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The conceptualisation of sustainability by tomorrow's managers.

By

CHRISTINE PARKIN HUGHES

A thesis submitted to Plymouth University
in fulfilment for the degree of

DOCTOR OF PHILOSOPHY

Plymouth Business School

May 2016

Abstract:

The conceptualisation of sustainability by tomorrow's managers by Christine Parkin Hughes.

Sustainability is an emerging field, a knowledge frontier. However, the conceptualisation of what sustainability is, and what it means in theory and practice remains unsettled. Scant attention has been paid to how future managers make sense of sustainability, representing a significant gap in the literature.

The overarching aim of this thesis is to explore how the polysemous phenomenon of sustainability is conceptualised by the next generation of managers. It explores how they made sense of sustainability; the drivers behind their sensemaking; whether there is a skew within their conceptualisations in favour of environmental explanations; and, whether the pilot of the UN Sustainability Literacy Test impacted on how they perceive sustainability. Drawing on 485 surveys, 7 semi-structured interviews and 3 focus groups, this was achieved through the theoretical lens of sensemaking, employing an inductive case study approach with elements of survey analysis, obtained from students at Plymouth Business School.

The interpreted findings show that participants made sense of sustainability in various ways, mostly espousing a long-term/intergenerational view, with explanations principally couched in single-dimensional environmental terms, thereby demonstrating the sustainability skew. Education appears to be the main driver behind their sensemaking, although the media and conformity/socialisation also had an important part to play. The sustainability literacy test seems to have broadened perspectives and increased understanding of sustainability and for the vast majority of participants, the interest-levels following the test remained the same or increased.

This study joins the ongoing conversation by providing an original contribution, both theoretically and empirically, to the contentious, complex and multifaceted notion that is sustainability, both in the wider sense and more particularly from the perspective of future managers. This is important because how future managers make sense of sustainability will ultimately structure its reality.

List of Figures. Charts and Tables

Figures

Figure 1: The Sustainable Development Goals (UN, 2016) page 50

Figure 2: Timeline for Sustainability page 51

Figure 3: Carroll's Pyramid of Corporate Social Responsibility (1991), added to by SHRM (Cohen et al., 2012) page 66

Figure 4: Understanding Corporate Social Responsibility, Sustainability and Ethical Behaviour (Garavan & McGuire, 2010) page 71

Figure 5: The Concept of Sustainable Economic Development (Barbier, 1987) page 85

Figure 6: The Triangular and Nested Circles Models (Moir & Carter, 2012) page 86

Figure 7: FTSE and TTSE (Lozano, 2008) page 88

Figure 8: Five Dimensional Model of Sustainability (Seghezzo, 2009) page 90

Figure 9: Conflated Model of Sustainability (Moir & Carter, 2012) page 91

Figure 10: Sustainability Hierarchy (Marshall & Toffel, 2005) page 93

Figure 11: The Four System Conditions of a Sustainable Society (www.naturalstep.org) page 95

Figure 12: Waves of Sustainability (Dunphy et al., 2006) page 103

Figure 13: 2014-15 Initial Funding (HEFCE, 2015) page 130

Figure 14: Approaches and Orientations of Business Schools (Ivory et al., 2006) page 134

Figure 15: Participants' Programme of Study page 177

Figure 16: Chapter 8 Route Map page 194

Figure 17: The Temporal Element Word Cloud page 202

Figure 18: The Dimensions of Sustainability Word Cloud page 228

Figure 19: The Drivers Behind Conceptualisations Word Cloud page 228

Charts

Chart 1: Interest In Sustainability Post-Test page 258

Tables

Table 1: The Ten Principles of the Global Compact (UNGC, 2013) page 40

Table 2: Principles of Responsible Management Education (UN PRME, 2014) page 44

Table 3*:* Rio+20 People's Treaty for Higher Education (UNCSD, 2012) page 49

Table 4: Sustainability Definitions and Explanations (Ehnert & Harry, 2012) page 80

Table 5: Three Conceptions of Business Sustainability: Intent and Alignment Dimensions. (Colbert & Kurucz, 2007) page 99

Table 6: Sustainability Education Café's Conceptualisations of Sustainability page 105

Table 7: Conflicting Themes in the Debate Concerning Business Schools (Ivory et al., 2006) page 131

Table 8: Primary Research Plan page 171

Table 9: Survey Questions page 179

Table 10 : Focus Group Participation page 197

Table 11: Frequency of Questionnaire Responses page 197

Table 12: Codes, Organising Themes and Global Themes page 199

Table 13: Labelling of the Transcript Excerpts page 201

Contents:

Abstract: page 3

List of Figures and Tables page 5

Acknowledgements: page 11

Author's Declaration and Word Count: page 12

Chapter 1: Introduction and Research Focus page 15

1.1 Focus of the Thesis page 18

1.1.1 Focus 1: Sensemaking and meaning of sustainability page 20

1.1.2 Focus 2: The Sustainability Skew page 21

1.1.3 Focus 3: Future Managers and Sustainability Literacy page 22

1.2 Research Aim and Research Questions page 24

1.3 Contribution page 25

1.4 Theoretical Framework: Sensemaking page 26

1.5 Outline of Thesis page 29

1.5.1 Literature Review page 29

1.5.2 Research Design and Methodology page 30

1.5.3 Results and Discussion page 32

1.5.4 Conclusions page 32

1.6 Historical Overview page 33

Chapter 2: Sustainability: A question of responsibility? page 54

2.1 The Age of Irresponsibility page 55

2.2 The Development and Positioning of an Institutionalised Mind-set: Ethics, Responsibility and Sustainability page 60

Chapter 3: Conceptualisation of Sustainability page 75

3.1 Towards a Definition page 76

3.2 Sustainability Models and Frameworks page 84

Chapter 4: The Sustainability Skew page 107

4.1 Why are Polar Bears and Milk Jugs More Important than People? page 108

4.2 Lack of Shared Meaning page 110

4.3 Engagement with Reality page 111

4.4 Visibility page 113

4.5 Ideology page 114

Chapter 5: The Developing Sustainability Agenda in HE Business Schools page 116

5.1 Higher Education page 118

5.2 The Business School page 125

5.3 Developing Future Business Leaders page 135

5.4 Sustainability Literacy page 140

Chapter 6: Research Design and Methodology page 148

6.1 The Researcher page 150

6.1.1 History and Traditions of Research page 150

6.1.2 Conceptions of Self and Other page 154

6.1.3 The Ethics and Politics of Research page 156

6.2 Theoretical Paradigms and Perspectives page 159

6.3 The Research Strategy page 166

6.4 The Research Site – Plymouth University Business School page 172

6.5 Methods of Data Collection and Analysis page 177

6.5.1 Survey by Questionnaire page 178

6.5.2 Focus Groups page 181

6.5.3 Interviews page 183

6.5.4 Administration of Data Collection page 185

6.5.5 Methods of Analysis page 189

Chapter 7: Results and Discussion page 193

7.1 Rationale and Approach page 195

7.2 Conceptualisation page 202

7.3 Drivers page 227

7.4 Sustainability Literacy page 252

Chapter 8: Conclusions page 262

8.1 Context page 264

8.2 Aim and Focus of the Research page 265

8.3 Conclusions Emerging from the Research page 266

8.3.1 Conclusion 1: Conceptualisation page 266

8.3.1.1 Ethics and Responsibility page 266

8.3.1.2 Intergenerational View page 267

8.3.1.3 Multidimensionalism page 268

8.3.1.4 Sustainability Skew page 268

8.3.2 Conclusion 2: Drivers page 269

8.3.3 Conclusion 3: Sustainability Literacy page 270

8.4 Contribution of the Research page 271

8.5 Implications for Theory and Practice page 272

8.6 Limitations and Further Research page 274

8.6.1 Sensemaking Framework page 275

8.6.2 Case Study Approach page 276

8.6.3 Data Collection page 278

8.6.4 Notions of Ethics and Responsibility page 278

8.6.5 Drivers page 279

8.6.6 Widening the Net page 279

8.6.7 Sustainability Literacy Testing page 280

8.6.8 Student Progression page 280

8.6.9 Policy and Provision at PU page 281

8.7 The Journey page 281

8.8 Summary page 282

References: page 284

Appendix 1: Sustainability Education Café Definition Poll page 319

Appendix 2: Values Elicitation Exercise page 320

Appendix 3: Ethical Approval Letter page 321

Appendix 4: Eleven Key Controversies and Questions Being Raised in Mixed Methods Research (Creswell, 2013) page 323

Appendix 5: Question Guide page 324

Appendix 6: Plymouth City page 325

Appendix 7: Focus Group Transcript (FG3) page 326

Appendix 8: Interview Transcript (I2) page 348

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Author's Declaration:

At no time during the registration for the degree of Doctor of Philosophy has the author been registered for any other University award without prior agreement of the Graduate Committee.

Work submitted for this research degree at Plymouth University has not formed part of any other degree either at Plymouth University or at another establishment.

Relevant seminars and conferences were regularly attended throughout the period of study, at which papers were presented and included in the proceedings. Two collaborative papers are being prepared for publication.

Publications:

- (to be submitted end 2016) Co-authors: Mariappanadar, De Prins. *Leading indicators for health and family well-being outcomes of employees: A prevention strategy for work related negative employee health and well-being.* Target journals are Human Resource Management (Journal US) and International Journal of Human Resource Management.
- (to be submitted 2017) Co-authors: Cotton, Winter. *Mind the Gap: Conceptualisation of Sustainability in China.*

Conferences papers presented:

- BAM 2014: The Human Factor: Why are polar bears and milk jugs considered more important than people?
- EURAM 2014: Human Sustainability: Of people, polar bears and paradigm shifts.

- EURAM 2015: Of business schools, sustainability literacy tests and the next generation of managers.
- International Sustainable HRM Conference 2015: Of business schools, sustainability literacy tests and the next generation of managers.

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- Knights and Willmott, *Introducing Organizational Behaviour and Management*. Cengage. (Full manuscript review, 2016)
- Martin and Fellenz, *Organizational Behaviour and Management*. Cengage (Full manuscript review, 2016)

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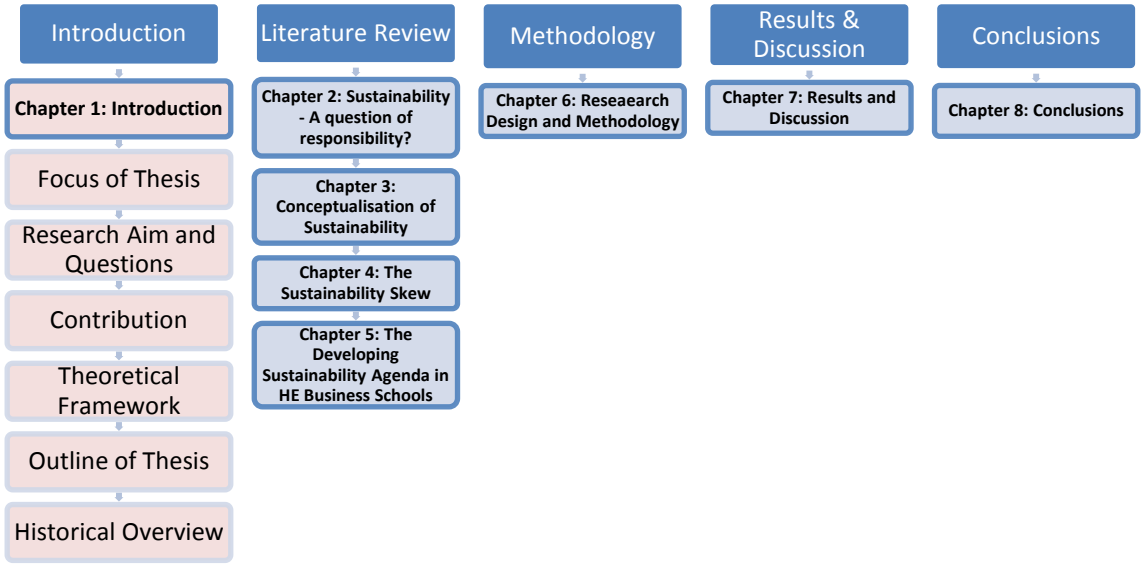
Signed ……

Date ……

Chapter 1: Introduction and Research Focus



"Never before in the history of the world has the viability of much of the life on this planet been under threat from humanity; never before have so many of the world's people experienced such material wealth and so many others lived in abject poverty; never before have so many had such interesting and fulfilling work and so many others such degrading work or no work at all" (Benn et al., 2014:3).

The influence and supremacy of the corporation have advanced vastly since the industrial and agricultural revolutions of the eighteenth century, the transportation and technological revolutions of the nineteenth and twentieth century, and most particularly within recent generations. Lozano (2010) argues that this is due to the dominant socio-economical paradigm of neoliberal capitalism; the globalisation, privatisation and liberalisation phenomena; and, the unremitting pursuit for short-term profitability – often at the expense of the environment and society.

Many challenge this fascination with a particular form of finance and economics (e.g. Elkington, 1999; Starkey & Tempest, 2008), questioning the profit-maximisation, short-

termism "*disease*" (Rappaport, 2005:65). They argue for a desperately needed alternative (N.E.F., 2014), a new industrial revolution (Docherty et al., 2009), the necessary revolution (Senge et al., 2008; Kirsch, 2011). They maintain that organisations have a wider responsibility (e.g. Dunphy et al., 2003; 2006), and that the free market economy has destructive consequences for the other stakeholders such as the employees, customers, suppliers, community, environment, future generations and so forth (e.g. Elkington, 1999; Ikerd, 2005). They claim that a new economy is needed which redefines economic capital to include the environment and people (e.g. Hawkins et al., 1999; Dunphy et al., 2003, 2006; Hahn & Figge, 2011; Jones, 2011). Consequently, the corporate model requires modification in order to contribute to the continuing health of the planet, flora and fauna; the survival of mankind; the development of a just and humane society; and, the creation of work that brings dignity and self-fulfilment to the worker (Dunphy et al., 2003).

Sustainability is offered as an alternative paradigm, a mantra for the 21st century, embodying the potential for societal advancement towards a more equitable and wealthy world in which the natural environment and cultural achievements are preserved far into the future (Dyllick & Hockerts, 2002). It spans disciplines and applications (Imada, 2012), requiring a shift in focus towards the trifecta of people, profit and planet (Kirsch, 2011), or multi-stakeholder management (Mariappanadar, 2014), to where the very definition of organisational success moves from purely financial and shareholder outcomes, to one encompassing sustainability (Boudreau & Ramstad, 2005). To do this, a long-term view is needed and then, by increasing perspectives from a couple of years to decades, generations and centuries, sustainability can become a primary objective for business (Zink, 2014). Thus, the

traditional purpose of a wealth-generating economy must be replaced with a corporate role grounded in engendering a healthy planet and an equitable society (Dunphy, 2011), not one where the top five families own more wealth than the bottom fifth of the entire global population (NEF, 2014). Prosperity should be reconceived as meaningful and purposeful living, not the *"unending acquisition of 'stuff'"* (Dunphy 2011:iii). The paradigm of growth and profit will need to be supplanted with that of prosperity without growth (Kirsch, 2011), with a shift in focus towards, for example, wellbeing (Mariappanadar, 2003), and gross national happiness (Burns, 2014).

The "*sustainability debate*" (Wilkinson et al., 2001:1492), is being engaged at three levels – the intellectual, corporate action and consumption levels (Dunphy et al., 2003). Stakeholders in the debate are wide-ranging and include academics, governments, consumers, activist groups, business schools, the United Nations and long-term investors. Although academic practitioners have been calling for a change towards sustainability for decades, the adoption of sustainability practices into the organisation continues to be problematic (Perey, 2015). Nevertheless, current organisational developments suggest that business is beginning to realise the scale of the challenge and the need for change. Indeed, the European Academy of Business in Society (EABIS) (2010), found that 93% percent of CEOs claim that sustainability-related issues are key to the future success of their business. Conversely, a study by the Society of Human Resource Management found that only 40% of organisations actually include sustainability issues as part of their stated goals, whilst only 23% of organisations indicated that sustainability issues were explicitly included within the annual report (SHRM, 2008).

Thus tomorrow's business managers are entering a world beset with complex and contentious urgent global issues (UGIs), requiring multiple interdisciplinary perspectives (e.g. Sterling, 2012; Rayment & Smith, 2013; Lozano et al., 2013). There is a growing expectation that higher education institutions (HEIs) and business education shall meet the increasing societal demands, by providing a generation of sustainability-literate young people, the business leaders of the future, skilled in responsible management, allowing them to make a lasting difference (e.g. UCAS, 2008; HEFCE, 2009; Parkes, 2012; Adomssent et al., 2014; Morelli, 2016). This is significant, as achieving this would enable the next generation of managers to better contribute meaningfully to the enactment of sustainability practices within the organisation. But we must understand, first and foremost, how tomorrow's managers make sense of the concept.

1.1. Focus of the Thesis:

"As a concept, sustainability is, I suggest, defined by polysemy; it is a term that embodies the coexistence and usage of multiple meanings. Therefore, how then do people in organisations engage with sustainability? What does sustainability mean for them and how do they enact it?" (Perey, 2015:149)

The over-arching aim of this thesis is to explore how future managers conceptualise sustainability. In line with the chosen theoretical framework (please see page 26 onwards), 'conceptualisation' is used here to denote an organisation and clarification of observations and sensemaking, possessing central common features and multidimensional notions of, in this case, sustainability (Colbert & Kurucz, 2007; Bryman & Bell, 2011, Alvesson & Karreman, 2011; Naslund & Pemer, 2012).

Since starting this thesis, there has been a little flurry of publications which have built on the work discussed in the literature review, and have, to varying degrees, partially overlapped with this research. Namely, the growing interest in the sensemaking of sustainability in wider terms (see, for example: Roy et al., 2015; Owens & Legere, 2015; Stark et al., 2016). More specifically, Visser and Crane (2010) considered the sources of meaning that managers of sustainability drew on to inform organisational change. Perey (2015) has examined how a particular individual made sense of sustainability and how it can contribute to understanding organisational-level enactment of sustainability practices. And, Eagle et al. (2015) recently reported initial findings of a longitudinal study centred on the curriculum and undergraduate business students and their attitudes towards sustainability issues, with a view to amending the curriculum and creating a benchmark from which to monitor progress. This thesis builds on this bourgeoning community of work which in turn helps to validate the approach taken here and provides greater credence to what this study sets out to achieve. Indeed, at a time when 'business' and the providers of 'business education' are being called to account over their role in society and the unsustainability of business practices, it is timely and appropriate to consider how the next generation of managers ascribe meaning to the concept of sustainability if we are to better understand its enacted reality.

There are three focal areas to this research, each derived from the extant literature, where opportunities for original contribution to knowledge have been identified. The first explores how future managers make sense of sustainability, and what the drivers are behind their conceptualisations. Emerging from that, the second focus considers whether there is a disparity within these conceptualisations in favour of environmental

explanations. Finally, the research explores whether the Sustainability Literacy Test has an impact on how future managers perceive sustainability. These three focal areas are summarised below:

1.1.1 Focus 1: Sensemaking and Meaning of Sustainability.

There are considerable discursive difficulties associated with the conceptualisation of sustainability and the defining of the notion, with sustainability often perceived as a novel and elusive concept (e.g. Gladwin et al., 1995; Filho, 2000; Marshall & Toffel, 2005; Gloet, 2006; Colbert & Kurucz, 2007; Mariappanadar, 2012; Kramar, 2014; Pal & Jenkins, 2014; Perey, 2015). Indeed, the literature remains unsettled, failing to reach a consensus. It is argued, given the often broad conceptualisation of the notion, that any definition is bound to remain abstract, contestable and ideologically controversial (e.g. Gladwin et al., 1995; Marshall & Toffel, 2005; Pal & Jenkins, 2014). Despite the recognised importance of sustainability, there is a distinct lack of inductively-based studies into its conceptualisations. Those studies which do examine the sensemaking of sustainability (see, for example: Visser & Crane, 2010; Roy et al., 2015; Owens & Legere, 2015; Perey, 2015; Stark et al., 2016), do not focus on the perspective of future managers. Consequently, the conceptualisation of what sustainability *is* and what it means in theory and practice is inexact and labyrinthine - which can render a shared consensus, and thus effective engagement in the organisational context, challenging (Filho, 2000; Marshall & Toffel, 2005; Ehnert et al., 2014).

If higher education and, in particular, business schools, are tasked with the responsibility of creating the next generation of managers for a sustainable future, how these future managers conceptualise sustainability, and what has driven these conceptualisations will ultimately structure that reality (e.g. Foucault, 1980; Weick,

1995; Marshall & Toffel, 2005; Colbert & Kurucz 2007; Wright, 2010; Alvesson & Karreman, 2011; Benn et al., 2014). Therefore, more research is required on the conceptions of sustainability if further progression towards sustainability is to be achieved (e.g. Colbert & Kurucz, 2007; Jones, 2011; Kramar, 2011).

1.1.2 Focus 2: The Sustainability Skew.

It is suggested that environmental sustainability and concerns over the challenges associated with climate change, carbon footprints and the management of natural resources have been squarely at the forefront of the sustainability debate (e.g. Dunphy et al., 2003, 2006; Pfeffer, 2010; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Moir & Carter, 2012; Bostrom, 2012; Ehnert et al., 2014; Benn et al., 2014; Alange, 2014; Laasch & Conaway, 2015). For example, the effects of negative externality of organisational practices on the individual and society have received less academic attention than the effects of negative externality on the environment (Mariappanadar, 2012). Indeed, 'sustainability' is oftentimes synonymous with 'environment' (Makower, 2014).

A review of the extant literature has identified various influencing factors behind the reported disparity which have been brought together and discussed in Chapter 5 under four broad headings:

- *Lack of shared meaning* - (Dunphy et al., 2003 & 2006; Colbert & Kurucz, 2007; Rimanoczy & Pearson, 2010; Garavan & McGuire, 2010; Pfeffer, 2010; Aggerholm et al., 2011; Ehnert & Harry, 2012; Mariappanadar, 2012; Renwick et al., 2013; Ehnert, 2009 & 2014).

- *Engagement with Reality* - (Ehnert, 2009; Garavan & McGuire, 2010; Clarke, 2011; Mariappanadar, 2012; Kleiner & Pavalko, 2014; Majed, 2014; Makower, 2014).
- *Visibility* - (Colbert & Kurucz, 2007; Pfeffer, 2010; Sood et al., 2011; Delmas & Burbano, 2011; Anderson, 2011; Mariappanadar, 2012; Makower, 2014)
- *Ideology* - (Pfeffer, 2010; Wells, 2011; Kramar, 2011; Schmitz et al., 2012; Scerri, 2012)

At the time of writing, there are no apparent studies investigating the existence of this skew from the perspective of tomorrow's managers. Nevertheless, discourse regarding any disparity in terms of management literature, emerging research, linguistics and public and business interest can have far-reaching implications for the future direction of sustainability - because what is considered legitimately included and excluded from discussion affects what is studied, how it is studied, and by extension, what becomes included in policy debate and organisational practice. Therefore, if it exists, there is a need to further understand this apparent disparity and how it impacts upon the sensemaking and enactment of sustainability by the next generation of managers.

1.1.3 Focus 3: Future Managers and Sustainability Literacy

The emerging debate surrounding the importance of education for the furtherance of sustainability is reflected in the growing questions about the role of HE and business schools in business and society (e.g. Dunphy et al., 2006; Lugg, 2007; Pfeffer, 2010; Winter & Cotton, 2012; Adomssent et al., 2014). Sustainability-based education is facing structural, cultural and ideological hurdles, with limited knowledge and expertise regarding the best way forward to most effectively educate the next

generation of managers in becoming change agents for sustainability (e.g. Lugg, 2007; Winter & Cotton, 2012; Johnston, 2013; Hesselbarth & Schaltegger, 2014).

Sustainability literacy refers to an individual's insight, perspective and understanding of issues relating to sustainability, and the ability to make reasoned, strategic choices which are conducive to sustainable development (Parkin et al., 2004; Murray & Cotgrave, 2007; Stibbe, 2009; Murray, 2011; Winter & Cotton, 2012; Kokkarinen & Cotgrave, 2013). Significantly, the UK Government recognised sustainability literacy as a *"core competency for professional graduates*" a decade ago (HM Government, 2005:16). However, as asked at the 2014 World Commission on Environment and Development (WCED) in Japan, how can universities be sure that they are producing sustainability literate graduates? (Carteron & Decamps, 2014).

There is a mounting demand for HEIs to demonstrate advancement in this area, for a metric to gauge student progression and to assess the effectiveness of the curricula and pedagogy in achieving sustainability literate graduates (e.g. Zwickle et al., 2014; Carteron & Decamps, 2014). In 2014, a pilot tool created by the academic community and UN-based agencies was launched - the global Sustainability Literacy Test (Sulite) (Carteron & Decamps, 2014). Plymouth Business School (PBS) students took part in the pilot.

*G*iven the *sui generis* nature of the opportunity, the pedigree of the test, the existing and expected uptake globally, and the very limited discussion and analysis currently available both in the literature and elsewhere *(*Carteron & Decamps, 2014), it is pertinent to ask within the scope of this study, whether and in what ways taking the Sustainability Literacy Test influences how future managers perceive sustainability.

1.2 Research aim and research questions:

The central aim of this research is to explore how the complex phenomenon of 'sustainability' is conceptualised by the next generation of managers. It is the intention to understand as much as it is to explain and so this study hopes to make a contribution to the emerging literature which links the conceptualisations of sustainability to future management practices. This will be achieved through an inductive case study approach with elements of survey analysis obtained from students at Plymouth University Business School. The study will consider people as subjects, recognising that they have their own needs and wants with a life beyond their education and degree programme.

