting initiative in South Africa. A significant implication of this is an obvious gap in the provision of relevant sustainability accounting training. This study argues that making sustainability accounting education a part of every intending accounting graduate's learning experience is achievable. Achieving this goal will require greater commitment and engagement among accounting academics in sustainability education. It is necessary that accounting academics have a clearly articulated framework for sustainability educa-

tion to educate learners about the connection between the accounting profession and sustainability. Academics with experience in sustainability issues should incorporate it in their curricula to develop accounting graduates with attributes of self-efficacy and improve capacity within the sustainability accounting discipline. This will require the training of accounting academics that will deliver enriched curricula. This can be done through specialised sustainability training workshops and inclusion into accounting programmes curricula to raise awareness among accounting academics and professionals about the social and moral implications associated with sustainability issues in professional practice. Developing future accounting graduates with relevant skills to provide sustainability, financial and non-financial information will have a great influence on how social, economic and environmental issues are reported in companies' annual integrated reports in South Africa. This is also relevant to countries who have either implemented sustainability reporting or plans to implement it in the near future. Therefore, the integration and implementation of sustainability accounting into accounting programme curricula in South African higher learning will ensure the sustenance of the King III sustainability reporting code of governance. The study suggests that further research will be useful to develop a sustainability accounting framework to provide a standardised teaching curriculum in all South African universities.

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