Drawing on surveys, interviews and focus groups with Plymouth Business School students, this research asks:

Research question 1:

a) How do future managers make sense of, and give meaning to, sustainability?

b) What are the drivers behind their sensemaking?

Research question 2:

Is there a skew within their conceptualisations in favour of environmental explanations?

Research question 3:

Does the Sustainability Literacy Test influence how future managers perceive sustainability?

1.3 Contribution:

As previously discussed, there has recently been a growing interest in sustainability through the theoretical lens of sensemaking (e.g. Roy et al., 2015; Owens & Legere, 2015; Stark et al., 2016), from the perspective of organisations and management (e.g. Visser & Crane, 2010; Perey, 2015), and undergraduate curriculum (e.g. Eagle et al., 2015). This thesis hopes to contribute both theoretically and empirically to the polysemous notion that is sustainability, both in the wider sense and more particularly from the perspective of future managers, by providing an original contribution to the emerging literature which links the conceptualisations of sustainability to management practices, and to further develop understanding so that a more integrated approach to sustainability can be realised. Similarly, it aims to enrich that small body of literature which is beginning to consider sustainability through the sensemaking lens.

The extant literature finds that environmental aspects of sustainability are far more prominent than socio-human aspects in terms of research attention and company initiatives (e.g. Gladwin et al., 1995; Filho, 2000; Marshall & Toffel, 2005; Gloet, 2006; Colbert & Kurucz, 2007; Mariappanadar, 2012; Kramar, 2014; Pal & Jenkins, 2014). This study hopes to explore this espoused disparity from the hitherto neglected perspective of future managers, thereby offering new insights.

Sustainability-based education is facing structural, cultural and ideological hurdles, with limited knowledge and expertise regarding the best way forward to most effectively educate the next generation of managers in becoming change agents for sustainability (e.g. Lugg, 2007; Winter & Cotton, 2012; Johnston, 2013; Hesselbarth & Schaltegger, 2014; Eagle et al., 2015). This thesis hopes to contribute to these conversations by explicitly focusing on tomorrows' managers within Plymouth Business

School and what sustainability means to them, and the drivers behind their sensemaking.

Carteron & Decampes, (2014) ask how universities can be sure that they are producing sustainability literate graduates. The Sustainability Literacy Test (Sulite) is a tool currently being created by the academic community and UN-based agencies. Given the very early stages of the tool's development, there is scant literature and presently very limited discussion and analysis concerning its success (Carteron & Decamps, 2014). This study explores the reactions of participants who piloted the test at Plymouth University and therefore hopes to contribute to the knowledge and understanding of whether and in what ways the Sulite influences how future managers perceive sustainability. It also hopes to contribute to the more general feedback and discussions surrounding the construction, content, usability and fit-for-purposefulness of the tool.

This study uses exploratory research because there are *"few or no earlier studies to which we can refer for information about the issue"* (Collis & Hussey 2013:4). It does not intend to offer final and conclusive evidence. Rather, it humbly hopes to allow for a better understanding of the field. Therefore it aims to provide initial research thereby forming and contributing the basis upon which more conclusive research can be built.

1.4 Theoretical Framework: Sensemaking

This work is an *"applied discipline"* (Swanson & Chermack, 2013:1), in that it is concerned with the notion of sustainability and how it is understood through its use in the functioning world by the next generation of managers. The concepts used to label and categorise sustainability are a central part of the sensemaking process of it. Thus a *"dominant story"* or shared notion of sustainability may be able to fix the meaning of

central concepts, so that they are given specific associative connotations (Naslund & Pemer, 2012:106). Indeed, sensemaking is an act of narrations and the narratives are our frames of reference embodying our beliefs, assumptions and enactment (Perey, 2015). Dewey (1902) argues that we need to examine to what attention is being paid, with what, for what and by whom, in order to articulate sensemaking, and to bring theory and practice together, thereby providing tremendous scope for further developing our knowledge and understanding of that which lies at the heart of organisation and management. Nevertheless, Berkeley (1990) cautions that "*no sooner do we … follow the light of a superior principle, to reason, meditate, and reflect on the nature of things, but a thousand scruples spring up in our minds…The cause of this is thought to be the obscurity of things… that we have first raised a dust and then complained we cannot see."* (p405).

Therefore, in line with a postmodern-interpretivist perspective, a framework is required which balances theory and practice when making sense of the unsettled, multifaceted world of sustainability. Although not universally accepted (Swanson & Chermack, 2013), it is taken here that a theoretical framework should frame and inform a thesis, being central in producing a particular version of the world (Alvesson & Karreman, 2011), and trying to make sense out of that world (Dubin, 1978), through an established rigour (Swanson & Chermack, 2013) – though it is worth noting that Alvesson and Karreman (2011) disagree on this point, instead calling for a relaxation of rigour in favour of the researcher's imagination. Nevertheless, searching for a sound and appropriate theoretical framework *"is not an easy task"*, particularly in the *"messy"* world of applied disciplines such as this (Swanson & Chermack, 2013:5-7).

The way in which sense is made of reality (or some aspect of reality), ultimately structure that reality (e.g. Foucault, 1980; Weick, 2005; Alvesson & Karreman, 2011). There are no objective observations of reality, only observations socially situated in the worlds of the observer and the observed (Denzin & Lincoln, 2013) - rather that it represents the selective and contestable construction of data (Alvesson & Karreman, 2011). Therefore a framework is necessary which gives considerable space to the researcher's subjectivity and emphasises the *"creative and imaginative constructions"* of empirical data (Alvesson & Karreman, 2011:5). Indeed, Weick (1995:xii) cautions that the interpretation of data *"would be a sham if it were grounded in paraphrase that rubbed the nuance off an author's remarks, discouraged reader exegesis, and squelched diverse reading."* Therefore, a framework is needed which, rather than assuming that data is like a "*signpost*" (Alvesson & Karreman, 2011:5), pointing in a specific direction, allows for an ongoing conversation (Weick, 1995:xii), and for empirical material to be read in a variety of ways, possibly making *"different knowledge results possible"* (Alvesson & Karreman, 2011:5).

Although not completely settled, the literature refers to the interpretative conceptual framework of 'Sensemaking' which is based on the premise that *"situations, organisations and environments are talked into existence"* (Weick, 2005:409). Broadly, it is a "*collaborative*" process (Cunliffe & Coupland, 2012:65), through which people interpret both themselves and the world around them through the *"production of meaning"* (Whittle & Mueller, 2012:114). Congruent with Alvesson and Karreman's deriving of *different knowledge results* above*,* Weick adds that sensemaking is the *"construction of plausible accounts of equivocal situations"* (2011:145). Gephart et al., suggest a temporal element, defining it as an *"ongoing process that creates an*

intersubjective sense of shared meanings" (2010:284). Similarly, and somewhat counterintuitively (Sandberg & Tsoukas, 2014), Weick describes sensemaking as a *"retrospective rationalisation"* (2011:146). This reflective circling-back highlights a tension within the sensemaking literature: episodic versus continuous (Maclean et al., 2012). Indeed, whilst the literature is very limited in its critique of sensemaking, Sandberg and Tsoukas (2014:S18) have drawn attention to its tendency to dismiss a prospective view – favouring the aforementioned retrospective view. Nevertheless, for the pragmatic purposes of this thesis, this research is cross-sectional episodic. It would lend itself to further continuous longitudinal study thereby providing an opportunity for future research. That is not to say that there is reduced value in episodic sensemaking as it is more likely to remain contextualised, a particularly significant aspect given the importance of linkages which could reside in varying environments and the continuous process of construction and retrospective deliberation by socially embedded actors (e.g. Dreyfuss & Dreyfuss, 2005; Weick, 2011; Sandberg & Tsoukas, 2014).

1.5 Outline of Thesis

The following section shall signpost the structure of the thesis. Please also refer to the Chapter Overview at the head of each chapter.

1.5.1 Literature review:

It is appropriate to recognise that sustainability research occupies a knowledge frontier, and much of what is known about the field is derived from innovative practice – which is largely developing faster than it can be studied and written down (Jones, 2011). It is also pertinent to draw attention to the reoccurring discourses running through the literature which highlight the values-laden nature of sustainability and

question the dominance of reductionist, Newtonian, neoliberal thinking – and the direct challenge that sustainability poses to it. Similarly, the philosophical and holistic nature of sustainability has meant that potentially all subject matter can be viewed through a sustainability lens. This has, in part, led to sustainability often being a prefix or suffix which can be bolted-on to almost any topic (for example, sustainable engineering, sustainability in art, managing sustainably, a sustainable Christmas etc.). Hence, it is neither straightforward nor perhaps practical to scope out the literature in terms of broader themes as those themes can be as numerous as there is subject-multiversity. Therefore, due to necessary brevity, this thesis shall not undertake a comprehensive review of the many rooms of sustainability-based literature. Rather, it shall focus on three themes derived from the extant literature. Chapters 2 and 3 explore the sensemaking and meaning of 'sustainability', and the drivers behind those conceptualisations. Chapter 4 considers whether there is a disparity within conceptualisations of sustainability in favour of environmental explanations. Finally, Chapter 5 adds to Chapters 2-4 and considers the positioning of higher education and business schools relative to notions of sustainability, and how they provide important reference points for the continuing analysis and sensemaking of sustainability, and their influence over sustainability-related practices and frameworks. It moves on to consider the sustainability literacy of future managers and whether and in which ways sustainability literacy tests influence how sustainability is perceived.

1.5.2 Research Design and Methodology:

Chapter 6 shall briefly establish the nature and context of the institution at the centre of this research, namely Plymouth University; and provide the justification for particular methods and methodology, which depend on the assumptions about reality

that the researcher brings to the research (Crotty, 1998). The gendered, multiculturally-situated researcher approaches the world with a set of ideas - a framework that specifies a set of questions, which are then examined in specific ways. Social research is concerned with people and their life contexts, asking philosophical questions relating to the nature of knowledge and truth (epistemology), values (axiology) and being (ontology), which underpin human judgements and activities (Somekh et al., 2011). It is a requirement for a successful research-outcome to establish that the results obtained are trustworthy, providing a sound theoretical basis upon which to base interpretations, thereby giving the practitioner credibility (Goulding, 2002). To achieve this, researchers are presented with a choice of philosophies, each of which can significantly bias the outcome of the investigation. Indeed, the reliability and validity of the study may be brought into question if the methodology employed is not appropriate (Sarantakos, 2013).

Given the theoretical framework of sensemaking and the values-laden nature of sustainability, this is essentially an exploratory study positioned within a subjective, constructivist ontology, based on the assumption that social phenomenon are not independent of social actors. Epistemologically, it comes chiefly from an interpretivist perspective, being concerned with the access and understanding of individuals' conceptualisations of sustainability. However, it also supports elements of positivism in order to facilitate a fuller exploration of the findings. This informs the strategy which asks for an exploratory case study with elements of exploratory survey. The methods of data collection are focus groups, interviews and questionnaire. And so, although principally qualitative in nature, the research falls within the realms of a multiphase, mixed method approach.

Finally, the chapter will briefly justify and establish the nature and context of Plymouth University which provides the case study for this research, an institution with a nationally and internationally recognised reputation for leading sustainability. Due to necessary brevity, this section shall hopefully serve as a precis of sustainability-positioning, both at university and business school level.

1.5.3 Results and Discussion:

Chapter 7 represents the heart of the results and discussion, exploring how future mangers conceptualise sustainability, and the influences at play on their sensemaking. It aims to outline the approach to the analysis of the data in light of the chosen conceptual framework of sensemaking, moving on to explore and discuss the data provided by the PBS students whilst acknowledging the risk of imposing contrived organisation and division on otherwise multi-layered and fragmented experiences, and recognising that any observation, interpretation and discussion included within the chapter are *"an abbreviated and succinct simplification,"* leaving much to the reader's imagination (Boje, 1991:115).

1.5.4 Conclusions:

Chapter 8 will revisit the aims and consider the 'findings' in terms of the insights that can be drawn from the research, fully acknowledging that they are in themselves, an interpretation. It shall reflect on the wider issues in terms of limitations, implications, and the potential for further research.

This chapter has so far introduced the principal reasoning behind the study, provided a statement of the overarching research aim and research questions, and provided a chapter outline to guide the reader through the thesis. Given that an individual's perspective is shaped by broader social, economic, political, and physical factors

(Schensul, 2008), this chapter shall now consider significant developments which have contributed to the development of the central concepts and global institutions involved in establishing the context for sustainability. This historical overview is necessary to be aware of how they evolve and what shapes them, to gain some insight into the factors which influence the sensemaking of sustainability both now and in the future. However, the vastness of the field exceeds the scope of this section. Therefore, the remainder of this chapter shall only reflect on those which are considered most influential by the (positioned and subjective) researcher. As this is exploratory research, the historical overview should help to locate the field and position the study within that field (Denzin & Lincoln, 2013).

1.6 Historical Overview

Humans have lived sustainably within the capacity of available resources, more or less unchanged, for over 90 per cent of our history on this planet (Leakey & Lewin, 1977). This cultural and economic stability was brought to an abrupt conclusion approximately 12,000 years ago at the end of the Ice Age with the *"dawn of human civilization"* (Laasch & Conaway, 2015:55). Within a few thousand years, a socioeconomic revolution, initiated by the domestication of plants and animals, replaced the existing order with something unprecedented and entirely new. This is often described as the most important and influential episode in the history of our species (Lee & DeVore, 1968).

The non-normative economic considerations of sustainability are threaded throughout history. For example, around 1500AD the inhabitants of Easter Island over-harvested trees resulting in sweet water loss, resource wars and a population fall of two-thirds

(Laasch & Conaway, 2015). Similarly, during the seventeenth-century in Europe, unsustainable excessive deforestation caused population collapse (Caradonna, 2014).

The normative debate regarding the responsibilities of business institutions to society is as old as economics itself (Jones, 2011). For example, Thomas Hobbes, the English philosopher observed in *The Leviathan* (1651:Chapter XIII, p57) that without civilising institutions and a sense of obligation life becomes, *"solitary, poor, nasty, brutish and short"*. In 1776, Adam Smith penned *An Inquiry into the Nature and Causes of the Wealth of Nations* within which Smith discussed the contribution and responsibility of business to society. This consciousness of societal obligation can be further found in Malthus: *An Essay on the Principle of Population, as it Affects the Future Improvement of Society (1798).* A few decades later in 1832, the *Sadler's Report* was published, containing testimonies from factory workers revealing appalling conditions, especially for women and children. The report shocked the public and in 1832 Lord Ashley, Earl of Shaftesbury campaigned in Parliament for factory reform resulting in new laws to improve conditions to benefit the welfare of the worker and their community (Nardinelli,1980). Around 20 years later, western lifestyles were brought into question by the stark Native American Cree prophecy, *"When the earth is being ravaged and polluted, the forests being destroyed, the birds would fall from the air, the waters would be blackened, the fish being poisoned in the streams, and the trees would no longer be, mankind as we would know it would all but cease to exist." (*Laasch & Conaway, 2015:57).

At the turn of the twentieth century, in an article by J.M Clark for the *Journal of Political Economy (1916)*, Clark suggested, in the same way that men are responsible for the known results of their actions, then so too must business responsibilities

include the known results of their dealings, whether or not these have been recognised by law. Around that time in the US, the publication of the influential *Principles of Scientific Management* (Taylor, 1911), established the fundamental principles of large-scale production, through controversial time and motion studies, to emphasise maximum economic efficiency and productivity of both machine and worker, often to the detriment of the worker in terms of increased monotony and work-rate. Conversely, also around the same time in the UK, the Welfare Workers' Association was formed, with representatives from key industries of the time demonstrating a more paternalistic outlook, including Rowntree, Boots and Cadbury. It predominantly concerned itself with the working conditions and welfare of female factory employees (CIPD, 2017).

In the 1950s, 1960s, and 1970s, issues surrounding environmental conservation – although still marginalised (Pal & Jenkins, 2014), became a subject of interest with the awareness of the limits of the perpetual drive for growth in industrialisation (Christofi et al., 2012). In 1953 Bowen published the seminal book entitled, '*Social Responsibilities of the Businessman'* and, coupled with the publication of '*Silent Spring'* (Carson, 1962), and the Club of Rome's *'The Limits to Growth'* (Meadows et al., 1972), the debate surrounding uninhibited industrial growth and the effect on the environment, humans and society was invigorated. Since when, particularly from the early 1970s, the field has grown significantly (Zink, 2014).

Aside from the continued dominance of the neoliberal form of finance and economics (e.g. Elkington, 1999; Rappaport, 2005; Starkey & Tempest, 2008; Lozano, 2010), environmental sustainability and concerns over the challenges associated with climate change, carbon footprints and the management of resources have been at the

forefront of the sustainability debate, less so socio-human factors (e.g. Pfeffer, 2010; Clarke, 2011; Bostrom, 2012; Winter & Cotton, 2012; Ehnert et al., 2014; Alange, 2014; Gray et al., 2014). This concern, the ensuing changing societal expectations and the 1968-9 United Nations Economical and Social Council resolutions (resolutions 2398 and 2581 - which noted the urgent need to limit damage to the environment for mankind), paved the way for the Global Conference on the Human Environment. In 1972 the Global Conference was convened in Stockholm by the General Assembly. Notably, it was the first international conference of its kind and its principal purpose was to, *"serve as a practical means to encourage, and to provide guidelines…to protect and improve the human environment and to remedy and prevent its impairment."* (UN, 2008). It was at this conference that the important role of education in fostering environmental protection and conservation was formally recognised (Lozano et al., 2013). The declaration of principles was subjected to reviews and amendments, but there was no fundamental challenge to the declaration itself. Eventually, the General Assembly *"'note[d] with satisfaction' the report of the Stockholm Conference, …by 112 votes to none, with 10 abstentions (General Assembly resolution 2994 (XXVII))"* (UN, 2008).

Then, 1987 witnessed the adoption of the 'Environmental Perspective to the Year 2000 and Beyond,' (General Assembly resolution 42/186, Annex). This was *"a broad framework to guide national action and international co-operation [in respect of] environmentally sound development"* (UN, 2008). Coupled with this, chaired by Gro Harlem Brundtland, 1987 also saw the publication of the much-referred to United Nation's World Commission on Environment and Development report (WCED), otherwise known as the 'Brundtland Commission' or 'Our Common Future' report. It

was this report which legitimised the term 'sustainability' and coined the term 'sustainable development', defining it as: *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs."* (WCED, 1987:8).

The report's intention was to develop an agenda for global change and a common future for mankind (WCED, 1987). It questioned how to achieve both societal and economic development without compromising natural living conditions for the majority of humanity. The sustainable development agenda of the report also focused on human development and social justice within the framework of social equity, the use of resources and their equitable distribution (Banerjee, 2008). The above 'Brundtland' definition was extensively used as a starting point for the development of policy by government, business and community – though it had its critics (please see Chapter 3 for a fuller discussion). Following the publication of this notable report, the concepts of sustainability received growing attention within the fields of business and management (Doppelt, 2010). Increasingly, corporations were recognising the interdependency and relationships between economics, the environment and society and the short and long term implications (Lozano, 2010).

In 1992, (twenty years after the previous conference in Stockholm), the United Nations Conference on Environment and Development - 'Earth Summit' was held in Rio de Janeiro, Brazil, where unparalleled corporate involvement sought to determine who was destroying natural resources and what solutions could be offered (Pal & Jenkins, 2014). Its principal theme was the environment and sustainable development, though some social elements of sustainability were also apparent – indeed, it is to this summit that Fougere and Solitander (2009) trace back the growing importance of corporate

social responsibility (CSR) today. The conference made the concepts of the Brundtland Report central to international considerations (Doppelt, 2010). It was, *"unprecedented for a UN conference, in terms of both its size and the scope of its concerns"* (UN, 1997). The notions of 'eco-efficiency' prompted hundreds of thousands of diverse peoples to persuade their leaders to join the Rio forum where difficult decisions would be made to ensure a healthy world for future generations (UN, 1997). The Summit's message reflected the complexity of the problem. It was broadcast by nearly ten thousand on-site journalists and was received by millions around the world. The Summit's message was *"…that nothing less than a transformation of our attitude and behaviour would bring about the necessary changes…"* (UN, 1997).

Of the numerous resulting documents - Agenda 21 referred meaningfully to social aspects of sustainability and provided the impetus for the implementation of the triple bottom line (TBL) and corporate social responsibility (CSR) in business activities on a global level (Tollefson & Gilbert, 2012). Agenda 21 was essentially a *"laundry list"* of the agreed objectives (Tollefson & Gilbert, 2012:20). It was an across-the-board framework for achieving sustainable development worldwide, and specifically discussed the re-orientation of education at all levels, both formal and informal, towards sustainable development, and the promotion and increased public awareness thereof (DESD, 2008). Although weakened by compromise and negotiation, it was still claimed to be the most comprehensive programme of action ever sanctioned by the international community (UN, 1997). This forty-chapter consensus document considered four principal areas:

1. Social and Economic Dimensions;
2. Conservation and Management of Resources for Development;

3. Strengthening the Role of Major Groups;
4. Means of Implementation.

Most particularly, Principle 1 of the Rio Declaration stated that *"Human beings are at the centre of the concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature"* (UNCED, 1992).

Over two decades on and, despite proclamations to the contrary, nations have made only marginal advances and have failed to achieve even a fraction of the promises they made (Tollefson & Gilbert, 2012; Kothari et al., 2015). However, despite lacking teeth, the 1992 agreements created formal international processes which engaged much of the world (Tollefson & Gilbert, 2012). Further, the Earth Summit arguably influenced all later UN conferences. It was a significant milestone that set a new agenda for sustainable development and triple bottom line accountability. It was hailed by Maurice Strong, the Conference Secretary General as a, *"historic moment for humanity"* (UN, 1997).

The Kyoto Protocol followed in 1997; it committed industrialised countries to reduce their collective emissions of all greenhouse gases by 2012. The treaty was a failure with regard to emissions (Tollefson & Gilbert, 2012). Yet, despite lacking in the socio-human elements of sustainability, it spawned an international process which encouraged investment in climate studies and a forum for environmental and importantly, wider sustainability research to be showcased.

Through the development of the Earth Summit's principles and with allusion to 'the age of irresponsibility' (please also refer to Chapter 2), the UN Global Compact (UNGC) was formed in 1999 by UN agencies, government and civil society groups. The UN

Secretary-General Ban Ki-moon explained that, *"The Global Compact asks companies to embrace universal principles and to partner with the United Nations. It has grown to become a critical platform for the UN to engage effectively with enlightened global business"* (UNGC, 2013). The compact claims to be the world's largest corporate citizenship and sustainability initiative. It has over 10,000 participants, including over 7000 participating organisations in 145 countries around the world (UNGC, 2013) - demonstrating that the owners of most of the world's largest corporations have been influenced to varying extents to work together for the general good (Dunphy, 2011). Significantly here, explicit reference was made beyond environmental factors to include socio-human factors, particularly concerning the workplace and the management of people. The intention of the UNGC was/is to guide organisations to align their operations and strategies around the following 'Ten Principles' (Table: 1):

Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and
Principle 2	Make sure that they are not complicit in human rights abuses.
Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
Principle 4	The elimination of all forms of forced and compulsory labour;
Principle 5	The effective abolition of child labour; and
Principle 6	The elimination of discrimination in respect of employment and occupation.
Principle 7	Businesses should support a precautionary approach to environmental challenges; and
Principle 8	Undertake initiatives to promote greater environmental responsibility; and
Principle 9	Encourage the development and diffusion of environmentally friendly technologies.
Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.

Table 1: The Ten Principles of the Global Compact (UNGC, 2013).

These principles provide an umbrella framework under which organisations can develop and align a set of policies and systems towards cultivating a sustainable organisation (Cohen et al., 2012). Significantly, the above principles also paved the way for other relevant frameworks supporting sustainability within the workplace, possessing commonalities between them and providing a generic roadmap for sustainable management practices (Cohen et al., 2012). Other frameworks include:

- ISO 26000 – (Discussed later in chapter) a voluntary international standard providing guidance on key themes of social responsibility for use by organisations of all sizes. The core subjects of this standard frame the questions for the UN supported international Sustainability Literacy Test for HEIs (see Chapter 5).
- SA8000 – a certifiable standard focusing on the aspects of management systems, labour standards and human rights, particularly for non-direct workers along extended supply chains.
- OECD Guidelines – The Organisation for Economic Co-operation and Development. This is a guideline framework for multinational organisations providing a comprehensive set of tools to enable sustainable development and ethical practice whilst ensuring compliance with government policy.
- GRI Framework – The Global Reporting Initiative is an international independent organisation, providing a globally recognised framework for sustainability. The prominent framework is used by the majority of organisations which publish sustainability-related reports. It is network-based and facilitates mainstream disclosure of governance, environmental and social performance. The amended 2010 version identifies eighty-four sustainability performance indicators, with twenty-six of them offering guidance on diversity,

> human rights and a range of other responsible management-related activities such as labour standards, health and safety practices and worker-compensation. (Cohen, et al., 2012).

Alongside the Earth Summit's principles, in 2005 the UN World Summit held a high-level plenary meeting in New York and the follow-up Outcome Document was published. Importantly, following Elkington's TBL framework (Elkington, 1994), it referred to the three inter-dependent and mutually reinforcing *pillars* of sustainable development, these being: economic development, social development and environmental protection (UN, 2005). However, some contested that there were actually four pillars – the fourth being labelled variously but typically of a societal bearing, for example 'democracy' (Moir & Carter, 2012), and 'culture' (UNESCO, 2001). Incidentally, this cultural suggestion was adopted as the fourth policy area by the Universal Declaration on Cultural Diversity where it was suggested that cultural diversity is as necessary for man as biodiversity is for nature (UNESCO, 2001).

The sustainability movement continued to emerge and to become established within Higher Education (Bessant et al., 2015). A key driver was the UN's Decade of Education for Sustainable Development (UNDESD): 2005 – 2014. It was established at the 57th UN General Assembly with UNESCO designated the lead agency to promote and implement it. The intention was to emphasise the crucial role education plays in achieving sustainable development – specifically with the content and purpose of it. Education for Sustainable Development (ESD) aimed to embrace the three pillars equally in a *"holistic and integrated"* way and included culture as an essential and underlying dimension (DESD, 2008). In particular, it provided increasing momentum for national-scale developments within UK HEIs (Bessant et al., 2015). However,

challenges still remained, not least the need to further integrate and co-ordinate sustainable education at all levels on a global scale (DESD, 2008).

The introduction in 2006 of EU Directive 2006/46/EU highlighted CSR and corporate governance and despite many already doing so, it required that all EU listed companies publish a corporate governance statement. Coupled with this, it encouraged and supported the European Alliance of CSR, a business-led initiative in which enterprises develop practical tools for the implementation of CSR (EC, 2011). Yet, clarity regarding what was meant by CSR, ethical behaviour and sustainability, and their positioning relative to each other proved problematic for the Directive (Casson, 2013). This is explored further in Chapter 2.

Then in March 2007, the European Parliament produced the *CSR – A New partnership* report which proposed that CSR could not and should not be considered separately from ethical governance and suggested amendments to the ethical governance rules to incorporate CSR. The report recommended that directors should have *"a personal duty to minimise any harmful social and environmental impacts of the companies' activities"* (Casson, 2013:17). However, these recommendations were not acted upon by the Commission. Indeed, asserting that the diversity of meaning and conceptualisation of CSR were too diverse, the Commission failed to propose any legislation regarding CSR – consigning it to purely voluntary governance.

Significantly, the expectation that management education institutions should be at the forefront of both thought and deed regarding CSR and sustainability issues was acknowledged with the UN-supported Principles of Responsible Management Education (PRME). The PRME, referred to as a key catalyst for the transformation of

management education (Godemann, Haertle et al., 2014), were developed in 2007 by an international working party of sixty deans, university presidents and representatives of leading business schools and academic institutions, to address the responsibility of management education in preparing future managers for the challenge of responsible and sustainable business (UN PRME, 2014). It followed a recommendation by all academic stakeholders of the UN Global Compact to develop a principle-based global engagement platform for academic institutions, which demonstrate that the institution's organisational practices serve as exemplars for the values and attitudes conveyed to the students (Table: 2). Participating institutions collaborate, sharing information on progress and best practice.

Purpose	We will develop the capabilities of students to be future generators of sustainable value for business and society at large and to work for an inclusive and sustainable global economy.
Values	We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact.
Methods	We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.
Research	We will engage in conceptual and empirical research that advances our understanding about the role, dynamics, and impact of corporations in the creation of sustainable social, environmental and economic value.
Partnership	We will interact with managers of business corporations to extend our knowledge of their challenges in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.
Dialogue	We will facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability

Table 2: Principles of Responsible Management Education (UN PRME, 2014).

Two years later in March 2009, over two thousand scientists from eighty countries met in Copenhagen for the International Scientific Congress on Climate Change (ISCCC), the intention being to provide the world leaders attending the United Nations Framework Convention on Climate Change with the most up-to-date scientific information. Here, the chief economist of the World Bank summarised the congress findings as simply, *"High carbon growth kills itself"* (Doppelt, 2010:12). This stark, simple statement from an economist's perspective very effectively underscored the urgency of humanity's challenge. Increasingly, investors became interested in ensuring that investments demonstrated sustainability and corporate responsibility considerations - most particularly the environmental and economic aspects (O'Donnell & Royal, 2011). As a case-in-point, the Obama Administration acknowledged the link between high-performance work practices and sustainable economic growth: that achieving and sustaining world-class levels of performance requires an integrated approach to capital investment, investment in new technologies and the implementation of context-specific high performance workplace practices (Appelbaum et al., 2011). By doing so, multi-stakeholders benefit from innovative, responsive and inclusive workplaces where the entire range of workers' skills are utilised (Mohle, 2012), and a sustainable path for economic growth realised (Appelbaum et al., 2011). Similarly, this shift in consideration was also evident in May 2010, when the signatories of the UN Principles for Responsible Investment (UNPRI) invested US$20 trillion into UNPRI. However, the social aspects of sustainability still remained *"less clear to the majority of the investment market"* (O'Donnell & Royal, 2011:133). Indeed, this is arguably demonstrated by the reaction and adjustment of many organisations, particularly within the financial sector, to the global financial crises of 2008, namely mass

redundancies with far-reaching socio-economic consequences (Psychogios et al., 2016).

As already briefly mentioned, 2010 also heralded the ISO26000 standard. This international multi-sectoral standard was developed by a cohort representing governments; non-governmental organisations; industry; consumer groups; academics and other organisations from around the world – consisting of 400 experts, 200 observers from 99 countries and 42 international organisations (ISO, 2016). Following the theme of 'responsibility', it offers ways to integrate socially responsible behaviour into the organisation, whilst emphasizing the importance of results and performance improvements with that regard. Interestingly here, one of its objectives is to *"promote common terminology in the social responsibility field*" (ISO, 2016). It espouses seven key underlying principles of social responsibility: accountability, transparency, ethical behaviour, respect for stakeholder interests, respect for the rule of law, respect for international norms of behaviour, and respect for human rights (ISO, 2016). The scope of ISO 26000 includes the following intentions, to:

- Assist organisations in addressing their social responsibilities while respecting cultural, societal, environmental, and legal differences and economic development conditions;
- Provide practical guidance related to making social responsibility operational;
- Assist with identifying and engaging with stakeholders and enhancing credibility of reports and claims made about social responsibility;
- Emphasise performance results and improvement;
- Increase confidence and satisfaction in organisations among their customers and other stakeholders;

- Achieve consistency with existing documents, international treaties and conventions, and existing ISO standards;
- Promote common terminology in the social responsibility field;
- Broaden awareness of social responsibility (ISO, 2016).

ISO 26000 is another interesting example of transnational governance within the sustainability field and the role multi-stakeholder processes play in shaping the role of business in society (Hahn & Weidtmann, 2016). It provides a starting point for organisations on their journey of social responsibility (Bernhart, 2016), arguably complementing other CSR instruments such as UNGC and GRI (Montiel, 2015).

Following calls from the Council and the European Parliament, in 2011 the Commission produced *A Renewed EU Strategy 2011-14 for Corporate Social Responsibility*. It aims to encourage the conditions necessary for longer-term employment levels, sustainable growth and responsible business behaviour, though it controversially places sustainability viability squarely with economic success. It is in this strategy that the European Commission claims to have played a *"pioneering role in the development of public policy"* (EC, 2011:4). Yet, with enduring conflicts and paradoxes surrounding the management of the employment relationship (Legge, 1995), contemporary workplaces are witnessing the rise of zero-hour contracts, an increase of precarious work, decreasing job-security, greater work intensification, extreme income inequality and trade union emasculation – with a backdrop of economic austerity of the Great Depression proportions (Bratton & Gold, 2017).

Therefore, despite all these developments, it is clear that the initial radicalism of the 1970s had at best been *"watered-down"* (Alange, 2014:1), or worse had *"vanished"*

(Kathari et al., 2015:1). So, twenty years after the first Earth Summit, world leaders were re-united in Rio and had their 1992 original commitments reaffirmed during the United Nations Conference on Sustainable Development, 2012 (Rio+20) (UNCSD, 2012). Sustainability was reframed as a solution to societal problems both now and in the future, and was broadened to include the concept of the 'green economy' (Schlör et al, 2015). Arguably, as with other UN processes, the Summit fell short of recognizing where responsibility lay and failed to identify the historical and structural roots of unsustainability, rendering any proposed solutions not nearly transformative enough (Kothari et al., 2015). Nevertheless, one of the main outcomes was the agreement by Member States to launch a process to develop a set of sustainable development goals (SDGs), defined in 2015, and published at the start of 2016 (please see page 44). Given that the Decade of Education for Sustainable Development (DESD) was drawing to a close, Rio+20 also provided clear direction and recognition of the crucial role that HE can play in supporting societal change for sustainability. Two initiatives of particular relevance to this study were tabled. The first, the UN-led Higher Education Declaration, records the actions and commitment of HEI leaders worldwide with regards to the improvement of their sustainability performance. The second initiative was the Rio+20 People's Treaty for Higher Education, the signatories of which commit to transform higher education towards sustainable development at five levels (Table: 3).

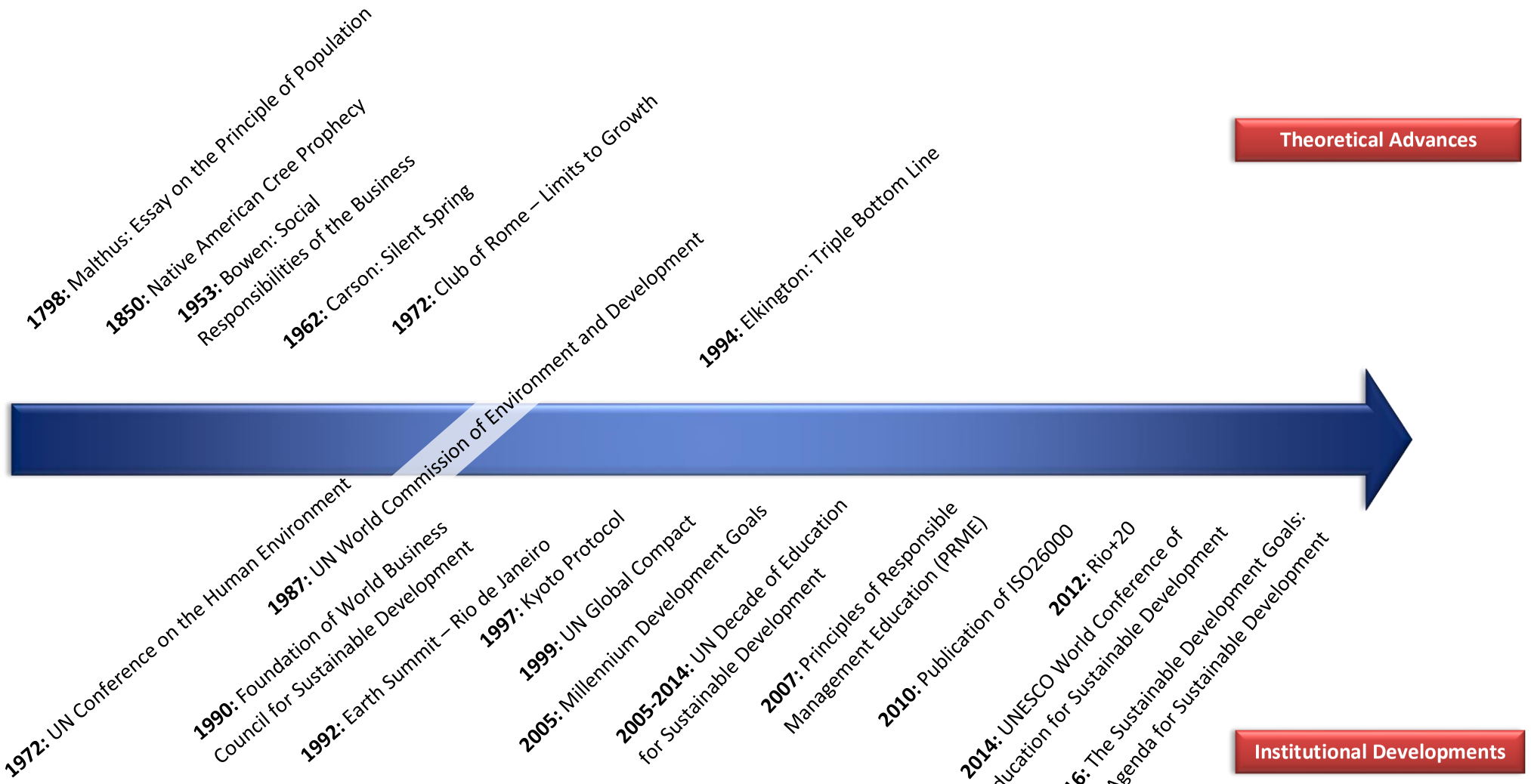
Cultural	Promote change so that sustainable development becomes a guiding principle for higher education.
Campus	Mainstream campus management practices and extend good practice across the sector.
Curriculum	Reorient the curriculum so that it aligns with sustainable development.
Community Engagement	Demolish the walls of higher education institutions which can exclude the work of the communities that they serve and improve access to higher education.
Connecting the System	Review the various policies, incentives and mechanisms driving higher education to ensure that they are aligned with sustainable development.

Table 3: *Rio+20 People's Treaty for Higher Education* (UNCSD, 2012).

Then in Japan 2014, at the end of the UN Decade of EDS, the UNESCO World Conference of ESD raised two major questions. Firstly, how can HEIs assess and report on their global performance? Secondly, how can HEIs be certain that they are producing sustainability literate graduates? In part fulfilment of the first question, the online Platform for Sustainability Performance in Education was launched to assist HEIs to implement, monitor and report their institution's commitment towards and performance for sustainability. The platform provides sustainability assessment tools from around the world. In response to the second key question and of particular significance to this study, the 'Sustainability Literacy Test' (Sulite) was launched. It is a HEI tool designed for assessing and verifying the sustainability literacy of students and shall be discussed further in Chapter 5.

Figure 1: The Sustainable Development Goals (UN, 2016)

Figure 2: Timeline for sustainability

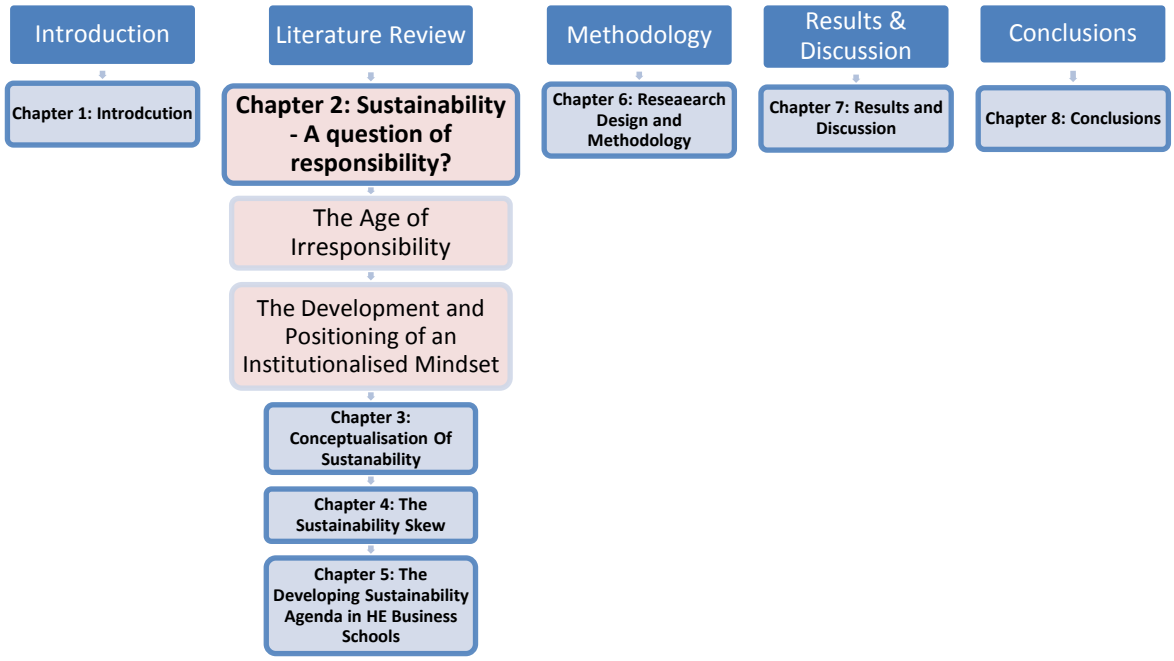


As touched on previously, 2016 marked the publication of the 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs) (UN, 2016a). The 17 SDGs and associated 169 targets provide a detailed dashboard of goals and targets agreed to by all 193 UN member countries, representing a global consensus (please see Figure: 1). By explicitly recognizing the much needed work still to be done, by incorporating a broader and more transformative agenda that more adequately reflects the complex challenges of the 21st century, and recognising the need for structural reforms in the global economy, they should provide an important step in the transition to a sustainable world (Costanza et al., 2016; Fukuda-Parr, 2016). The SDGs represent a *"major potential turning point in the future of humanity. For the first time in recorded history we have a set of goals and targets agreed upon by all UN countries, which include the full range of factors that contribute to equitable and sustainable well-being. We must not squander this opportunity to change the trajectory of humanity toward a more sustainable future."* (Costanza et al., 2016:59).

This chapter has introduced the principal reasoning behind this study, suggesting why it is important. It has also provided a statement of the overarching research aim and research questions. Following the advice of Denzin and Lincoln (2013), this chapter located the field by summarising the main historical and theoretical developments, thereby gaining some insight into the drivers behind the sensemaking of sustainability. Figure 2 provides a timeline showing the main institutional developments and theoretical advances discussed above, ending with The Sustainable Development Goals which balance the three dimensions of sustainable development: economic, social and environmental. The next chapter shall delve more deeply into the relationship

introduced in this chapter, namely that between ethics, responsibility and sustainability.

Chapter 2: Sustainability - A question of responsibility?



"*Organisations face many challenges in the globalised, interconnected twenty-first century – none more so than the societal expectations of behaving responsibly with regard to people…profits…and the planet*" (Parkes, 2012:287).

This study is an exploration into the conceptualisation of sustainability, and it is argued that to explore sustainability, an exploration into responsibility and ethics is required, as they are inextricably linked (e.g. Jones, 2011; Gray et al., 2014; Laasch & Conaway, 2015). To that end, the nature, assumptions and meaning of *ethics* and *responsibility*, both within the organisation and their position in relation to sustainability, would benefit from some consideration within this study. Such a discourse may enable a more dynamic understanding of sustainability, and will add to the discussions as to whether ethical behaviour and responsibility in their many guises are a subset of, separate from or the same as, sustainability (Jones, 2011). It is hoped that this will also serve by allowing some clarity within the proceeding Chapter 3: Conceptualisation of Sustainability. Therefore, the aim of this chapter is to consider how responsibility and

ethics are positioned in relation to sustainability. Consequently, it begins with an exploration into the '*The age of Irresponsibility*' to provide context and to frame notions of responsibility, followed by a lengthier section investigating the development and positioning of an institutional mindset for sustainability, responsibility and ethics.

2.1 The Age of Irresponsibility

"For several decades business has been undergoing the most intense scrutiny it has ever received from the public. Allegations levied against it are that it has little concern for the consumer, cares nothing about the deteriorating social order, has no concept of acceptable ethical behaviour, and is indifferent to the problems of minorities and the environment. Issues about what responsibilities business has to society continue to be raised. These claims have generated an unprecedented number of pleas for companies to be more socially responsible." (Carroll & Buchholtz, 2015:27)

Many believe that if the mistakes of the past are to be avoided, business leaders of the future need to develop skills in responsible management with a real awareness of the implications for all stakeholders (e.g. Parkes, 2012; PRME, 2014). Few business leaders could deny that the great advances of the industrial revolution brought with them a *"host of unintended consequences"* (McDonough, 2003:7). The rise of the multinational corporation and the globalisation of the financial markets has meant that the corporation proves a formidable challenge to the authority of nation-states (Benn et al., 2014). Indeed, the wealth of the largest corporations today exceed that of most nations and thus endows them with unprecedented power (Dunphy et al., 2006). Corporations can operate across national boundaries and political borders which facilitates a potential to abuse that power. This is by no means indicative of all corporations and their leaders, as some are undoubtedly environmentally and socially-

minded, recognising the interdependence between businesses and community, rather than those who place share-holder value as the most important outcome (Avery, 2005). Indeed, there appears to be a growing divide between those corporate leaders who, through ignorance or design, continue to exploit natural and human resources and those who embrace the responsibilities and opportunities of "*corporate citizenship*" (Dunphy et al., 2006:7). This divide is perhaps compounded by the stances taken in terms of the nature and role of the human construction that is 'business'. For instance, as famously asked by Friedman in "*The Social Responsibility of Business Is to Increase Its Profits.*" (1970:173): *"What does it mean to say that "business" has responsibilities? Only people can have responsibilities. A corporation is an artificial person and in this sense may have artificial responsibilities, but "business" as a whole cannot be said to have responsibilities, even in this vague sense."* Similarly, Shaw (1988) argues that it is the role of democratic institutions to deal with national agenda issues such as inflation, unemployment, and pollution, not that of the private sector. Yet even Friedman, who argues that the only responsibility of business is to increase its profits, concludes that business should engage in *"open and free competition without deception of fraud"* (1970:175), thereby implying a broad range of moral obligation and social responsibility underpinning the conduct of said business (Mulligan, 1986).

A revealing survey conducted by GlobeScan for the University of Maryland found that environmental protection ranked highly amongst public attitudes in twenty countries and about seventy-five percent of those polled wanted more rigorous protective regulation (Christofi et al., 2012). It is both this populous demand for equity and social justice, and the increase in environmental-stewardship regulation which have each played their part in the evolution of sustainability. But more recently, two things in

particular have happened: Firstly, the interest in, and the need for, *'shared responsibility',* (expounded upon by the UN through the UNGC (UNGC, 2013)); Secondly, following the more recent financial turmoil, the international governmental cooperation to end the dubbed *"age of irresponsibility"* (Brown, 2008). In the 1990's the *'Global Responsibility'* movement, initially centred in religious interfaith dialogue, sought to derive universal, common ethical truths (e.g. Kung, 1991; Perez, 2003; de Woot, 2005; Jones, 2011). By taking the intellectual position acknowledging that what is 'ethical' is dependent upon and relative to culture, and that people do not have to be religious to be ethical, it allowed global responsibility to become inclusive (Kung, 1991). Hence, a more global approach to responsibility acknowledges that all stakeholders have rights – and all stakeholders, not just the 'corporation', have responsibilities (Garavan & McGuire, 2010).

A succession of man-made disasters and ethical scandals, from the age of irresponsibility, have increased these expectations and contributed to the strong public opinion favouring tougher regulation to protect workers, the environment and the peoples within it (Brown, 2008). The 'scandals' highlight the irresponsible behaviour of significant corporations (and their supply chains), demonstrative of a disregard for other stakeholders – corporations such as the tobacco industry, Anvil Mining, James Hardie, Enron, RBS, Shell Oil and the apparel industry (Dunphy et al., 2006; Cohen et al., 2012). The following provide some illustrative examples:

1984, India: Bhopal Catastrophe. "On the night of December 2nd, 1984, a Union Carbide plant in Bhopal, India, began leaking 27 tons of the deadly gas methyl-isocyanate. None of the six safety systems designed to contain such a leak were operational, allowing the gas to spread throughout the city of Bhopal. Half a million

people were exposed to the gas and 25,000 have died to date as a result of their exposure. More than 120,000 people still suffer from ailments caused by the accident and the subsequent pollution at the plant site." (The Bhopal Medical Appeal, 2013).

1986, Russia: Chernobyl Disaster. "In the early hours of 26th April 1986, one of four nuclear reactors at the Chernobyl power station exploded. Moscow was slow to admit what had happened, even after increased radiation was detected in other countries. The lack of information led to exaggerated claims of the number killed by the blast in the immediate area. Contamination is still a problem, however, and disputes continue about how many will eventually die as a result of the world's worst nuclear accident" (BBC, 2009).

1989, Alaska: Exxon Valdez Oil Spill. "Considered to be one of the worst environmental disasters of its kind, the Exxon Valdez tanker spilled 38,000 tonnes of crude oil into Alaska's Prince William Sound after the vessel hit a reef. As a result, more than 2,000km (1,250 miles) of coastline was affected, killing thousands of seabirds and having a serious impact on the region's fishing industry. In the five years after the disaster, the oil was shown to be dispersing at a rate of about 70% each year. Most clean-up operations in the area ended in 1992 because the remaining oil was expected to disperse within a few years…A later study discovered that the oil was disappearing at a rate of just 4% each year, and that an estimated 20,000 gallons remained in the beaches" (Kinver, 2010).

2012, Pakistan – Karachi Blaze. "It was during the late afternoon shift change when the fire which…killed nearly 300 people broke out at the garments factory in Karachi. The source of the fire is thought to have been a faulty electrical switch… In this case the

factory was a recipe for tragedy - its low-ceiling halls were crammed with machines manned by workers toiling away in sweat shop conditions to produce top-of-the-line, ready-to-wear garments which earned the factory owners millions of dollars annually. The workers, on the other hand, go home with $5 to $6 a day. There are no other benefits…In general, the problem is the same that plagues all matters of governance in Pakistan - a failure to enforce the law [and] the lack of adequate safety checks. Textile factories are particularly at risk due to the lethal combination of chemical dyes and stacks of cotton often stored next to each other - …Fire exits - as in the case of the factory in Karachi - exist only on paper… Industrial standards are disregarded to minimise cost as inspectors are paid to look the other way…Small and potentially easily rectifiable problems are made worse by years of official neglect. Mistakes are covered up only to be repeated a few months later" (Hasan, 2012).

The above examples go some small way to illustrating the multifarious and elusive nature of responsibility. It is suggested that responsibility is determined by the relationships between the multiple stakeholders, with each world view perceiving the nature of the relationships differently (Gray et al., 2014). If so, it is a complex concept which is as much about what has *not* been done, as that which has. And, as Jones (2011:2) succinctly purports, *"The ethical framework for sustainability is an applied ethic and inevitably focuses on the nature of responsibility….Responsibility is about doing good, not because of a rational business case, but because of a capacity to do so."*

2.2 The Development and Positioning of an Institutionalised Mind-set – Ethics, Responsibility and Sustainability.

"The reason why some business leaders create global injustice [is because] corporate executives are like drug addicts reaching for the quick fix of profit maximisation and short-termism." (Corfino, 2014:1).

The pressure for organisations to behave responsibly has deep historical, cultural and religious roots (Parkes, 2012). Discourse surrounding responsible and ethical business initiatives such as stakeholder management, corporate accountability, green management, CSR and corporate environmental management, are knitted in with the discussions on the conceptualisations of sustainability (Gray et al., 2014; Carroll & Buchholtz, 2015). For example, sustainability is often described as the normative-ethical principle of resource allocation from an anthropocentric perspective (e.g. Doppelt, 2010; Hahn & Reimsbach, 2014). Indeed, sustainability, ethics and responsibility are frequently perceived as parallel and often overlapping issues within the organisation and in business education (Hahn & Reimsbach, 2014).

However, there is a distinct risk that a more responsible, ethical and sustainable future will not be realised unless the concept of sustainability is expressed in a manner which allows its notional essence to be clearly exposed (Moir & Carter, 2012). Perhaps therefore, a *"diffusion of concepts"* (Ehnert, 2009:2) enables a greater appreciation of the relationships (Kramar, 2011) allowing the development of an institutionalised mind-set (Jones, 2011). Christofi et al. have sympathy with this view and highlight the importance of establishing standardised reporting of sustainability by corporations, arguing that it will renege on its intended purpose without standardised

environmental and social reporting criteria linked to bottom line performance (2012:169). CSR and similar initiatives depend on stakeholder theory essentially because it is the focus on the status of the various stakeholders which provides the broader sense of responsibility within the corporation (Greenwood, 2002; Garavan & McGuire, 2010; Jones, 2011). But, it is the assumptions about the nature of and relationship between economics, organisations and management processes which frame the conceptualisation of the relationships between institutions, outcomes and processes (Kramar, 2011), and thus the outlook and approach taken.

Corporate social responsibility has maintained a central place in the discussions of what it means to be a corporation for around half a century (Gray et al., 2014). Likewise, literature regarding CSR is abundant and has grown in number exponentially during recent decades (Baisakalova, 2014). Indeed, it is argued that CSR is the institutionalised mind-set for sustainability, particularly through TBL formulations (Jones, 2011; Gray et al, 2014). For an increasing number of global corporations, it is considered a necessary constituent of corporate strategy, process and culture (Schuler & Jackson, 2006). However, the concept of CSR is not universally shared and is context specific – dependent on the social, political and economic environment of the organisation (e.g. Carroll, 1991, 1999; Baisakalova, 2014, Gray et al., 2014; Crane & Matten, 2016; Seivwight & Unsworth, 2016). For some organisations CSR is an intrinsic part of their identity being *"deeply embedded in their institutional DNA"* (Willis, 2015:1). Whilst for others it is bewildering and can lead to negative perceptions of *"tokenism"* (Willis, 2015:1). Or, as Seivwright and Unsworth suggest, it is in reality often simply the *"production of expensive reports for the purpose of compliance"* (2016:2).

It is unsurprising therefore, that definitions are various and commonplace in the literature (Garavan & McGuire, 2010). And, whilst no conclusive definition has been reached by the literature, it is largely accepted that in essence CSR is a function of relationships (Gray, et al., 2014), recognising that organisations also have ethical and philanthropic responsibilities to all stakeholders, alongside economical and legal responsibilities (Garavan & McGuire, 2010; Parkes, 2012; Kramar, 2014). The World Business Council for Sustainable Development, consisting of CEO's representing around 200 organisations, defines CSR as *"the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large."* (WBCSD, 2014).

Because of, or despite, the abundance of literature, research on CSR and sustainability has produced a wide and disparate body of knowledge (Pal & Jenkins, 2014). There are two conflicting stances in particular. Firstly, the business and society approach advocates that organisations have an obligation to society. Whereas the economic approach argues that the principal responsibility of business is to maximise profit (Friedman, 1962), and thus separates business from social functions (Pal & Jenkins, 2014). However, through content analysis, Windsor (2001) maintains that regardless of the underlying approach, dominant discourses surrounding CSR and sustainability tend not to relate to societal interests and the impact of corporate activities on external stakeholders, instead, upholding corporate interests. Pal and Jenkins (2014) suggest this is because the integration of CSR into a corporate setting is derived from the overarching motivation of sustaining the corporation through economic opportunity instead of emphasizing societal benefits.

Similarly, CSR has been criticised in terms of operationalisation - for falling short of translating the rhetoric into the reality of effective organisational practice and process (e.g. Garavan & McGuire, 2010; Seivwright & Unsworth, 2016). A particular challenge being the development of a climate of trust, respect and dedication that recognises for instance, the organisational responsibility to worker-wellbeing, both in and out of work (Mariappanadar, 2012a) – not simply the surface-level engagement in philanthropic activities and charitable donations (Garavan & McGuire, 2010).

Ethics, on the other hand, fundamentally focuses on right and wrong, good and bad (Garavan & McGuire, 2010). Moreover, public interest in it is at an all-time high (Carroll & Buchholtz, 2015). It is defined generically by the Oxford English Dictionary (OED, 2013) as the *"moral principles that govern a person's behaviour or the conducting of an activity."* Within organisational practice it usually includes guidelines concerning, for example, the maintenance of business records, respect, corruption, discrimination and conflicts of interest (Cohen, et al., 2012). Laasch and Conaway (2015:118) suggest that business ethics *"…in practice aims at achieving the right decision and behaviour in a certain ethical issue, or dilemma, situation. Business ethics in theory aims at studying how people in business should act and why they do or do not act that way".* It arguably relates to deeds which are considered to be necessary for all stakeholders – not simply those stipulated by regulation or law (Carroll, 1999; Garavan and McGuire, 2010). And, it is from this perspective that the Society for HRM Foundation defines business ethics as, "*a set of behavioural guidelines by which all directors, managers and employees of an organization are expected to behave to ensure appropriate moral and ethical business standards, typically beyond the letter of the law*." (Cohen, et al., 2012:12). Unfortunately, argues Parkes (2012), decisions taken in business do, in reality, extend

beyond this rather minimalist moralistic approach, with actions often justified by higher financial returns.

CSR often pertains to the relationships between organisational responsibilities towards environmental, social and economic drivers, usually considering how values and judgements are critical in ethical decision-making (Garavan & McGuire, 2010; Parkes, 2012). This places ethical behaviour *within* CSR. Welford (1995) also couches the conceptualisation of sustainability in terms of ethical behaviour but extends the argument to suggest that organisations need to act with equity, encapsulating the mantra of sustainability in its many forms. Welford suggests that, *"Equity provides the widest possible ethical and conceptual net for sustainability"* (1995:6). However, the Institute of Environmental Management and Assessment (IEMA) shies away from *"a vague notion of ethical business…to explain CSR"*, instead preferring the following widely accepted definition: "*CSR is about how organisations align their values and behaviour with the expectations and needs of their stakeholders – not just their customers and investors, but also employees, suppliers, communities, regulators, special interest groups and society as a whole*." (2007:1).

Interestingly, the Society for Human Resource Management (Cohen et al., 2012), suggest that the strategic journey for the achievement of sustainability can be represented through Carroll's Pyramid of Corporate Social Responsibility (Carroll, 1991), please see Figure 3. Carroll argues that, although there is a natural fit between the idea of social responsibility and an organisation's stakeholders, corporate executives have struggled with the notion of balancing their commitments to shareholders with their obligations to an ever-broadening group of stakeholders. He asks, *"What does it mean for a corporation to be socially responsible?"* (1991:39).

Carroll suggests that for CSR to become an institutionalised mind-set, it should be framed so that the entire range of responsibilities is considered, these being: economic, legal, ethical and philanthropic. These are depicted as a pyramid, each in order of significance and importance. However, it does have its limitations, not least its overly simplistic and static nature which arguably fails to capture the complexities of business contexts and the actors within them. The rather reductionist, and possibly Newtonian 'ranking' aspect of one element being more important than another, does not sit comfortably with holistic notions of sustainability either. Likewise, it does not overtly recognise the implications of cultural variances – as found in a European study by Crane and Matten (2004) and an African study by Visser (2005). There is contention within the ranking too and the assumption that economic responsibilities, for instance, are more important than the law-based responsibilities. Hence, despite Carroll's four-part conceptualisation of CSR being the most durable and widely cited in the literature (Crane & Matten, 2004; Visser, 2005), including by the Society for Human Resource Management, perhaps it is not best placed to describe the complex reality and relationships of responsibility, ethics and sustainability.

More recently, studies which directly examine the business case and the positive relationship between ethical vigour, responsibility and business success are providing a stronger evidence-base (Jones, 2011). Amongst these are the emergence of reporting and accounting standards which look beyond economics to measure a range of outcomes – such as UNPRI (UN Principles for Responsible Investment), the GRI (Global Reporting Initiative), TBL Reporting, STOXX and the Dow Jones Sustainability Index. However, the contentious issue of conceptualisation and underlining purpose remains apparent despite these developments. Zappala (2010 in Kramar, 2011:165) cautions

that, *"an understanding and integration of broader sustainability outcomes reflected in the concept of CSR is still limited and fragmented."* Pruzan concurs, arguing that conceptualisation has been to a large extent by-passed, suggesting that the current focus is *"primarily on how to operationalize CSR – how to integrate it into the corporation's vocabulary, policies, stakeholder communications, and reporting systems"* (2008:553 in Kramar, 2011:165).

- **Economic responsibilities:** The first responsibility of any organization is to deliver an acceptable return for shareholders (while contributing to local and global economies through their core business).
- **Legal responsibilities:** The second aspect of responsibility requires that organizations operate within the law at all locations in which they do business.
- **Ethical responsibilities:** The third layer of the pyramid requires organizations to consider social and environmental impacts of their operations and, as far as possible, to do no harm while pursuing business interests.
- **Discretionary responsibilities:** The fourth layer of responsibility is to proactively seek opportunities to make a positive contribution to society beyond profitability, compliance and business ethics. At the discretionary, or voluntary, level, organizations have a responsibility to understand broad stakeholder needs and to address societal concerns though their business practices.

Figure 3: Carroll's Pyramid of Corporate Social Responsibility (1991), added to by SHRM (Cohen et al., 2012:5)

Adding to this discourse are several policy documents, including the European Union white paper on CSR and the UN Global Compact, which address environmental and social issues (Banerjee, 2008). Most of the literature regarding these initiatives pursue the notion that organisations depend on environmental and social resources that are scarce and as such, should be considered in corporate decision making (Hart, 1995). Yet, running through them are differing interpretations of meaning. This was demonstrated with the previously-mentioned 2006 EU Directive /46/EU where clarity regarding what was meant by CSR, ethical behaviour and sustainability, and their positioning relative to each other, proved problematic.

Both the European Commissions' 2001 Green Paper on CSR and their 2006 communication, *Implementing the Partnership for Growth and Jobs: Making Europe a Pole of Excellence on CSR* demonstrate the want for a voluntary approach for CSR, thus adding distance between it and the required ethical governance (Casson, 2013). Then in March 2007, the European Parliament produced the *CSR – A New partnership* report which proposed that CSR could not and should not be considered separately from ethical governance and suggested amendments to the ethical governance rules to incorporate CSR (EP 2007). The report recommended a common mind-set and that directors should have *"a personal duty to minimise any harmful social and environmental impacts of the companies' activities"* (Casson, 2013:17). However, these recommendations were not acted upon by the Commission. Indeed, asserting that the diversity of meaning and conceptualisation of CSR was too diverse, the Commission did not propose any legislation – consigning CSR to purely voluntary governance.

Following calls from the Council and the European Parliament, in 2011 the Commission did produce *A Renewed EU Strategy 2011-14 for Corporate Social Responsibility*. Aiming to encourage the conditions necessary for longer-term employment levels, sustainable growth and responsible business behaviour, the strategy argued that, *"Through CSR, enterprises can significantly contribute to the European Union's treaty objectives of sustainable development and a highly competitive social market economy… CSR offers a set of values on which to build a more cohesive society and on which to base the transition to a sustainable economic system"* (p3), suggesting that sustainability can be achieved *through* CSR – but that CSR is not in itself the end-point. Again, this controversially placed the viability of sustainability squarely with economic success (Interestingly, Kramar (2014), citing a study by Walsh, Weber and Margolis (2003), noted that economic rationale and performance dominate the research on CSR initiatives. They found that of 121 studies, 100 were concerned with the financial outcomes rather than social performance). It is in this strategy that The European Commission claimed to have played a *"pioneering role in the development of public policy"* (EC, 2011:4).

Importantly here, the EU strategy then went on to offer a new definition for CSR: *"the responsibility of enterprises for their impacts on society"* (EC, 2011). It argues that in order to fulfil this, depending on variables such as the nature and size of the organisation, organisations should, *"have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders, with the aim of: maximising the creation of shared value for their owners/shareholders and for*

their other stakeholders and society at large; identifying, preventing and mitigating their possible adverse impacts" (EC, 2011:6).

As can be derived from the excerpt above, this strategy appears to continue to view ethical behaviour as separate to CSR, placing it *along-side* CSR 'issues' rather than inextricably contained within (Casson, 2013). The review highlights the difficulty of clarifying what is meant by ethical behaviour, CSR and sustainability. It also demonstrates the problematic nature of establishing a shared mind-set, the convergence of practice and a level playing field across the EU member states – not least due to differing context-based interpretations.

Interestingly, in June 2013 in response to the 2006 EU Directive, the Institute of Business Ethics (IBE) produced *'A Review of the Ethical Aspects of Corporate Governance Regulation and Guidance in the EU'* (Casson, 2013). The review was conducted throughout the EU and aimed to explore any formal mechanisms and requirements (i.e. legislation, codes of corporate governance etc.) for operating, governing and reporting in line with ethical business principles and practice. The review highlighted the numerous discussions pertaining to whether or not corporate governance incorporated CSR. However, the review also concluded that disparity between terminology and conceptualisations undermine the general governance debate.

In an attempt to provide clarity, Garavan and McGuire (2010) suggest that the three concepts of ethics, CSR and sustainability have the active enhancement of societal welfare in common – but with each concept taking a different path to achieve this end.

- Ethics encourage moral reflection and focuses on standards of behaviour within organisations.

- CSR considers concern for society as a supplement to the traditional economic focus of organisations.

- Sustainability promotes the interdependence and balance between the three pillars: environmental, societal and economic objectives.

Garavan and McGuire's resulting model (please see Figure 4), recommends that the relationship between the three concepts is not hierarchical though there are significant areas of overlap.

Laasch and Conaway (2015) take a similar stance to Garavan and McGuire. They discuss the hierarchical relationships and the dominance of one over the other, and conclude that such discourse is unhelpful and an *"inhibitor"* to the theoretical development of the field (p.viii). Whilst acknowledging the (possibly over) simplification of the three domains, they consider sustainability, responsibility and ethics as *"complimentary, mostly mutually reinforcing, but distinct in their core concepts and organisational implication."* (Laasch & Conaway, 2015:viii). Demonstrating parallels with Garavan and McGuire (2010), Laasch and Conaway's rationale is as follows:

- Sustainability is centered on the core concept of the TBL and aims to create a neutral or, better, positive TBL.

- Responsibility is centred on the core concept of stakeholders and aims to optimise stakeholder value.

- Ethics is centred on the core concepts of ethical issues and opportunities, and aims to create moral excellence. (2015:viii).

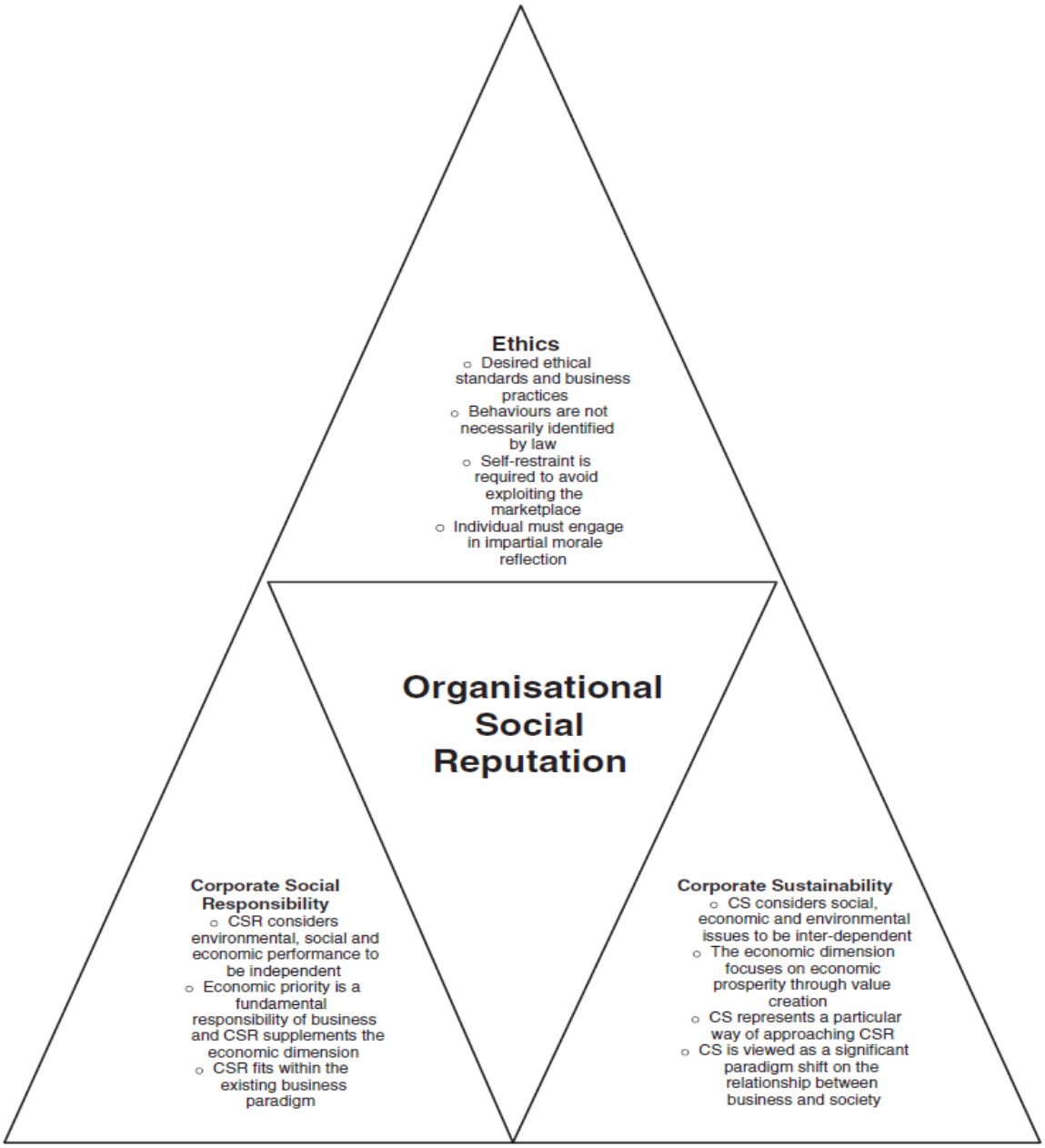


Figure 4: Understanding Corporate Social Responsibility, Sustainability and Ethical Behaviour (Garavan & McGuire, 2010:493)

Both these theories challenge the notion that ethical behaviour sits *within* CSR (Parkes, 2012); contest the European Parliament report (2007) which proposed that ethical governance could not and should not be considered *separately* from CSR; have

sympathy with European Commissions' Strategy for Corporate Social Responsibility (2011) which does view ethical behaviour as separate to CSR – placing it *alongside* CSR issues; yet disputing the same European Strategy (2011) for suggesting that sustainability is achieved *through* CSR and that CSR is not in itself the end point.

Therefore the literature is unsettled. However, the relationship between ethical behaviour, CSR and sustainability may become more apparent following a possible new EU Directive, the proposal for which was published in April 2013. If passed without significant amendment, the Directive will apply to organisations with at least five hundred employees and a turnover of at least forty million Euros. Organisations will be required to include in their annual report a statement regarding anti-corruption, bribery and respect of human rights, and environmental, social and employee-related concerns. In the UK, quoted companies will be required to report in a fair, balanced and understandable way, any environmental, social, community and human rights issues within the Annual Report and Accounts (Casson, 2013). Though of course, what is to be considered an 'issue' is in itself subjective and open to discretion and interpretation, and so perhaps bringing us back to 'square one'. For now, as the idiom suggests, it appears that 'the jury is out'.

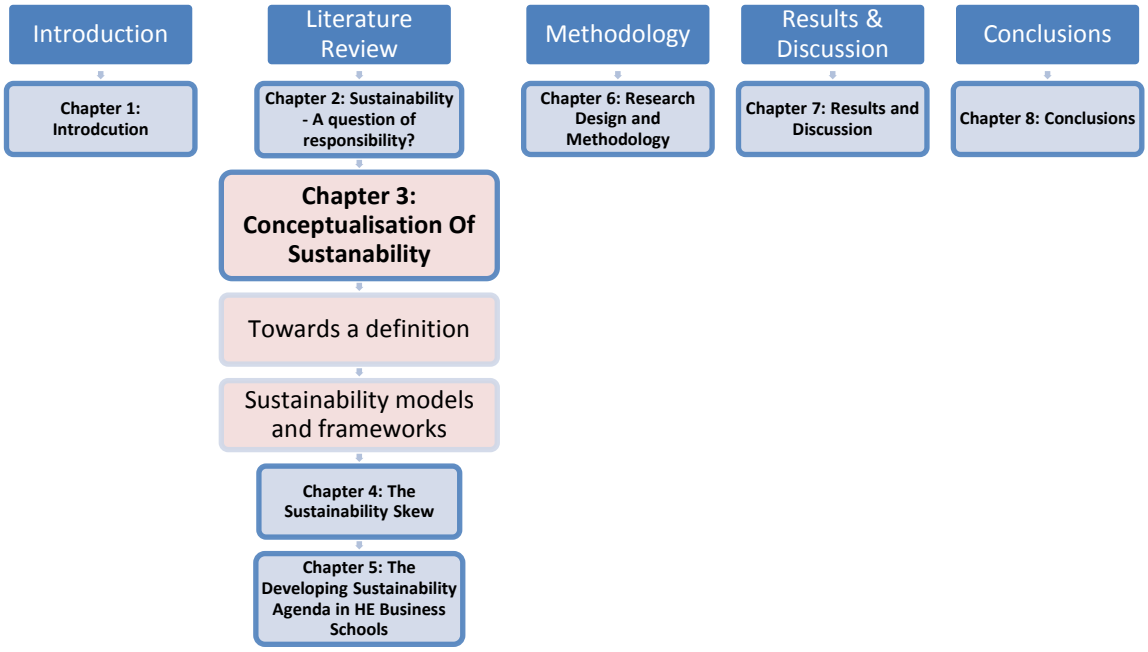
Despite this *"fog of confusion"* surrounding how responsibility (more specifically, CSR) and ethical behaviour are positioned in relation to sustainability, the IEMA claim that *"…[CSR] has come in from the cold. Once a phrase used almost exclusively by pressure groups, non-governmental organisations, niche consultancies and a handful of pioneering but unconventional corporations, it now sits firmly in the mainstream business agenda…CSR is common currency*." (IEMA, 2007:1). However, as Jones (2011) cautions, the very essence of these discussions has its critics who principally champion

their setting-aside to maintain a focus on profit. Jones highlights Milton Friedman's (1970) renowned claim (discussed earlier), that a company's responsibility is only to make profit and that the spending of shareholders' funds on the wider good which does not add to the financial bottom line is in itself fundamentally unethical. Others too have sympathy with this view. Bakin (2012) and Doane (2005) argue that companies are prevented from acting for the good of society constitutionally; that the rigours of highly competitive markets constrain them; and further, that it is foolish to expect otherwise. Friedman (1970) has argued that disingenuous philanthropy is naught more than *"hypocritical window dressing"* (Jones, 2011:10), or *"tokenism"* (Willis, 2015:1). Greer and Bruno (1996) document widely the practice of 'Greenwashing' where organisations fraudulently manipulate reputation, not just with regard to the more usual ecological sustainability, but more widely to provide false depictions of corporate social responsibility in the drive for ethical legitimacy (Jones, 2011), thus undermining and devaluing the CSR currency and associated indexes. Baraka (2010) suggests that this is possibly due to organisations working from incompatible ethical positions and incompatible concepts of sustainability.

This chapter explored notions of ethics and responsibility, and their position in relation to sustainability, thereby adding clarity to the discussions which follow in Chapter 3, which focus on the conceptualisation of sustainability. It seems that sustainability both clarifies and confuses issues of ethics and responsibility. Even so, the socially responsible, sustainable, or ethical investment movement is thriving (Carroll & Buchholtz, 2015). In many respects the literature remains unsettled, failing to reach a consensus. Nevertheless, although the terms may appear to be used homologously in practice, the literature tends to agree in disagreeing, suggesting that ethics,

responsibility and sustainability are not interchangeable (e.g. Gray & Milne, 2004; Garavan & McGuire, 2010; Milne et al., 2009; Gray et al., 2014; Laasch & Conaway, 2015). Rather, they are important and related concepts often sharing a rich history (e.g. Gray et al., 2014; Carroll & Buchholtz, 2015). As concluded by Casson's Review, *"Many companies recognise business ethics, sustainability and social responsibility, and also boardroom ethics as characterising the right way to run a business as well as being essential for long-term success."* (2013:41).

Chapter 3: Conceptualisation of Sustainability



"Most people in the world today have an immediate and intuitive sense of the urgent need to build a sustainable future. They may not be able to provide a precise definition of sustainability…but they clearly sense the danger and the need for informed action." (UNESCO, 1997:7)

In line with the chosen theoretical framework for this study, the term 'conceptualisation' is used here to denote an organisation and clarification of observations and sensemaking, possessing central common features and multidimensional notions of, in this case, sustainability (Colbert & Kurucz, 2007; Bryman & Bell, 2011, Alvesson & Karreman, 2011; Naslund & Pemer, 2012). As indicated in the previous chapters, there are considerable discursive difficulties associated with both the conceptualisation of sustainability and thus the defining thereof, with sustainability often perceived as a conflicting, elusive and multidimensional concept (e.g. Filho, 2000; Marshall & Toffel, 2005; Gloet, 2006; Docherty et al., 2009; Saul & Kramer, 2011; Donnelly & Proctor-Thomson, 2011;

Mariappanadar, 2012; Kramar, 2014; Gray et al., 2014; Perey, 2015; Laasch & Conaway, 2015). Hence, for the purpose of clarity, the positioning and interpretations of ethic-based and responsibility-based constructs have largely been discussed in Chapter 2. It is recognised that it is a point of debate as to whether notions of ethics and responsibility can actually be reduced and separated from sustainability – which is compounded by varying interpretations, each with *"its own reasoning, each speak[ing] its own language; and each believ[ing] that it is the most important"* (Scott, 2011:4). As with thr Historical Overview, the complexity and scope of the sustainability field far exceeds that which can be sensibly detailed within this study. To which end, the more modest aim of this chapter is to explore those conceptualisations of sustainability which are subjectively considered to be most influential to the field and/or relevant to this study. It shall begin with a conversation surrounding definitions, then will take a closer look at particular models and frameworks for sustainability.

3.1 Towards a definition:

"Usage of the word "sustainability" is widespread and incorporates a plethora of meanings. …[However], robust answers to questions such as what is sustainability?, what is a sustainable society?, and what is a sustainable organization? have proved elusive" (Marshall & Toffel, 2005:673).

As discussed within the Historical Overview, the publication of the World Commission in Environment and Development's Brundtland Report was a historic moment, triggering a new wave of debate and sustainability-related activity (Laasch & Conaway, 2015). It defined sustainable development as: *"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987:8).*

This is a very widely used and referred-to explanation, being utilised extensively as a starting point for the development of policy for government, business and community (Doppelt, 2010). It incorporates a broad view (in terms of environmental, economic and social outcomes), has a long-term intergenerational perspective, and an inclusive approach (Pierce & Madden, 2009). However, the literature remains unsettled. At a fundamental level the WCED's underlying conception of sustainability and of sustainable *development* ignited debates concerning the competing interests of corporations for economic growth and environmental stewardship (Pal & Jenkins, 2014). One of the earliest and most vociferous critiques came from Escobar (1995), who argued that sustainable development would not adequately address global socio-economic disparities, but instead would result in the maintenance and perpetuation of capital and corporate growth (Pal & Jenkins, 2014). Others suggest that it is, in essence, flawed – not least for being anthropocentric and interpreting reality in terms of human values and experiences (Seghezzo, 2009). Commentators such as Doppelt, (2010) and Laasch and Conaway (2015) highlight the difficulty in the adequate defining of 'need', whilst Jones (2011) suggests that it is not actually a definition of sustainability in general - but rather of a particular type of organisational growth. It has been criticised as being difficult, if not impossible, to implement (Marshall & Toffel, 2005). And, given it is a definition requiring prediction and consensus, its subjective nature is *"unhelpful in evaluating the sustainability implications of current decisions"* (Marshall & Toffel, 2005:673). Perhaps too, a distinction should be drawn between sustainability and sustainable development – not least because of the oxymoronic overtones of 'sustainable development'. Criticising sustainable development for its false hope, hypocrisy, vagueness and fake greenery, Jones (2011) advises that the term 'sustainability' is often considered more a process than an outcome, having less

association with economic development than 'sustainable development'. This dialectic complexity perhaps allows for a more holistic meaning dependent on the stakeholders in question, providing greater reality to, and engagement with, their particular construct of what sustainability is. Regardless, the Brundtland definition proved a visionary and important starting point – precipitating many attempts to further refine what it means to be sustainable and to develop sustainably now and for future generations – the definition's undisputed strength (Saul & Kramar, 2011). Indeed, Fleurbaey (2015) argues that the notion of giving future generations the *ability* captures the essence of sustainability better than any other explanation before or since. It successfully provided focus to the UN agenda, representing a new social and political contract between the developing and developed world, and, the current generation and generations far into the future (Jones, 2011).

Nevertheless, the lack of clear, unified guidance and leadership regarding sustainability has led to an abundance of differing definitions. It is suggested that, given the broad conceptualisation, any definition is bound to remain elusive, contestable and ideologically controversial (e.g. Gladwin et al., 1995; Marshall & Toffel, 2005; Pal & Jenkins, 2014). Consequently, in an attempt to incorporate many varying interpretations and opinions particularly surrounding implementation, the concept has perhaps become too broad and is losing meaning and efficacy, distracting from the aims of sustainability (Marshall & Toffel, 2005). Arguably therefore, definitions tend to be couched in one-dimensional and environmental forms which can perhaps be too simplistic in nature - rather than a regulative notion, a mind-set presented in a more positivist technical form (Sood et al., 2011). Conversely, perhaps a move away from reductionist explanations towards a more broad-brush approach is precisely what is

needed given the complexity of organisations and the people within them. Indeed, Kramar (2011:165) discusses the concept of complex adaptive systems which assumes that the world is *"nonlinear, unpredictable, self-organising, adaptive and evolving…a self-organising living organism",* which allows for a more dynamic understanding of the relationships between sustainability, the organisation and its many stakeholders.

The effective defining of sustainability is all the more elusive as the spectrum of what is considered 'sustainable' varies enormously and often competes, ranging from economically-based to ethically-based interpretations, pointing towards differing underlying rationalities (Pal & Jenkins, 2014; Ehnert et al., 2014). Different approaches are taken by different interested groups such as financial institutions, governmental departments, social enterprises and regulatory bodies (Pal & Jenkins, 2014). The ethical interpretations of sustainability, as discussed in Chapter 2, tend to be societal-based providing discourse relating to responsibility, sustainable societies, ethical value, stakeholder theory and CSR. The economically-rational interpretations of sustainability centre on resource efficiency and the maximisation of shareholder value (Ehnert et al., 2014). Research by Marshall and Toffel (2005) reviewed extant sustainability frameworks and found that at one end of the spectrum it is merely a renaming exercise – for example, companies simply renaming their Corporate Reports as Corporate Sustainability Reports whilst leaving the content unchanged. Those occupying the other end of the spectrum believe sustainability should embrace fundamental equity such as ethical and transparent governance and the complete elimination of poverty (Marshall & Toffel, 2005). Undoubtedly, there is conceptual clear-water between 'a greener approach' and 'the elimination of poverty'.

Ehnert and Harry (2012:224), compiled a table of definitions which are reproduced here in Table 4, with further definitions and commentary added by the author (see shaded). Whilst recognizing the limitations of reductionism within what is essentially exploratory research, the table demonstrates differentiation between process and content orientated explanations, going some way to illustrate the complexity of the field.

Reference	Sustainability definition / explanations	Rationale
Sterling, (2012:10)	'Sustainable Development' describes the processes and activities that help ensure social, economic and ecological wellbeing, at any focus – local, regional, global – where these three dimensions are seen as systematically interdependent and inseparable.	From a teaching and learning perspective and as used in HEA's *Future Fit Framework.* Refers to 'wellbeing' of all three pillars, but without explicit temporal element. Highlights the significance of interrelatedness.
Sood et al. (2011:196)	Sustainability is *"to ensure decisions and subsequent programs and projects are carried out in a manner that maximises benefits to the natural environment and humans and their cultures and communities whilst maintaining or enhancing financial viability."*	Based on UNCED shared key themes, ie: concern for the wellbeing of future generations; awareness of the multidimensional impacts the need for balance among the different dimensions across sectors, themes and scale
Dyllick & Hockerts (2002: 131)	Corporate sustainability is *"defined as meeting the needs of a firm's direct and indirect stakeholders (such as shareholders, employees, clients, pressure groups, communities etc.), without compromising its ability to meet the needs of future stakeholders as well."*	as the 'triple bottom line' (Elkington, 1994)
Boudreau & Ramstad (2005: 129)	*"achieving success today without compromising the needs of the future"*	Grow human capital; understand organisational success beyond the financial bottom line

Costanza, Daly, & Bartholomew, (1991: 8).	*"Sustainability is a relationship between dynamic human economic systems and larger dynamic, but normally slower-changing ecological systems, in which (a) human life can continue indefinitely, (b) human individuals can flourish, and (c) human cultures can develop; but in which effects of human activities remain within bounds, so as not to destroy the diversity, complexity, and function of the ecological life support system."*	Functional systems view; maintaining the ecological life support systems; no socio-economic systems without eco-systems.
Doppelt (2010:58)	Sustainability *"allows humans to live and work in ways that can be maintained for decades and generations without depleting or causing harm to our environmental, social and economic resources".*	New economic paradigm needed which protects our options
Meadows, Meadows & Randers. (1992:210).	A sustainable society would be interested in qualitative development, not physical expansion.	Origins in Club of Rome. Asks whether growth is needed and by whom and whether it could be accommodated by the resources of the planet.
Ehnert (2009b) based on Müller-Christ & Remer (1999)	Sustainability = Resource consumption / Resource regeneration >/= 1 (Sustainability is the balance of resource consumption and resource regeneration)	Functional (eco-) systems view. Focus on human resource regeneration, development and on maintaining the resource base and relationships (substance) inside and outside the organisation.

Table 4: Sustainability Definitions and Explanations (taken from Ehnert & Harry, 2012:224, with further definitions and commentary added by author – see shaded).

Ehnert and Harry found that the main economic interpretations of sustainability denote the need to redefine what is meant by corporate success – to also include ecological and social performance for long-term survival. The broader process-orientated definitions refer to the relationship between, and dependency on, each of the three pillars. However, three pillar-based definitions are perhaps at risk of overlooking the complexities of the field and *"reducing sustainability as merely to a 'means' to financial 'ends' (e.g. eco-friendly behavior as a business opportunity) or a*

means to social ends (e.g. potential future needs), instead of an end in itself (e.g. maintaining life-supporting systems)" (Ehnert & Harry, 2012:225). Conversely, Doppelt (2010:58) suggests that sustainability is simply about "*protecting our options",* arguing that a new economic paradigm is needed which, *"allows humans to live and work in ways that can be maintained for decades and generations without depleting or causing harm to our environmental, social and economic resources".*

With specific reference to corporate sustainability (CS), Dyllick and Hockerts (2012) highlight an implicit pragmatic consensus, suggesting that CS refers to a multi-faceted construct which involves environmental, social, and economic organizational outcomes. However, as with other branches of sustainability, research on CS struggles to provide a practical definition for corporate sustainability, and one that goes beyond the mainstream win-win-win thinking in the field (Ehnert & Harry, 2012).

Meadows et al. (1992) suggest that a sustainable society should be concerned with qualitative development, not physical expansion. This notion argues that material growth is a *"considered tool, not a perpetual mandate"* (pg 210). The definition does not go so far as to be against growth *per se*, rather it seeks for discrimination between different kinds of growth and the underlying purposes for that growth. Therefore, the subjective notion of 'society' would decide on a specific growth proposal, it would ask what the growth is for, who the beneficiaries are, the costs involved, how long it would last, and whether it could be accommodated by the sources and limitations of the planet (Meadows et al., 1992).

The last definition in the table uses a formulaic approach, balancing the consumption and regeneration of corporate resources. Ehnert and Harry (2012) suggest that if

organisations engage in the regeneration and development of the resources that they themselves consume today and will need in the future – by maintaining the systems and relationships from where these resources originate from – this can lead to sustainable organisational behaviour and thus be called sustainability. Arguably, this substance-orientated approach is adaptable for most situations with Ehnert and Harry advocating its usefulness for people management in particular. However, its usefulness is questionable within the current economic system and the drive to make profit (in whatever form) – with much resting on the notion of success.

Thus, translating 'sustainability' into a meaningful concept for the organisational context is challenging, not least because organisations have varying rationalities which can pose difficulties for integrating the various dimensions (e.g. Marshall & Toffel, 2005; Colbert & Kurucz, 2007; Ehnert & Harry, 2012; Ehnert at al., 2014; Benn et al., 2014). Yet, even from the limited overview above, it is clear that many definitions have evolved, framing sustainability as a strategy, a goal or a concept (Rimanoczy & Pearson, 2010), and the literature has yet to come to a consensus. However, there are three key themes and basic principles which are shared to varying degrees:

- concern for the wellbeing of future generations;
- awareness of the multidimensional impacts of any decision broadly categorised as economic, environmental and social;
- the need for balance among the different dimensions across sectors, themes (e.g. climate change, community cohesion), and scale (e.g. local, regional, national, international).

(UNCED, 1992)

3.2 Sustainability Models and Frameworks:

"It is very hard to be against sustainability. In fact, the less you know about it, the better it sounds." (Solow, 1991:79).

It is accepted that there are general limitations when attempting to conceptualise through modelling something as involved and various as sustainability. Whilst models and diagrams can add direction and order to a conception through the illustration of patterns and causal relationships, they rarely progress further to elucidate on *why* the relationships have occurred (Saunders et al., 2012). They have a propensity to compartmentalise, be ambiguous and be restricted (Bresciani & Eppler, 2008). There is the tendency to treat diagrams as self-explanatory and, as put forward by Bresciani and Eppler (2008:15), *"…the world is filled with misleading, unattractive and confusing visualisations…"* Nevertheless, an attempt shall be made to discuss the models and frameworks considered most pertinent to the development of central theoretical concepts.

As can be garnered from previous discussions, and perhaps most particularly due to the Brundtland definition, Elkington's (1994) Triple Bottom Line, and the 2005 UN World Summit's 'pillars', sustainability is often shown to consist of three dimensions – these being environmental, societal and economic. Barbier (1987) used the Brundtlands' three dimensions to create the renowned three-circle Venn diagram demonstrating how the dimensions interact to achieve sustainability (see Figure 5). Barbier underscored the notion that true sustainability can only be reached if all three are balanced (Laasch & Conaway, 2015). For instance, if a country focuses mainly on

economic and social development, the results may indeed be equitable, but they would fall short of being bearable or viable (Laasch & Conaway, 2015).

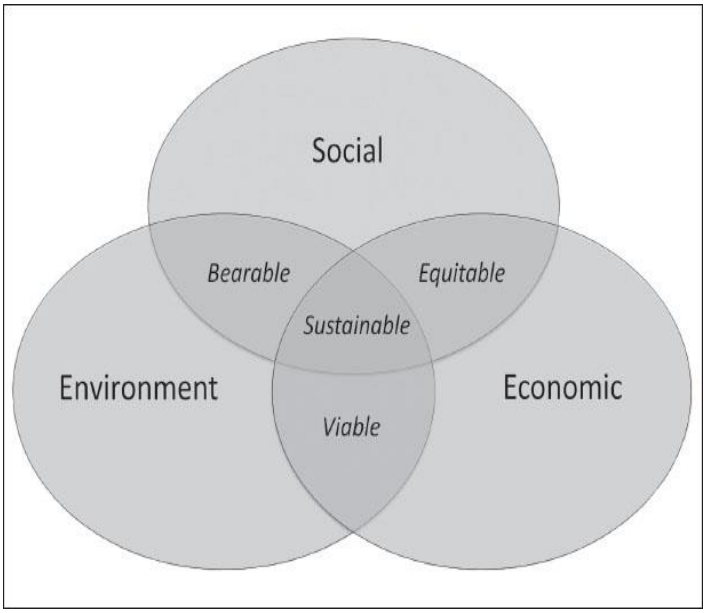


Figure 5: The concept of sustainable economic development (Barbier, 1987).

There have been various three-dimensional variations of Barbier's Venn diagram. It has proved a popular and adaptable method of representing the complexities of sustainability conceptualisation, for example the substitution of the original dimensions for people, planet and profit, or culture for society, or the amalgamation into socio-cultural, perhaps even the addition of further dimensions (Moir & Carter, 2012). For instance, Rimanoczy and Pearson (2010) suggest that education and peace are central and should be incorporated. One such adaptation, the triangular model 1) (see Figure 6), has incorporated a fourth dimension – that of the contextual institution – also referred to as 'democracy' or 'governance' (Waas et al., 2011) – reflecting the need for organisational change, as identified in the WCED/Brundtland Report, and reconciling the environment and economics in decision making (Moir and Carter, 2012).

However, it is this very simplicity and adaptability which are accused of being beguiling for interpretative reasons (Giddings et al., 2002). For instance, the intrinsic relationship between each of the dimensions may be overlooked and that, by characterising the dimensions as independent systems, it falls into the Newtonian and reductionist epistemological trap which fails to account for the inherent interactions between the parts and the whole (Mebratu, 1998; Lovelock, 2007; Wells, 2011). Essentially, Barbier's model (and variations of) inadequately represent the full integration of the dimensions and encourage compartmentalisation (Moir & Carter, 2012), or fragmentation rather than holism (Laasch & Conaway, 2015). Thus, they fail to sufficiently demonstrate influencing factors such as scale and the complexities of change (Lozano, 2008). Coupled with this, perhaps due to the more quantifiable nature of environmental performance, is the tendency to prioritise the environmental dimension, indeed with sustainability oftentimes being considered synonymous with environment – with the social dimension holding much less apparent importance (e.g. Moir & Carter, 2012; Makower, 2014; Alange, 2014; Laasch & Conaway, 2015).

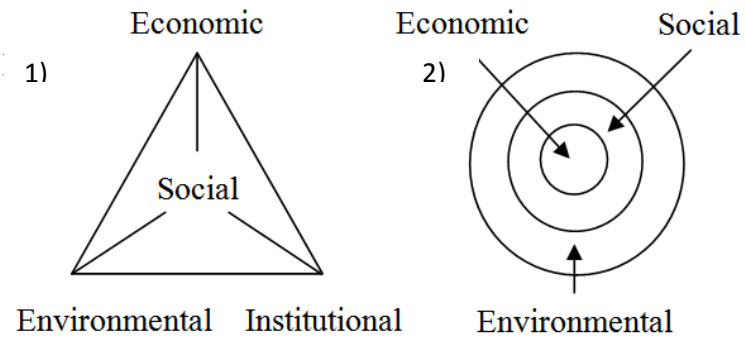


Figure 6: The Triangular and Nested Circles Models (taken from Moir and Carter, 2012:1480).

The nested circles model 2), moves away from the equivalency as suggested with the Venn diagram and its derivatives - rather, the nested circles imply hierarchy and are more sympathetic to integration (Moir & Carter, 2012). The rationale behind this model is that mankind's evolutionary development is fundamentally linked to society; that human activity itself is dependent on, and impacts upon, the environment; and, the economy is a societal function and as such is a subset of the society circle, and therefore not holding the principal position (Giddings et al., 2002). It suggests that economic activity is limited by society's potential to consume and how society's growth is limited by Earth's environmental resource limitations (Laasch & Conaway, 2015). Accordingly, this model implies that sustainable development must involve development which increases all three dimensions simultaneously without decreasing any of them (Laasch & Conaway, 2015). Critics however, suggest that it is once again a compartmentalising over-simplification which does not account for governance; nor the diverse environments, societies and economies that exist; it does not account for whether or not they have a beneficial or detrimental impact; nor is it an adequate representation of the intrinsic link between human enterprise, well-being and the environment (e.g. Jacobs 1961; Giddings et al., 2002; Langley & Mellor, 2002; Lozano, 2008).

Recognising these challenges, Lozano (2008) proposes two further note-worthy representations of sustainability based on a holistic perspective, which go some way to tackling previous limitations: the simultaneous First Tier and Two Tier Sustainability Equilibrium, or FTSE and TTSE (Figure 7).

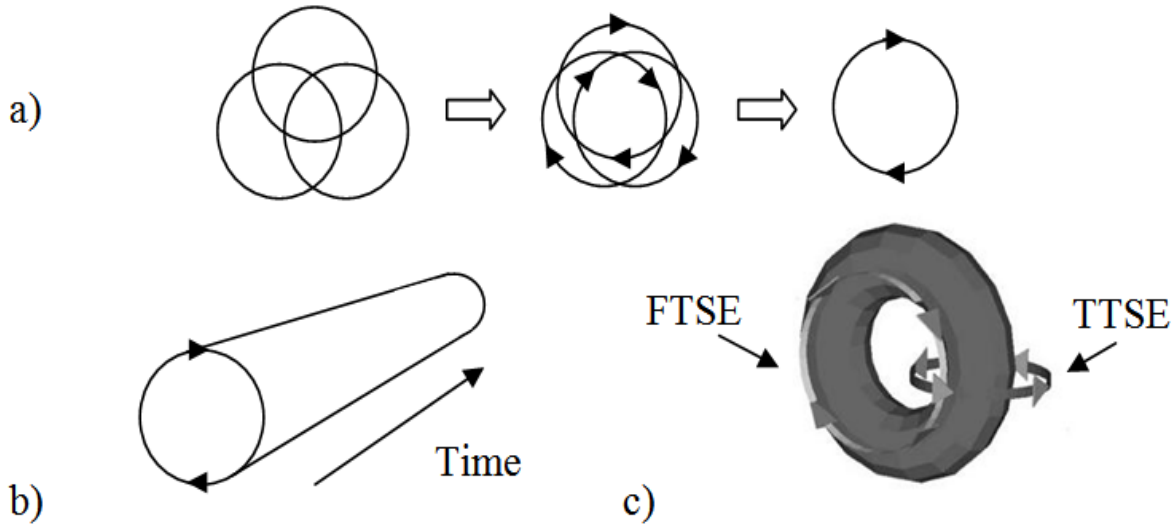


Figure 7*:* Diagrammatic representations of FTSE and TTSE (Lozano, 2008).

Adapting either the Venn diagram or the nested circles model, the first tier focuses on the three pillars of sustainability - the economic, environmental and social dimensions. These are progressively equalised and integrated such that no dimension takes primacy (Lozano, 2010). The resulting circle containing the three dimensions is shown as continuously rotating to represent the dynamism perhaps lacking in other models (Moir & Carter, 2012). This is the First Tier Sustainability Equilibrium (FTSE). The second tier focuses on the time dimension (the short, long and longer-term). The element of time and inter-generational concerns is then incorporated with the economic, environmental and social dimensions to result in a rotating cylindrical form, representing the interrelationships of all the dimensions in their various forms, in both the present and future (Lozano, 2010). This is taken further by combining the spatial and temporal equilibriums to produce the Two Tiered Sustainability Equilibrium (TTSE), a doughnut shape continuously rotating along two axis, as can be seen in the final diagram.

Similarly, sympathising with Lozano's reflections, Seghezzo (2009) also reflects on the lack of spatial and temporal elements in models of sustainability - suggesting that this stems from the 1987 WCED definition which is in essence flawed - not least for being anthropocentric and interpreting reality in terms of human values and experiences. Seghezzo (2009) also suggests that there is a failure to recognise non-physiological needs such as love, safety and esteem (Moir & Carter, 2012). Thus, a reframing of sustainability at the conceptual level is necessary and is attempted through a five-dimensional sustainability triangle as can be seen in Figure 8.

The model displays within the triangle the dimensions of Place, Persons and Permanence (Moir & Carter, 2012). Place and Persons are the tangible aspects existing now – in the present. Permanence, however relates to the projection of these aspects over time. The vertices denote intra- and inter-generational justice, and identity and happiness.

Lozano's and Seghezzo's models, whilst making some advancement and helping to develop an understanding of the issues requiring attention, both still only partially address the limitations of the original Venn diagram and nested circles models (Moir & Carter, 2012). For example, Lozano's model does not address a need for appropriate governance. It may also be difficult to grasp without prior knowledge of the phased development of the model.

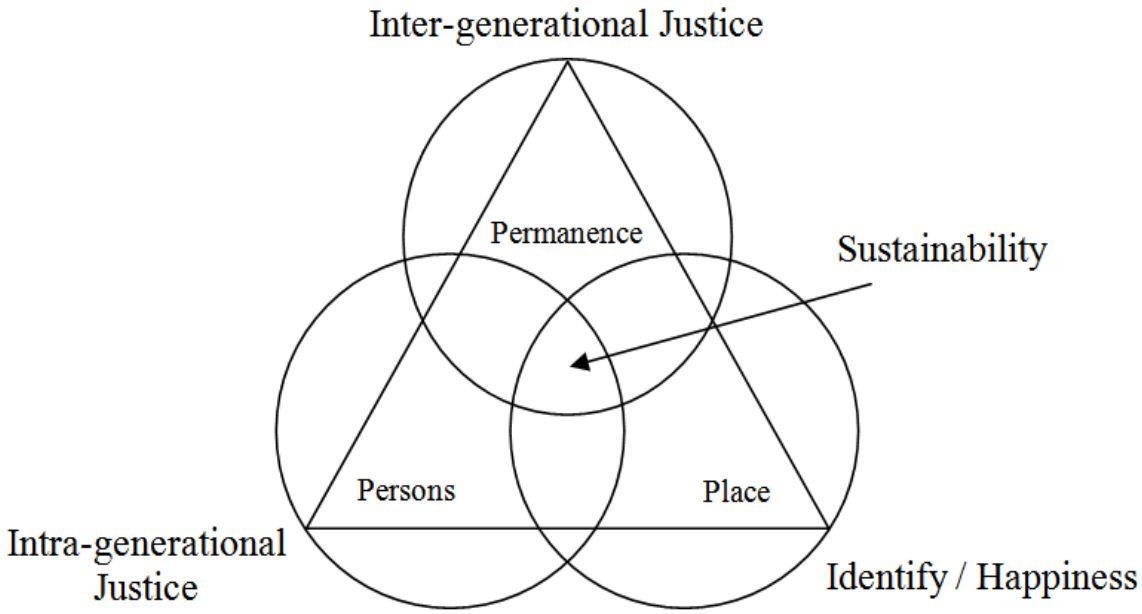


Figure 8: Five dimensional model of sustainability (Seghezzo, 2009).

Seghezzo's model incorporates at its heart, the widely criticised Venn diagram and fails to explicitly acknowledge the need for procedural fairness – as particularly pertinent to an organisational context. It is here that Moir and Carter (2012) put forward the 'Conflated' model of sustainability (please see Figure 9). It is a synthesis of existing ideas which, like previous models, suggest that sustainability can be conceptualised as addressing the following attributes, *"multifarious, spatial and temporal interactions between the notional dimensions of environment, society and economy, shaped and influenced by full public participation in associated decision-making*." – but, unlike previous models, it addresses the attributes in concert (Moir & Carter 2012:1484).

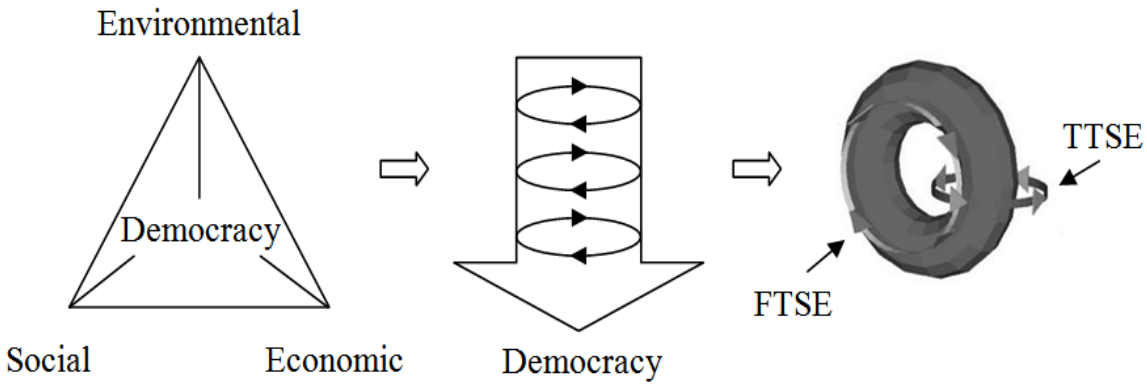


Figure 9: Conflated model of sustainability (Moir & Carter, 2012:1485).

The model begins with four pillars for sustainability. The first three are the usual environmental, social and economic. The fourth pillar is entitled 'Democracy' and pertains to full stakeholder engagement. 'Democracy' was perhaps preferable over other labelling choices chiefly because it does not carry the same barriers to participation connotations that 'institution' or 'governance' arguably might, and it is indicative of the individual and empowerment and participation. The second stage is adapted from Lozano's by Moir and Carter. The three continuously rotating circles, which are infused by the notion of democratic participation, relate to the three pillars which are connected but physically separate. Then finally, the doughnut-shaped model is as Lozano designed it – but now has the application of democracy within it too. It is this doughnut- or torus-shaped model which is argued to be the most suitable terminus for a representation of sustainability (Lozano, 2010; Moir & Carter, 2012). The model is grounded in that of Lozano. However, it differs from previous attempts by achieving the transition to the three-dimensional torus model unambiguously. Thus, this model lessens the need for extensive accompanying explanation. However, it is still perhaps difficult to understand without significant explanation and knowledge of the phased development. Perhaps it too is an intuitive leap too far. Arguably, it also

demonstrates that stakeholder influence is inseparable from sustainability considerations, a notion expounded upon elsewhere on the sustainability literature (e.g. Moir & Carter, 2012; Mariappanadar, 2012). This model perhaps sits more comfortably than other models with the complex adaptive systems (Kramar, 2011), that are organisations. The element of flexibility and adaptability within the model is particularly pertinent to the assumption that the world is, *"nonlinear, unpredictable, self-organising, adaptive and evolving"* (Kramar, 2011:165). It is through this model that Moir and Cater (2012) suggest a more dynamic understanding of the relationship between sustainability and the organisational context can be enabled. Nevertheless, as with the previous models there is still ambiguity with regards to *what* is being sustained.

The Sustainability Hierarchy model (Marshall & Toffel, 2005) (Figure 10) moves away from the difficult task of trying to conceptualise and define *what is* to be sustained. Instead, it looks towards *what cannot* be sustained – that which is unsustainable. This model categorises and frames ways in which sustainability has been used in the literature and through public discussion. This is achieved through a pyramid consisting of four levels, with each level referring to a wide range of issues on a local and global scale. The sustainability hierarchy model is similar to Maslow's Hierarchy of Needs (Maslow, 1943), in that certain lower needs must be satisfied before higher needs can be (Marshall & Toffel, 2005). Thus for instance, the basic essential-for-survival environmental sustainability forms the first level, with higher levels representing higher-order sustainability. However, whilst an action may be considered sustainable at one level, it may not at another (Marshall & Toffel, 2005) – perhaps limiting this model. It makes it important that individuals and/or organisations using this model

specify which level they are considering – otherwise all four are in use and thus the scope could be too wide, blurring the lines between what is considered sustainable and what is not.

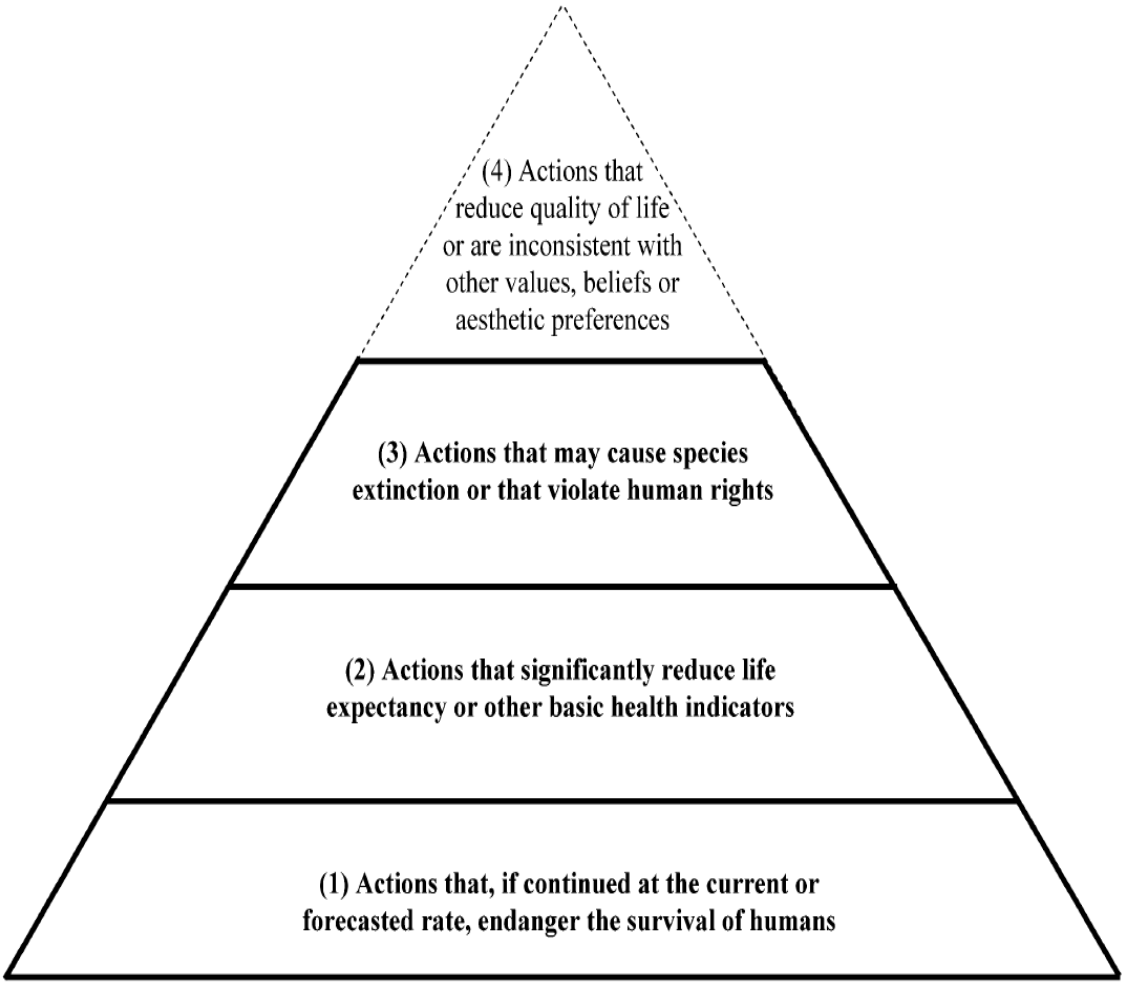


Figure 10: Sustainability Hierarchy (Marshall & Toffel, 2005:675).

Another area of ambiguity rests with the unit of analysis. Could it and should it be used for individual products and policies, for organisations, countries or indeed, the planet? As can be seen in Figure 10, the top level of the pyramid has a dashed line. This is to illustrate the concern held by Marshall and Toffel (2005), that it is a matter of contention as to whether all levels of the hierarchy should even be considered sustainability issues. This is chiefly because the fourth level is based on values and

beliefs. The main arguments against the inclusion of the fourth level rest on an unrealistic and unobtainable notion of sustainability achieving all our wants and values. However, others contend that fourth-level issues are essential to the hierarchy (Marshall & Toffel, 2005), arguing that sustainability should be a broad concept, containing a myriad of desirable social and environmental improvements. In this case, sustainable becomes a synonym for *"quality,"* and sustainable development is *"good"* development, however the speaker defines *"good"* (Marshall & Toffel, 2005:679).

Alange (2014) suggests that there are a limited number of frameworks which directly address the need for organisations to develop strategies in line with the demands of a future sustainable society – citing The Natural Step as one that has had a significant impact. Moving away from more the difficult to identify cause-and-effect relationships, *The Natural Step* advocates simply taking the natural step of reducing the potential causes of unsustainability (Doppelt, 2010). The practical framework is gaining acceptance by increasing numbers of organisations, particularly in Sweden (Blutstein, 2003).

Founded by Dr Karl-Henrik Robert in 1989, The Natural Step (a not-for-profit organisation), aims to work directly with organisations to 'transform' the way in which they operate by using the four system conditions detailed in Figure 11 (Blutstein, 2003). A sustainable society is one where four conditions are met. It promotes the notion that change for sustainability *"is about creating and maintaining momentum in dynamic human structures (not machines and spare parts)"* (The Natural Step, 2014). Significantly, this implies a consideration for human structures within the workplace as well as society in general. And, more explicitly, the fourth condition refers to *"conditions that* systematically *undermine people's capacity to meet their basic human*

needs (for example, unsafe working conditions and not enough pay to live on)'' (The Natural Step, 2014). The Natural Step perhaps therefore offers one of the most coherent frameworks for sustainability – yet it must also be recognised that practitioners struggle because of the model's linear tendency and the difficulties associated with implementation (Doppelt, 2010).

Coined and introduced by John Elkington (1994), the Triple Bottom Line (TBL) model is used as a public reporting framework which is being increasingly adopted by a growing number of organisations – many of whom aspire to related industry-level, national and international awards such as the Dow Jones Sustainability Index, STOXX and the Global Reporting Initiative (GRI) (Gray et al., 2014). At its broadest, the TBL is employed to

Figure 11: The Four System Conditions of a Sustainable Society (www.naturalstep.org)

capture the complete set of values, issues and processes which organisations need to address to minimise harm (Carroll & Buchholtz, 2015). At its narrowest it is simply a

metric or framework for reporting performance in terms of economic, social and environmental indicators (Carroll & Buchholtz, 2015). Nevertheless, it is often regarded as the "*keystone*" for any sustainability management activity (Laasch & Conaway, 2015:70). TBL sustainability overtly acknowledges the importance and relevance of an organisation's economic success and its relationship with its social and environmental performance (Elkington, 1999). Indeed, TBL requires that for a firm to be considered as operating at its peak, it must be performing simultaneously against these three aspects (Jones, 2011). And as such, it can be considered a *"values-laden aspiration"* (Colbert & Kurucz, 2007:22). These indicators define sustainability in a *"powerful way"* not least because sustainable investment funds may utilise these indicators to distinguish between sustainable organisations which are thus worthy for investment – and those which are not (Jones, 2011:8). Indeed, supporters of the TBL insist that organisations seeking sustainability ought to make decisions based on environmental protection and social justice, not solely only on economic returns (Marshall & Toffel, 2005). As with the work of Lozano (2008), Seghazzo (2009) and Moir and Carter (2012), the three elements do not sit in isolation from each other and can be combined. For instance, the optimisation of environmental and economic goals refers to eco-efficiency; economic activities with a societal focus may be termed fair-trade; and social equity in environmental protection could be called environmental justice (Marshall & Toffel, 2005). The TBL framework achieves this by offering an *"…umbrella… under which managers can be free legitimately to reconcile, or even leverage, the apparent paradoxes and tensions in running a complex organization."* (Colbert & Kurucz, 2007:22)

However, the TBL has been criticised for being only an article of faith and for being vague, confused and often contradictory (Laasch & Conaway, 2015). Similarly, the more philanthropic approach to the social elements of the TBL – such as the gifting of money to worthy community causes - can be disingenuous (Porter & Kramer, 2006; Jones, 2011) and merely hypocritical window dressing (Friedman, 1970). Coupled with this, as with the 'pillar' analogy, the TBL concept has been accused of lacking a meaningful foundation and that companies should have other 'bottom lines' such as an ethical bottom line (Kerr, 2002). Marshall and Toffel (2005) have sympathy with this view and question whether, even if the TBL framework was implemented by all companies, would eco-efficiency, fair trade, and environmental justice be enough to ultimately lead to sustainability anyway. Colbert and Kurucz, (2007:27) found that business-leaders *"pointed to the…broad, non-prescriptive nature of the triple bottom line as somewhat problematic, potentially leading to confusion among organizational leaders and members..."*. Others have reservations regarding the TBL's effectiveness, suggesting that it is simply a*, "good old-fashioned single bottom line plus vague commitments to social and environmental concerns."* (Norman & MacDonald, 2003:13).

Significantly, thematic and conceptual research and analysis conducted by Colbert and Kurucz, (2007) investigated the conceptions of TBL business sustainability. They conducted individual interviews and focus groups with sixty-six business leaders from three Canadian-based organisations which had publically embraced a TBL framework and were *"recognized as a leader[s] in sustainability in [their] respective industry"*(p22). 'Business Leaders' ranged from chief executives to line managers. They asked, *"What does sustainability, primarily characterised…as a focus on triple bottom*

line performance, mean to you and your organization?" (p22). Colbert and Kurucz found that the concept of TBL business sustainability meant different things to different business leaders regardless of the relative clarity of an organisation's public declarations. Notably also, that there may be multiple meanings within the same organisation. Through analysis they derived three broad conceptions of TBL business sustainability: *A balanced operational conception*; *An integrated operational conception*; and, *An integrated strategic conception of business sustainability*. (Colbert & Kurucz, 2007:23).

These three conceptions were mapped against seven dimensions of intent and of alignment (please see Table 5), which together, they argued, form a *"coherent conception"* of sustainability. Colbert and Kurucz perceived 'intent' as appertaining to the *"purpose or objectives embraced in a given conception of sustainability";* whereas the 'alignment' dimensions were perceived as capturing *"supporting features to help realize the intent of a given conception."* (2007:23).

Thus, their research found that to practising business leaders, the three conceptions of TBL sustainability were:

Balanced operational– to maximise organisational value (profit, shareholder / investor value), to manage the trade-off / balancing of stakeholder interests, and thereby sustain the business, less values-laden; *Integrated operational* – simultaneous value creation: inter-dependence rather than balancing interests, to build sustainable competitive advantage by working to integrate mutual interests of *all* stakeholders (employees, customers, investors, communities, suppliers etc); and, *Integrated*

		Balanced Operational (tradeoff management)	Integrated Operational (win-win management)	Integrated Strategic (win-win global leadership)
Intent	Sustainability Objective	Maximize organizational value subject to stakeholder constraints	Simultaneous value creation for all organizational stakeholders	Leverage inclusive stakeholder view to create value for organization and broad global society
	What Is Sustained?	Current operations License to operate Local stakeholder relationships	Current operations Industry competitive advantage Organizational self-image	Organization as economic entity Corporate brand Global human welfare
	Utility of a Sustainability Framework	As a negotiating frame: Mitigate business risk by negotiating tradeoffs	As an integrative frame: Build sustainable competitive advantage by leveraging complementarities	As a strategically provocative frame: Re-orient business growth by broadening conceptions of context and capabilities
Alignment	Strategic Capabilities View	Focus on technical capabilities and community relations	Focus on building advantage in current industry through culturally embedded resources	Abstract derivation of capabilities base—position versus macro view of global opportunities
	Primary Role of Leaders	Strong business management Stakeholder appeasement	Stakeholder engagement Values integration	Opportunity identification Build organizational commitment
	Role of Values	Criteria for negotiating tradeoffs	Ground for integrating stakeholder needs	Compass for setting strategic direction
	Role of Dialogue	Understand stakeholder wants/needs Communicate organizational actions	Attune to interdependent view Search for stakeholder win-win	Broaden strategic reference frame Enroll stakeholders in new direction

Table 5: Three Conceptions of Business Sustainability: Intent and Alignment Dimensions. (Colbert & Kurucz 2007:26).

strategic – to leverage the integration of stakeholder interests to create value for society, at strategic level, to proactively seek new ventures that simultaneously remedy global problems whilst creating value for the organisation (Colbert & Kurucz, 2007:23-29).

Despite only including subjects from the 'business leader' level upwards, Colbert and Kurucz's research highlights a notion of particular interest to this research, given the overarching aim to explore how future managers conceptualise sustainability. They found that depending on how TBL business sustainability was conceptualised and interpreted, affected how an approach was framed and thus how it was disseminated within the workplace and put into practice. For instance, as can be seen from the summary findings in Table 5, the notion of *what* is being sustained ranged from a 'license to operate' through to 'global human welfare'. This has clear parallels with Marshall and Toffel's (2005) findings discussed earlier in the chapter, which highlighted the conceptual clear water between sustainability frameworks taking a 'greener approach', and frameworks driving for 'the elimination of poverty'.

Dexter Dunphy, Andrew Griffiths and Suzanne Benn (2003), conceived an ideal which they call 'the sustaining organisation'. It bears parallels with the above Colbert and Kurucz's (2007) model, though through an organisational phase lens. Given that the literature is fairly conclusive in suggesting that environmental sustainability has been at the forefront of the sustainability debate (e.g. Dunphy et al., 2006; Pfeffer, 2010; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Moir & Carter, 2012; Bostrom, 2012; Ehnert et al., 2014; Benn et al., 2014; Alange, 2014; Laasch & Conaway, 2015), this model is of particular interest as it is unusual in explicitly examining the socio-human elements of sustainability within the

organisation. It considers the paths organisations need to travel to reach a full commitment to sustainability that covers both human and ecological issues (Benn et al., 2014). It has both an internal and external focus. Externally, it focuses on sustaining the community whilst the internal focus is on sustaining the people within the organisation. It is a model which suggests a *"tantalising relationship,"* between types of human resource and ecological investment (Jones, 2011:14). It interprets levels of sustainability and, as taken from the final stage, suggests that a sustaining corporation is one which *"reinterpret[s] the nature of the corporation to an integral self-renewing element of the whole society and in its ecological context"* (Dunphy et al., 2006:17).

The phased model is designed to allow *"…meaningful comparisons between organizations to assess their current commitment to and practice of behaviours relevant to two kinds of sustainability: human and ecological."* (Dunphy et al., 2006:14). Each stage characterises the way in which people and natural resources are used. There are six stages in total which reflect particular attitudes to human resources (HR); environmental impact; and, relationships between business systems, strategy, HR and the environment (Benn et al., 2014). It follows a construction similar to Marchington and Wilkinson's *Escalator of Participation* model (2008:174), and the underpinning rationale is that it is important to understand at which stage an organisation is presently at regarding their commitment to sustainability, in order that they can progress further. Recognising that change is a dialectic process (Kramar, 2011), progress is facilitated through a range of internal and external stakeholders as change agents, for example CEOs, politicians, customers, suppliers, line managers, employees. The six broad stages of human or ecological sustainability against which an organisation can be positioned on their journey to becoming a 'sustainable'

organisation are: Rejection; Non-responsiveness; Compliance; Efficiency; Strategic proactivity; The sustaining corporation. (Dunphy et al., 2006:14).

These six phases are then further delineated into three 'waves' of corporate change. Figure 12 provides a brief summary of these stages, including the key characteristics of organisations at each phase. Stages 1-4 suggest that sustainability can be promoted through: Raising awareness and building competence; Providing clear definitions and expectations for all stakeholders; Performance management and staff development; and, fostering commitment to sustainability via formal and informal champions (Kramar, 2011). The fifth stage entitled 'Strategic Proactivity' highlights the need for effective change systems and the engagement thereof for strategic advantage. The final stage builds on previous stages. It is labelled 'transformation' and concerns itself with the sustaining corporation, emphasising the development of the organisation as an integral part of a network of stakeholders (Kramar, 2011).

Kramar (2011) suggests that the model is a valuable tool in conceptualising the relationship between HR and sustainability. Dunphy et al. (2006) acknowledge however, that this model is an oversimplification for the purposes of understanding and presentation. Despite their concession that one of the main disadvantages of this and other 'phase' models is *"a high-level abstraction from the bewildering diversity of corporate life"* (p13), Kramar is supportive, suggesting that, *"…rather than a basket of HR practices being required at particular stages of sustainability, the mix…will vary according to the individual organisation"* (2011:171). Similarly, Dunphy et al. (2006) recognise that an organisation in reality may not progress incrementally – visiting each stage in turn, and may instead 'leapfrog' stages should there be transformative

Figure 12: Waves of Sustainability (Dunphy et al., 2006:17, as amended by Kemp, Stark & Tantrum, 2004).

progress such as new legislation or a new CEO appointment, for instance. Likewise, within any particular organisation, different aspects, functions, strategies or departments could be placed at different phases. Kramar appears to have sympathy

with this stating that, *"…it is really only a hypothesis which needs to be tested. The model provides discrete stages, but it is possible they represent a process of continuous evolution or, alternatively, in interrupted continuum."* (2011:170). A clear strength of an ideal-type model such as this, is that it allows for comparisons across societies, organisations, groups and individuals (Benn et al., 2014). Within this research, the way this model brings together global issues of ecological and human sustainability to create a unified approach is particularly interesting – indeed, it provides *"fertile ground for further research"* (Kramar, 2011:170). The need for innovation for the purposes of change towards sustainability is also implied. So too is the emphasis on the importance of employees and leadership both to develop human sustainability and to move towards ecological sustainability. And, as Pfeffer advises, *"One lesson for those interested in human sustainability is that developing a consistent set of measures or indicators of the construct, gathering data on them, and publicizing such data might provide more impetus for focusing on the human sustainability implications of what organizations do."* (2010:41).

The author is a member of a Plymouth University special interest group consisting of academic staff from throughout the university which meet four or five times a year for a 'Sustainability Education Café'. At one such meeting held on 13th May 2015, the 14 participants were asked about their conceptualisations of sustainability by the visiting speaker, Harold Glasser. The participants were offered two definitions and two models in turn and asked to simply vote whether they agreed with, were neutral towards or disagreed with each. Please refer to Appendix 1 and Table 6 below for the results of the vote.

	Agree	Neutral	Disagree
Definitions:			
Brundtland (see page 33)	7	3	4
Meadows et al. (see Table 4, page 75)	10	3	1
Models:			
Venn Diagram (see page 79)	6	2	6
Nested Circles (see page 80)	8	2	4

Table 6: Sustainability Education Café's Conceptualisations of Sustainability

In a small way, this rudimentary exercise illustrates the disputed and ideologically-underpinned nature of notions for sustainability discussed within the literature (e.g. Gladwin et al., 1995; Pal & Jenkins, 2014).

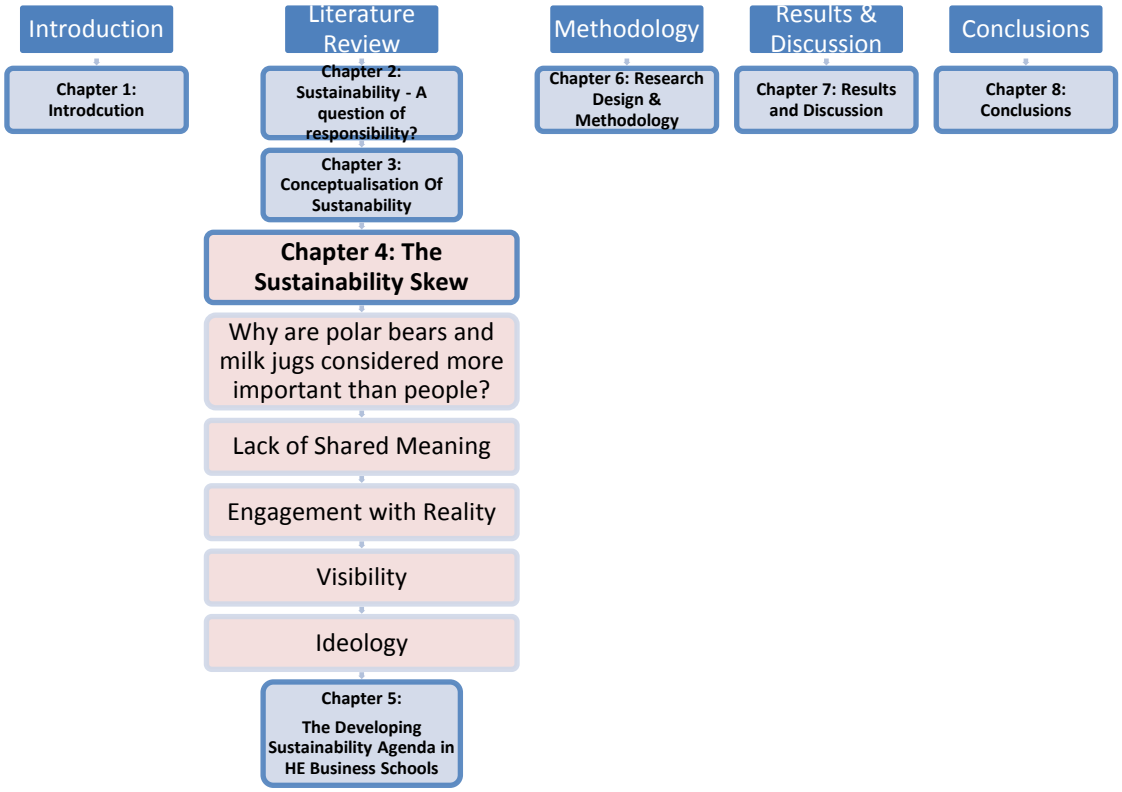
Indeed, given the often broad conceptualisation of sustainability and the multiple explanations it evokes, any definition is bound to remain abstract, contestable and ideologically controversial, creating difficulties for its enactment within organisations (e.g. Marshall & Toffel, 2005; Colbert & Kurucz, 2007; Benn et al., 2014; Perey, 2015). It is a philosophy, an attitude, a lens through which to view the world. Therefore, rendering 'sustainability' into a germane concept for the organisational context remains problematic (Ehnert et al., 2014; Benn et al., 2014; Laasch & Conaway, 2015). It has become a *"convenient slogan"* in the challenging task of aligning the conflicting goals of bringing prosperity to all people whilst preserving the capacity of the world to cope (Fleurbaey, 2015:34). It has become a *"fashionable buzzword"* and it does not necessarily follow that the proliferation of the term denotes an increase in understanding the meaning of it (Laasch & Conaway, 2015:61). As Perey (2015:149) maintains, *"…even if there is a lack of agreement on a definition of sustainability, there is probably more common agreement on what is unsustainable. The unsustainable includes environmental degradation and the use of non-renewable resources, impacts*

of rampant consumption, food and water crises caused by human population growth, social justice and human rights abuses, and global warming and its impact on humans and biodiversity. Above all, as Fricker puts it, 'sustainability is about the meaning of life' (1998:368)".

How tomorrow's managers conceptualise sustainability will impact on its organisational-level enactment, inevitably having a part to play in driving its reality (e.g. Foucault, 1980; Weick, 1995; Marshall & Toffel, 2005; Colbert & Kurucz 2007; Wright, 2010; Alvesson & Karreman, 2011; Benn et al., 2014; Perey, 2015). Therefore, given the lack of literature in this area, exploratory research is required on how the next generation of managers make sense of sustainability so further progression towards sustainability can be achieved (e.g. Colbert & Kurucz, 2007; Jones, 2011; Kramar, 2011; Perey, 2015).

This chapter has explored the unsettled world of sustainability definitions, models and frameworks. The next chapter shall move on to consider the claim that there is a disparity within notions of sustainability, in favour of environmental dimensions.

Chapter 4: The Sustainability Skew



"Human beings are at the centre of the concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature" (Principle 1: Rio Declaration, UNCED, 1992).

The *Historical Overview* in chapter 1 attempted to gain some insight into the factors influencing the sensemaking of sustainability, through reviewing the significant developments which have contributed to the evolution of the central concepts and global institutions involved in establishing the context for sustainability. Chapter 2 considered the relationship between ethics, responsibility and sustainability because it is argued that they are inextricably linked, and Chapter 3 aimed to explore those conceptualisations of sustainability which were subjectively considered to be most influential to the field and/or relevant to this study. Throughout these chapters (and notwithstanding the all-invasive and continued dominance of finance and economics

(eg Elkington, 1999)), the claim by much of the literature that 'green' issues are at the forefront of sustainability has been explicitly and implicitly recognised (e.g. Dyllick & Hockerts, 2002; Dunphy et al., 2003, 2006; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Bostrom, 2012; Ehnert et al., 2014; Godemann et al., 2014; Makower, 2014; Alange, 2014; Laasch & Conaway, 2015). The aim of this brief chapter therefore, is to further explore and unpick this apparent skew within the field of sustainability. It shall ask: 'Why are polar bears and milk jugs considered more important than people?'; then discuss the various drivers behind the disparity, as identified by the literature. It is not the intention to argue that one dimension should or should not be considered more important than the other, rather, to explore *why* it appears to be so. This is significant because how an organisation approaches sustainability, be that in predominantly environmental terms or not, and how its corporate leaders frame, interpret and discuss it, will influence how it is put into policy and practice – in short, its reality (e.g. Foucault, 1980; Colbert & Kurucz, 2007; Parkes, 2012).

4.1 Why are polar bears and milk jugs considered more important than people?

This question was posed by the noted scholar, Jeffery Pfeffer (2010), in his seminal contribution for the Academy of Management Perspectives entitled *'Building Sustainable Organizations: The Human Factor'*. In it he acknowledges that both environmental and social sustainability confront and challenge one issue: the belief that the ultimate goal of companies should be to maximise profits. Yet he claims the emphasis within organisations is squarely on the natural environment in terms of research attention and company initiatives. The literature is consistent with this view, claiming that the physical environment is far more prominent, at the expense of the

social environment (e.g. Dunphy et al., 2003, 2006; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Bostrom, 2012; Ehnert et al., 2014; Godemann et al., 2014; Alange, 2014; Laasch & Conaway, 2015), indeed that 'sustainability' is synonymous with 'environment' (Dyllick & Hockerts, 2002; Makower, 2014).

Pfeffer (2010) refers to two global organisations to illustrate this disparity – Walmart and British Petroleum (BP). The CEO of Walmart announced in 2005 that they were committed to being 100% supplied by renewable energy, selling environmentally sustainable products and creating zero waste. And, in 2008 a divisional CEO sang the praises of a new innovative milk jug which increased the shelf-life of milk, reducing costs and saving at least ten-thousand delivery trips. Yet, at the same time, Walmart paid its employees significantly less than similar large retailers, trade unions were actively discouraged and employees were offered considerably less medical and other benefits. The second example: BP, was one of the first major oil companies to invest significantly in alternative energy, garnering much publicity. Conversely, it had to pay a multi-million dollar fine not only due to a fatal explosion in Texas which killed fifteen workers, but for persistent safety violations which BP failed to rectify - even after the explosion.

If this skew in favour of environmentalism exists, it is in itself unsustainable - not least due to the futility of only tackling a portion of the sustainability concerns in an interconnected world (e.g. Barbier, 1987; Elkington, 1999; Makower, 2014; Laasch & Conaway, 2015). A reduction such as this misses several important criteria which organisations should satisfy if they want to become truly sustainable, falling short of capturing the full spectrum of sustainability and its implications (Dyllick & Hockerts,

2002; Oskarsson & von Malmborg, 2005; Lozano, 2010). The extant literature has identified various drivers behind the imbalance which have been brought together here under four broad areas: lack of shared meaning; engagement with reality; visibility; and, ideology.

4.2 Lack of Shared Meaning

The literature argues that a lack of a shared meaning has had a significant impact on the emerging research surrounding the socio-human elements of sustainability (Rimanoczy & Pearson, 2010; Garavan & McGuire, 2010; Ehnert & Harry, 2012), with interpretations within management practice ranging from managing stakeholder relationships, to complete societal change (Marshall & Toffel, 2005; Colbert & Kurucz, 2007; Dunphy et al., 2006; Benn et al., 2014). For example, sustainability within the context of human resource management (HRM) has been very limited, receiving comparatively little attention from academics and business, only relatively recently focusing on the connections between management practice and the sustainability agenda (Dunphy et al 2003 & 2006; Garavan & McGuire, 2010; Aggerholm et al., 2011; Parkes & Borland, 2012; Ehnert, 2009 & 2014). It is only during the past decade that there has been an increase in publications regarding sustainable HRM and still, many within the field remain critical of the concept, questioning whether it is simply old wine in new bottles - merely a re-packaging of HRM (Ehnert & Harry, 2012). A CIPD survey (2007:3-4) found that managers thought the concept *"wishy-washy"* and a form of "*extremism*", with some respondents advising against the jumping-on of *"political bandwagons"*, particularly given the HR value challenge and the field *"striving to be taken seriously"* – implying that it is not a serious proposition. This is compounded by

the lack of integrated environmental management / people management literature and research, further relegating social aspects (Renwick et al., 2013).

Even when there is apparent attention given to the socio-human effects of organisational actions and management practice, the focus tends to be on the consequence of economic development, sustainable financial outcomes and the achievement of competitive advantage - not on the consequences of management practices for the individual and society in terms of work-life balance, happiness, health and well-being in their own right (Pfeffer, 2010; Kramar, 2011; Mariappanadar, 2012a; Benn et al., 2014; Perey, 2015).

4.3 Engagement with Reality

The literature suggests that the notion of sustainability is often in direct and sometimes harsh contrast to the reality of organisational life. As suggested above, economic viability is generally considered the foundation-stone of an organisation with the long-term sustainability of the organisation dependent on remaining financially feasible and competitive, with economic considerations underpinning most strategic decision-making (e.g. Norman & MacDonald 2003; Clarke, 2011; Jones, 2011; Kramar, 2011; Dawson & Zanko, 2011; Christofi et al., 2012). Although mission statements, rhetoric and other discourse claim that the people are the most important resource, the reality is characterised by a managerialist focus, impersonal economic rationalism and a resource of willing slaves (e.g. Wilmott, 1993; Vaughan, 1994; Redman & Wilkinson, 2009; Bratton & Gold, 2012; Kramar & Syed, 2012). The concept of sustainability is predominantly used to link high-performing individuals and work with sustainable long-term performance (Parkes & Borland, 2012). Therefore, management practices have tended to move away from a more humanistic perspective, to one

driven by efficiency and performance focused approaches grounded in profit maximisation, with increasing control over the lives of the worker beyond that of the organisation, impacting negatively on family, community and society (Mariappanadar, 2012a; Benn et al., 2014; Laasch & Conaway, 2015). It seems the reality is that organisations and the people within them, are experiencing increasing working hours, work intensification, high turnover, downsizing, restructuring and the general attempt to do more with less to satisfy stakeholder expectation (e.g. Clarke, 2011; Mariappanadar, 2012; Kleiner & Pavalko, 2014). Indeed, analysis by the CIPD (2014b) of various surveys (including The Skills and Employment Survey, Workplace Employment Relations Study, European Social Survey and European Working Conditions Survey), suggest that employees believe they are working harder than ever with increasing job insecurity and greater work intensity.

Thus, there is a paradox existing in the tension between the execution of efficiency drivers and maintaining the human condition, capability and relational rationality (Ehnert, 2009; Garavan & McGuire, 2010; Benn et al., 2014; Laasch & Conaway, 2015). The outcome of such fundamental complexities results in more challenging engagement with sustainability, particularly at senior level (Majed, 2014). This apparent lack of easily attainable and straightforward 'low hanging fruit' in terms of sustainable management practices can become a barrier to engagement, as change towards socio-human sustainability is often perceived to be more much more complex and radical when compared with some more easily achievable environmental measures such as reducing blatantly wasteful energy and water usage (Makower, 2014).

4.4 Visibility

Whilst consequences of poor organisational practice such as diminished well-being and reduced life-expectancy are less immediately obvious (Mariappanadar, 2012), deforestation, the erosion of top-soil, melting polar ice-caps and the demise of mega-fauna such as the polar bear, are much more apparent (Pfeffer, 2010; Makower, 2014). The literature suggests that the primary source of information and knowledge about sustainability for the public is drawn from the media (Anderson, 2011), and the exponential increase in information availability has vitalised a new generation of environmental groups and stakeholders who are steering the demands and expectations facing business leaders (Colbert & Kurucz, 2007). The internet, blogs and other mediums have each played their part in fanning public outrage at the lack of organisational environmental responsibility (Sood et al., 2011), with organisations, environmental groups, politicians and 'celebrities' alike successfully courting publicity, to highlight both irresponsible behaviour and good practice to further 'the cause', and, more cynically, as a green-washing marketing exercise and politicised point-scoring (Delmas & Burbano, 2011; Anderson, 2011). Environmentalism has become mainstream and institutionalised and, whilst there has been a general fall in levels of 'Climategate' coverage since 2009, and despite an editorial backlash, competing news stories and a feeling of public disempowerment (Anderson, 2011), consumer perception and resultant behaviour are being influenced thereby further driving change towards environmental sustainability (Sood et al., 2011). This has an impact on agenda-setting and national and international policy discourse (Anderson, 2011), swelling the call for various compliance and environmental impact regulations, which in turn provide more data with which to underpin and encourage further environmentally-based research.

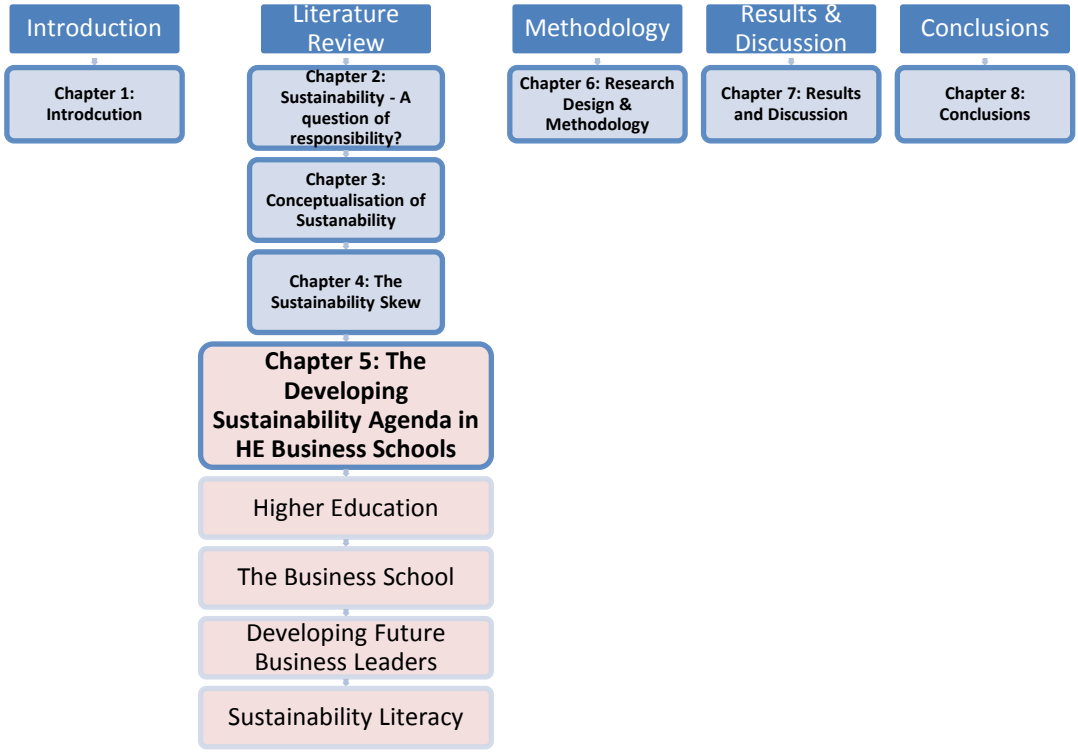
4.5 Ideology

Ideology and the element of choice perhaps further explain why other dimensions are, to a large extent, overlooked in favour of the environmental factor (Pfeffer, 2010). For example, traditional principles of Newtonian ideology – particularly those of reductionism, control, prediction, and cause and effect (Lovelock, 2007; Wells, 2011), perhaps sit more comfortably with the study and discussion surrounding environmental sustainability. Somewhat conversely, social factors suggest a necessarily holistic and interpretivist approach, recognising that society and the people within it are part of, and subject to, complex adaptable systems (Kramar, 2011; Lozano el al., 2013). As such, they are not controllable, nor predictable beyond immediate time or space, and constituents are interdependent which cannot be reduced to independent parts or 'best practice' (Wells, 2011). Likewise, if the notion that social, economic and political systems are social constructions that are embedded in the ecological environment, then human endeavour is compelled to acquiesce to it (Schmitz et al., 2012). How we reconcile demands for environmental behaviours and demands for social constructions such as justice, ethics, ownership, profit is perhaps indicative of a transition towards a more holistic cultural ideology (Scerri, 2012), with individuals and the larger society increasingly regarding themselves as *"participants* in *nature"* (p41). Pfeffer furthers that trees do not choose to be cut down and can do little about their fate. Thus, there is a duty or *"implicit assumption"* that mankind should act on behalf of the environment (Pfeffer, 2010:42). Mankind on the other hand, does have choice which is exercised within society – ultimately, people can choose to leave the situation (Pfeffer, 2010).

Despite the apparent imbalance, the socio-human dimensions of sustainability are becoming increasingly viewed as important within management practice and, on a more encouraging note, latterly there appears to be the beginnings of a burgeoning interest within the literature linked to the human factor (Ehnert, 2009; Mariappanadar, 2012). Yet there remains a dearth of studies investigating this from the perspective of future managers. Nevertheless, discourse regarding any disparity in terms of management literature, emerging research, linguistics, public interest and business practice can have far-reaching implications for the future direction of sustainability and how it is enacted at organisational level (e.g. Foucault, 1980; Colbert & Kurucz, 2007; Parkes, 2012; Perey, 2015). Therefore, we need to further understand this apparent skew and how it impacts upon the sensemaking of sustainability of the next generation of managers. As Pfeffer succinctly concludes, *"There is no reason why building sustainable companies should focus just on the physical and not the social environment. It is not just the natural world that is at risk from harmful business practices. We should care as much about people as we do about polar bears—or the environmental savings from using better milk jugs—and also understand the causes and consequences of how we focus our research and policy attention*" (2010:43).

Chapters 2, 3 and 4 have considered the conceptualisation of sustainability in terms of its positioning with ethics and responsibility; definitions, models and frameworks; and, the sustainability skew. The last chapter of the literature review shall consider the development of tomorrow's managers in terms of the complex relationship between higher education, business schools and sustainability.

Chapter 5: The Developing Sustainability Agenda in H.E. Business Schools



"If we want to avoid repeating the mistakes of the past, business leaders of the future need to develop skills in responsible management and a real awareness of the world around them...This requires a massive fundamental mind-shift in the lecture halls of our universities and business schools." (Parkes, 2012:1).

The knowledge and capability to manage sustainability within industry has grown in significance over recent years (BIS, 2012). There has been a shift from business sustainability to sustainability management, reflecting a fundamental move from the organisational to the individual perspective (Laasch & Conaway, 2015). It stands to reason therefore, that given the highly influential socio-economic nature of business, the question of how sustainability is considered in management education is increasingly recognised as pertinent (Hesselbarth & Schaltegger, 2014). Within the literature, it is widely suggested that higher education (HE) – a shaper of the values of

society - is one of the optimum moments for engaging future managers with sustainability, not least because it offers a fertile ground for critical thinking and innovation (e.g. Parkes, 2012; Ryan & Tilbury, 2013; Muff et al., 2013; Hesselbarth & Schaltegger, 2014; Godemann et al., 2014; Adomssent et al., 2014; Bessant et al., 2015). Sustainability-based education is, however, at the emerging phase, with limited knowledge and expertise regarding the best way forward to most effectively develop the next generation of managers in becoming change agents for sustainability (Johnston, 2013; Hesselbarth & Schaltegger, 2014). Indeed, Stibbe (2009) suggests that the capability to build a more sustainable self, society and world requires significantly more than knowledge *about* sustainability – it requires sustainability *literacy*.

Previous literature has recognised the need for, and has examined the extent to which, sustainability is embedded into the curricula, both HE-wide, and more specifically within business schools (e.g. Tilbury et al., 2004; Holmberg et al., 2008; Hopkinson et al., 2008; Arkin, 2009; Wright, 2010; Pappas, 2012; Ryan & Tilbury, 2013; Rayment & Smith, 2013; Haile & Glassey, 2014; Sharma & Hart, 2014; Laasch & Conaway, 2015). This falls beyond the focus of this study. Instead, adding to Chapters 2-4 in attempting to locate this study, this chapter aims to consider the complex relationship between HE, business schools and sustainability. This is helpful because their relative positioning provides important reference points for the continuing analysis and sensemaking of sustainability, and their influence over sustainability-related practices, frameworks, knowledge generation and skills development. The chapter shall begin with a conversation surrounding the tension between the philosophical underpinnings of HE and sustainability, and the challenge that pursuing and encouraging sustainability in HEIs poses to the self-determination, liberal education ideals of HE (Lugg, 2007; Winter

& Cotton, 2012) . It shall then consider the unsettled role of business schools, in particular, the inherent tension between the challenges of sustainability and funding, academic rigour, relevance to industry and responsibility to society. This is followed by a conversation about the development of future business leaders who are skilled in responsible management and sustainability literacy. The final section of this chapter shall explore sustainability literacy in more detail and the use of metrics such as the Sustainability Literacy Test (Sulite).

5.1 Higher Education:

"Most [HEIs] continue to be traditional, and rely upon Newtonian…reductionist paradigms. As a result many universities are still lagging behind companies in helping societies become more sustainable" (Lozano et al., 2013).

Higher Education Institutions (HEIs) are organisations in their own right (Needle, 2015). As such, they are exposed to climates of uncertainty and have a range of stakeholders to whom they need to respond. The influences acting on the HE landscape are various and complex, and include globalisation, the technological revolution, consumerism, corporatisation and the political-governmental ideologies of neoliberalism (Bessant et al., 2015; Needle, 2015).

As key catalysts of knowledge generation, HEIs are uniquely positioned to generate new knowledge, to contribute to developing behaviours and to raise awareness of sustainability issues (Adomssent et al., 2014; Godemann et al., 2014). HEIs have traditionally approached sustainability through sustainability-focused teaching; sustainability-focused research; campus operations and environmental management; and, community engagement (Bessant et al., 2015). Many are embracing sustainability,

yet it has fallen significantly short of permeating all disciplines, scholars, and university leaders (e.g. Sterling, 2012; Lozano et al., 2013; Godemann et al., 2014; Adomssent et al., 2014). Indeed, by 2011, only 15 out of the 14000 universities worldwide had published sustainability reports (Lozano et al., 2013). Similarly, analysis by Muff et al. (2013:xix) found that a *"great deal of lip service"* is being given to sustainability education when compared to that which is required by students and is needed for them to develop into future generators of sustainable value for business and society at large – as advocated by the PRME principles (discussed elsewhere). Indeed, Kirby notes that *"there is now a gulf between most lecturers and their students akin to the one which appeared in the late 1960s"* (2006:1).

For hundreds of years universities have been instrumental in creating and shifting paradigms, and educating the future decision-makers and leaders (Lozano et al., 2013). However, they have a tendency to remain traditionally Newtonian-modernist which does not sit comfortably with the underpinning tenets of sustainability (Bloland, 1995; Lovelock, 2007; Wells, 2011). This represents a challenge for HEIs, particularly given the renewed calls for making the deep and radical changes necessary for generating reflection, new knowledge and influencing behaviour in light of sustainability (Lozano et al., 2013; Adomssent et al., 2014, Bessant et al., 2015). Therefore, whilst it is not the intention to provide an in-depth review of the epistemologies, and it is recognised that attempts to reduce philosophical explanations to simply a difference in epistemology are spurious (Matusov, 2015), the following shall attempt to make sense of conventional philosophical proclivities, their application to HE and thus their positioning in relation to the sustainability field. Broadly, there are three positions: pre-modernist, modernist and post-modernist.

Generally assumed to come from God, the primary epistemology of pre-modernism is centred upon revealed knowledge – truth. The conduits for this truth, and thus the source of power, are/were churches, holy-men and religious leaders (Berger & Luckmann, 1966). Modernism on the other hand, represents enlightenment and the discovery of a singular truth - the essence of truth or, essentialism (Hansen, 2010). In its simplest sense, it epitomises the creation of a framework of ideas about man, society and nature, challenging conceptions rooted in the *"traditional world-view"* of pre-modernism (Power, 2004:73). Generally, modernist frameworks reflect a Newtonian mental model and a belief in progress and order, cause and effect - developing knowledge to develop practices and the continual, methodical inquiry to test the effectiveness of approaches, interventions and methods (Ainsworth & Hansen, 2005; Lovelock, 2007; Wells, 2011; Lozano et al., 2013). It focuses on unity and the bringing together of ideas to form systematic and cohesive frameworks (Fawcett, 2006). Conversely, postmodernism is a vigorously debated concept advocating the co-existence of multiple realities, emphasizing multiple, local truths rather than a singular, universal truth and narrative model (White & Epston, 1990; Hansen, 2010). Therefore truth is undecidable, unobtainable, and depends on perspective, 'anti-essentialism' (Hansen, 2010; Pettigrew, 2013). Indeed, postmodernists attack the validity and legitimacy of the most basic assumptions of modernism (Bloland, 1995), underlining the elusiveness of meaning (Kirby, 2006), promoting the dynamism and plurality of knowledge (Jameson, 1992). It implies an appreciation of how knowledge can be contested, and what is not knowable, instead of delving constantly for certainties that may not exist (Fawcett, 2006).

The modern-postmodern debate began in the humanities in 1960's United States, gaining momentum in the 1970s in the arts and social theory (Bloland, 1995). By the early 1980s the debate had become, *"one of the most contested terrains in the intellectual life of Western society"* (Huyssen, 1990:357). However, during the 1990's, having swept through the humanities and social sciences, the modern-postmodern debate ebbed, and scholars often referred to the period as *"post- theory"* (Winkler, 1993:A9). Despite its significance in the previous decades the debate arguably had relatively little direct impact on higher education (Bloland, 1995). Despite the term 'postmodern' appearing with increasing frequency within HEIs, few of the discussions directly addressed the background of the modern-postmodern divide that provided the vocabulary of the discourse. The lack of higher educationists' engagement with the postmodern was unfortunate, for despite the debate seeming to wane, the modern-postmodern discussion continued to have a significant impact on the way in which society, politics, economics, education and thus HE was considered (Bloland, 1995).

However, Edwards and Usher (2001) argued that during the late twentieth century, there was in fact much debate about the postmodern framings for the pedagogy and adult education forums taking various forms, ranging from *"enthusiastic support to outright hostility"* (2001:273). Due to necessary brevity, Edward and Usher's succinct summary of the debate is worth quoting in full: *"For some, the postmodern is part of the globalization of capitalist economic relations and the growth of post-industrial and consumer-oriented social formations within an information-rich environment enabled by new technologies (Harvey, 1989). For others, it is a form of analysis associated with poststructuralism and deconstruction that brings to the fore the place of language and discourse and that challenges foundational certainties in thought and action (Lemert,*

1997). Some view it as promoting individualism and lifestyle practices, linked to a revitalized neoliberalism, marketized structures, and a consumer society (Featherstone, 1991). Others argue that it provides a space for forms of radical and emancipatory politics associated with new social movements and issues of gender, race, ethnicity, and sexuality, which provide the possibility for practices free from the totalizing discourse of the traditional left (Ellsworth, 1997)." (Edwards & Usher, 2001:273/4).

Arguably, these competing definitions and underlying intentions converge and diverge, with postmodernism amounting to little more than a word that captures a sense of separation and disjuncture with unidentifiable parameters - a *"nonspace without meaning"* (Jarvis, 1998:97). This manifests itself in autonomous thinking, disruption, stepping outside of established practices, resistance, deconstruction and criticality. However, such plurality perhaps provides HEIs with the opportunity to reconstruct knowledge and break down perceived barriers between the perspectives of stakeholders particularly when considering the more holistic notions of sustainability.

Indeed, Sampson (2009:91) suggests that the postmodern approach has made important contributions to the delivery of education and development, arguing that theorists, researchers, and practitioners advocating a postmodern view have encouraged those seeking a modern approach to think carefully about what individuals need and how they can be best served by HEIs. Conversely, other commentators argue that postmodernism is no more (e.g. Hutcheon, 2002; Kirby, 2006; Toth, 2010). For many, by 1989 the demise of postmodernism was an inevitability (Toth, 2010), even if, as with modernism, its discursive strategies and its ideological critique continue to survive (Hutcheon, 2002). This is particularly salient if acknowledging that for many HEIs, their governance structures and academic cultures have been subject to wider

debates on public sector reform and internationalisation, and to public expenditure cutbacks compelling them to justify their societal value, with many reflecting *"quasi-corporate characters"* (Godemann et al., 2014:220).

Nevertheless, pursuing and encouraging sustainability within HEIs poses structural and cultural challenges, not least because sustainability is often perceived as an ideology, a lens through which to view the world – the promotion of which is juxtaposed to the self-determination, liberal educational ideals of HE (Lugg, 2007; Winter & Cotton, 2012). Paradoxically, given that the UK Government has recognised sustainable literacy as a core competency for graduates (HM Government, 2005), where colleges and universities were once perceived as public goods, they are now open to scrutiny, having to prove that funds are wisely spent, and demonstrate value for students - often in terms of competency and skill sets (e.g. Pfeffer & Fong, 2002; Ivory et al., 2006; Winter & Cotton, 2012; Rayment & Smith, 2013; Siebert & Martin, 2013; Farkas, 2013).

It is an ambiguous and complex field involving a plurality of ways to explain and understand what is happening in practice. Perhaps therefore, postmodernist frameworks are relevant when considering the multiple discourses and stakeholder perspectives at play in HEI practice and provision, and understanding the dynamics between them (Bloland, 1995). Indeed, the notion of there being differing understandings and conceptualisations of what both higher education and sustainability are, and the relationship between them, are central to postmodernism. Sampson (2009) suggests that from this contested terrain, two principal standpoints have emerged. The first is that the modern and postmodern approaches are incompatible, and the postmodern approach is superior to the modern approach. The

second is that the modern and postmodern approaches are compatible, each with specific benefits and limitations, and individual needs and cost-effectiveness should govern the decision of which approach to use.

Despite the apparent antagonism perhaps a commonality, a holism, can be provided which assists the search for the robust conceptualisation of sustainability within HEIs. Indeed, it has long been recognised that a key feature of postmodernist thinking is a questioning dialogue (Roche, 2007). However, although presenting somewhat of a paradox, it is perhaps also prudent to recognise the value of modernist ideas regarding sustainability, particularly in terms of best-practice. Most significantly, it appears useful to consider the potential value in the productive tension between modernist and postmodernist frameworks. It leads to a continuous questioning and re-examining of knowledge, and the processes through which it is constructed. There seems to be much to be gained from the continuing, nuanced analysis of the relationship between modernism and postmodernism in developing conceptual frameworks for interrogating, analysing and constructing sustainability knowledge. Rather than focusing on one framework or the other therefore, it seems that the intersections between them are the most fertile space for exploring robust, practice-focused knowledge within the field of sustainability. Perhaps then, the process of conceptualising the epistemological bases of sustainability knowledge within HEIs in such a way which hardens boundaries, rather than bridges them, should be avoided. Sampson, (2009:94) advises that practitioners should use interventions which work, which develop relationships, irrespective of their philosophical underpinnings, suggesting that it is important to understand and value each approach for its unique

contributions, that the *"divorce"* between theorists, researchers, and practitioners championing modern and postmodern approaches is unnecessary.

HE is a societal leader, future shaper and exemplar of best practice. It influences local and national policy, and so has a fundamental responsibility towards sustainability and in educating the next generation of managers (Bessent et al., 2015). However, the traditional, modernist tendency of HEIs present a *"daring challenge"* (Lozano et al., 2013:10) for any relationship with sustainability. In strategically challenging times it is incumbent upon HEIs to find a sense of purpose and make some difficult choices in light of the multifaceted nature of, and clear necessity for sustainability (Ivory et al., 2006; Rayment & Smith, 2013).

5.2 The Business School:

*"Clearly, it is time for business schools, and indeed all stakeholders in the field of management education, to seriously consider their contribution to society…How will we develop an educational vision that generates the kind of managers and leaders society needs?" (*Muff et al., 2013).

The world's first business school was founded in 1819 in Paris – the École Supérieure de Commerce de Paris, with other European business schools following suit throughout the nineteenth century. In the United States, the first schools were created during the late nineteenth century (Sharma & Hart, 2014), and were not necessarily welcomed by universities, being accused of *"sully[ing] the robes of Chaucer and Shakespeare with seekers of gold"* (Ewing, 1990:267). Here in the UK, the London School of Economics and Political Science was founded in 1895, with Birmingham and Manchester universities offering commerce degrees by the early 1900s (Engwall &

Danell, 2011). However, the 'university business school' developed comparatively late in the U.K. Indeed, no UK university had its own business school until the 1960s. Yet, by the turn of the twenty-first century, following a prolific growth in number, there were around 120 (Ivory, et al., 2006; Engwall & Danell, 2011).

Business schools, one of the crowning glories of higher education over the last four or five decades, are positioned at the very heart of the global economy of knowledge (Rayment & Smith, 2013). Indeed, within the UK (and elsewhere), they have often moved from the periphery of university interests, to the centre (Ivory et al., 2007; Siebert & Martin, 2013). Business studies in its various manifestations have become the most popular programmes globally (Muff et al., 2013). In the UK, the Higher Education Statistics Agency (HESA, 2015), show that in 2013-2014, the most popular subject area at both undergraduate and post graduate levels were business / administration related degrees. Nevertheless, clouds are now gathering on the business school horizon (Ivory et al., 2008; Muff et al., 2013).

Within HE, business schools in particular have been thrown into disarray, with academic leaders and analysts questioning the content and structure of management education provision, questioning the business school's value as a source of knowledge production (Ivory et al., 2006, 2008; Financial Times, 2009; Rayment & Smith, 2013). The very purpose of the business school is under scrutiny (Muff et al., 2013). Indeed, there were signs of uneasiness about the role and relationship of the business school in society even before the global financial crisis (Siebert & Martin, 2013; Godemann, Haertle et al., 2014; UN PRME, 2014). And currently, following the downturn, they are experiencing a time of confusion and disagreement – a crisis of confidence, with their role and actions increasingly becoming the focus of debate (e.g. The Financial Times,

2009; Rayment & Smith, 2013; Siebert & Martin, 2013; Muff et al., 2013). Yet, at the same time, business schools are striving to contribute to future business in a meaningful way (Financial Times, 2009; Hesselbarth & Schaltegger, 2014).

There are some difficult choices ahead – business schools are at cross-roads and under threat from various places, with their economic viability increasingly uncertain, leading some to suggest that the business school 'success story' is coming to an end (e.g. Pfeffer & Fong, 2002; Ivory et al., 2006; Rayment & Smith, 2013; Siebert & Martin, 2013; Farkas, 2013). They are reproached for being reactive rather than proactive, *id est* ethical practice, CSR and sustainability are only included in business education when corporations are obliged to respond to societal demands – with instances of business education leading practice rare, if not non-existent (Sharma & Hart, 2014), with *"more learning taking place on the streets"* (Muff et al., 2013:43). This has led some critics to question the efficacy and ethicality of what is taught within business schools, particularly in light of the financial crisis (Siebert & Martin, 2013). Similarly, they are accused of being *"ivory towers"* - of sacrificing the improvement of practice which meets the demands of modern-day management, in order to focus on theoretical research (Ivory et al., 2006:7).

Starkey and Tempest (2008) question whether or not managers are being adequately prepared for global challenges, suggesting that the business school community has become 'stuck in a groove' and can no longer think critically about what they do. Others (e.g. Hawawini, 2005; Starkey, 2008; Siebert & Martin, 2013), argue that programmes, and MBAs in particular, are fixated on a particular form of finance and economics, quantitative management skills, markets and individualism - or as Starkey (2008:1) suggests in a letter to the Financial Times: *"greed and selfishness".* Starkey

calls on business schools to reflect on their role in the *"…carnage of Wall Street and just how management education has contributed to the mindset that has led to the excesses of the last two decades."* (Starkey, 2008:1). Bradshaw (2009) agrees and adds that business school academics are concerned about the suspicions surrounding irresponsible big business and the perception that their graduates are seen as part of the problem. This demonstrates an inherent tension between academic rigour and relevance to industry: the expectation that graduates are moulded into commercially successful, high performing managers, and yet be reflexive and critical about the role of business in society (Siebert & Martin, 2013; Hahn & Reimsbach, 2014). Indeed, Atwater et al. (2008), point to empirical evidence which finds that graduates are not adequately prepared – not least because programmes are too functionally isolated.

The reputation of 'business' has also suffered, and Generation Y is increasingly focused on 'management' rather than 'business' (Bradshaw, 2009). They are shunning the 80-hour working week of the investment banker or consultant for more socially rewarding jobs in not-for-profit companies or government which provide a better work-life balance and more time with their families (Bradshaw, 2009). The perceived importance of reputation also manifests itself in the form of school status, image and how the institution is viewed by the various stakeholders such as prospective students and research collaborators (Ivory, et al., 2006). Increasingly, as the financing and affordability of education has moved up the public agenda and become a core political issue for business schools, the reputational benchmarking culture and a school's position within the league tables and its REF outcomes (Research Excellence Framework), are of particular and growing importance (Muff et al., 2013; Siebert & Martin, 2013). The REF assesses research quality and, is the UK's principal

determinant on how research funds are allocated. The REF also provides accountability for public investment in research, producing evidence of the benefits of that investment. And, crucially, it provides benchmarking information and establishes reputational yardsticks (REF, 2014). Naturally, this can be challenging for HEIs who aim to grow, or even simply maintain, their reputation – particularly if they have not historically excelled. This has implications for the type of staff recruited and balancing the need for research output reflecting the pressures derived from audits such as the REF; and for staff to be able to engage effectively with industry for knowledge co-production (Siebert & Martin, 2013). Similarly, prospective students (both domestic and international) are highly influenced by the somewhat crude and flawed league tables and other ranking systems (Ivory et al., 2006). Likewise, there is student demand and internal pressure to gain accreditation through bodies which may emphasise differing priorities (Siebert & Martin, 2013). Therefore, the relationship and whether or not a business school is considered separately from the rest of the university can be crucial to its reputation – *id est*, where is it situated symbolically and physically, how resources are shared and the impact of the wider university's mission and values (Siebert & Martin, 2013). Arguably, all this has placed pressure on business schools to employ the strategies of the well-funded elite schools (often governed by American-influenced shareholder value business model), rather than following the logics of differentiation and sustainable development (Siebert & Martin, 2013; Dameron & Durand, 2013).

The other principal source of funding (and constraint) is the Higher Education Funding Council for England (HEFCE). HEFCE aims to meet the diverse needs of students, the economy and society through promoting and funding high quality, cost-effective

teaching and research (HEFCE, 2015). Their main role is to allocate funding from the Government to HEIs offering undergraduate programmes on an annual basis. For instance, the total allocated for 2014-15 cycle was approximately £3.9 billion with about equal amounts given to teaching and research (Figure 13):

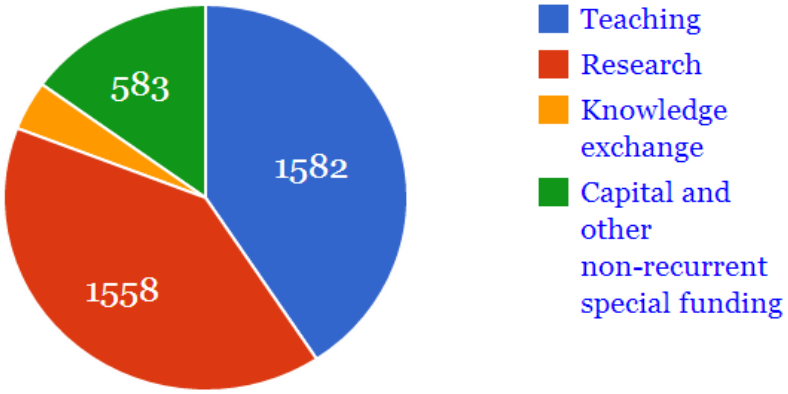


Figure 13: 2014-15 Initial funding allocations £ millions (HEFCE, 2015).

However, the combined allocation from HEFCE and student fees often does not offset the cost of providing the sought-after 'high quality' education. This has implications for, and perhaps further explains, the focus on research and publications within business schools.

'The Future of Business Schools in the UK' briefing (Ivory et al., 2006), summarises the conflicting opinions discussed above by representing the main themes in succinct table, reproduced here (Table 7).

Business school research is too abstract and irrelevant to the needs of practicing managers.	Not enough business school research is grounded in the methodological rigour of the social sciences, it is often too case based and discursive.
Business school teaching is too theoretical, and not sufficiently focused on problems that managers actually face.	Business school teaching is too 'customer focused' and not sufficiently distant from, and critical of, management practice.
MBAs, and business degrees generally, do not produce well rounded managers with leadership qualities.	MBAs are, or for a long time were, seen as a passport to career progression and greater earning power.
Business education has made almost no impression on practicing managers, and has failed to impact business performance.	Business schools are partly culpable for recent corporate scandals, and therefore have had a negative impact on business performance.
There are too many business schools. Many of those taking degrees in management are unlikely to get much benefit from their studies.	There are not enough business schools. UK firms simply cannot rely on the University sector to supply the training/ education that their managers need.

Table 7: Conflicting themes in the debate concerning business schools (Ivory et al., 2006:8).

Encouragingly, the expectation that management education institutions should be positioned at the forefront of both thought and deed regarding responsible management practice and sustainability issues was acknowledged with the UN-supported Principles of Responsible Management Education (PRME) of 2007. The PRME, referred to as a key catalyst for the transformation of management education (Godemann, Haertle et al., 2014), were developed by an international working party of sixty deans, university presidents and representatives of leading business schools and academic institutions, to address the responsibility of management education in preparing future managers for the challenge of responsible and sustainable business (UN PRME, 2014).

Likewise, the Deans at the 2009 European Foundation for Management Development (EFMD) Conference, agreed unanimously that business schools have a key role to play,

and thus should do more, in influencing students so that their future in-work decision-making and behaviour reflects globally responsible leadership (Rayment & Smith, 2013). To achieve this, it is suggested that business schools need to broaden their intellectual horizons (Starkey, 2008), with teaching focusing on societal skills (Hawawini, 2005), in order to provide students with a clearer insight into what the new role of business will be in society (Bradshaw, 2009).

It is incumbent upon business schools therefore, to develop the right approaches to meet the challenges of sustainability. However, as previously discussed, business schools tend to be places with multiple communities, discipline groups and stakeholders, each with contrasting perceptions, aims and purposes (Starkey & Tempest, 2008). Rayment and Smith (2013) suggest that a crucial factor is whether or not business schools position themselves fundamentally as a business or a school. If they consider themselves a school, then their underlying motives, philosophies and approaches are likely to be different than if they see themselves as a business – not least because a school perspective implies a focus driven by education and training, and perhaps a broader social remit; whereas a traditional business posititon may encourage a focus on league tables, market share, competition with other institutions and profit. Indeed, Rayment and Smith (2013) ask simply: *"should they be focused on assisting business or assisting humanity through business?"* (p491).

Although there are a wide variety of business schools, The Advanced Institute of Management Research (AIM) suggests within their report, *The Future of Business Schools in the UK* (Ivory et al., 2006), that schools' activities and aims can be simplified across two dimensions. The first dimension concerns the extent of the schools' focus on their impact upon organisation and policy, or upon academics. The second refers to

whether their scholarship is focused towards teaching or research. Thus, there are four key strategic approaches – or, typologies, of business school, between which a balance needs to be found (please see Figure 14) The *professional school* demonstrates parallelism with vocational provision, and focuses on the improvement of management practice through teaching and its role in encouraging economic growth and social inclusion. The principal stakeholders are governments, employers and individual managers. Performance is measured against teaching excellence and the provision of specialised executive profession-based education such as the MBA and specialist masters. The *social sciences school* focuses on the contribution to knowledge. The principal stakeholders are academics and other social-science based business schools. Performance is measured against the REF. This approach is criticised for being an unnecessary constraint on academic freedom (Siebert & Martin, 2013). The *knowledge economy school* focuses on the development and commercialisation of knowledge. The principal stakeholders are up and down the knowledge value-chain (such as research sponsors, specialist training centres, management consultancies, other university departments). Finally, the *liberal arts school* – focuses on encouraging well-rounded and thoughtful graduates who are knowledgeable about business and management (Siebert & Martin, 2013). This approach centres on the fundamentals of self-development, knowledge, self-knowledge, wisdom and leadership and the art of critical application and practice – rather than more positivist scholarship and research. It addresses the wider debates such as the role of business in society.

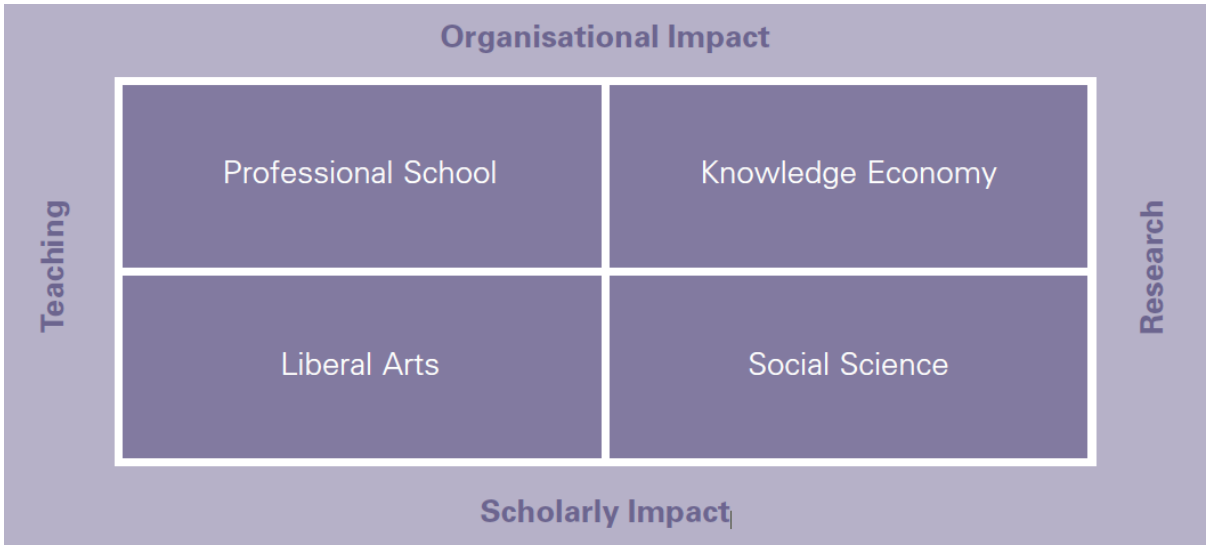


Figure 14: Approaches and orientations of business schools (Ivory et al., 2006)

The report suggests that these four strategic approaches (all of which are valuable in their own right), represent the future for business schools. And, because of the complexity of the challenges and variation between different institutions, it advocates the need for a heterogeneous approach, with individual business schools choosing the path which is most appropriate to them (this is assuming that the reality and context within which the schools operate provide for a degree of choice). This will result in greater levels of diversity in focus, types of excellence and the impact on institution-specific economic, academic and social contexts (Ivory et al., 2006).

This holistic approach potentially has many synergies with the underpinning tenets of sustainability. In a study of 15 business schools by Raiment and Smith (2013), it was found that there are broadly two types of leadership within business schools. The first type (Type 1), are focused on the local economy and thus concerns regarding sustainability are also local-level based, not being inclined to question the broader role of HEIs at the global level. The second type of business school leadership identified (Type 2) operate at the international level and principally consider their school to be

supporting business rather than individuals or society. Thus, Rayment and Smith, whilst acknowledging the limitations of their study in terms of number of participants, conclude that none of the leaders participating in the study appeared to be directing business, either now or in the future, through their provision, towards helping wider humanity achieve a sustainable future. Yet: *"Management education must play a critical role in addressing the global social and environmental challenges, as well as the dilemmas and issues they create for business. It needs to fundamentally rethink its purpose and how its customers should be served. Business schools should cease conforming to the current business and economic system; instead, they should start* transforming *the system. We believe that the mission of business and management educators in the twenty-first century is to become custodians on behalf of society, to enable and create the business system needed for a world worth living in." (Muff et al., 2013:49-50).*

Having explored the positioning of HE, business schools and sustainability in terms of philosophical underpinnings and their role within society, the following two sections shall consider the development of future business leaders who are skilled in responsible management, and sustainability literacy.

5.3 Developing Future Business Leaders:

"The role of universities in developing graduates who are 'global citizens' – that is, they better understand how the world works, their own responsibilities, and the sustainability or otherwise of many activities – is arguably one of the most significant and pressing issues for higher education in the 21st century." (Sterling, 2012:11).

The knowledge and capability to manage 'sustainability' within industry has grown in significance over recent years (BIS, 2012). Furthermore the highly influential nature of

business within society and the economy prompts the question of how sustainability is considered in management education (Hesselbarth & Schaltegger, 2014). Despite the shortage of literature in the area of HE responsiveness to the sustainability agenda, particularly with having yet to engage a significant number of scholars in accounting and management (Godemann et al., 2014), some suggest that HE – a shaper of the values of society - is one of the 'optimum moments' for engaging future managers with sustainable development, particularly as it is a generative place for alternative ideas and conceptions, and the tackling of more challenging questions (Ryan & Tilbury, 2013; Godemann et al., 2014). Hahn & Reimsbach (2014), advise that advancements in the curriculum for future managers should foster critical thinking rather than using sustainability information superficially. They caution against viewing sustainability issues as an 'add-on' to existing provision, and call instead for a combination of integrating sustainability issues in core business curricula and offering stand-alone sustainability-based programmes.

As previously discussed, there is strong political support for, and a growing expectation that, HE will provide a generation of sustainability-literate young people (UCAS, 2008), with business leaders of the future skilled in responsible management (Parkes, 2012). Thus, as attested by the recently concluded UN Decade of Education for Sustainable Development (2005-2014), it is unsurprising that sustainability-based education, usually subsumed under the contested heading of Education for Sustainable Development (ESD), has become, at least in terms of policy, an established feature on the HE landscape (Winter & Cotton, 2012; Sterling, 2012; Bessant et al., 2015). Indeed, Hahn and Reimsbach (2014) point to several studies (e.g. Wu et al., 2010; Alcaraz et al., 2011; Singh et al., 2011; Rasche et al., 2013), which indicate that including ESD within

business and management curricula is becoming a trend. And, although the ESD phrase is in itself disputed, it is necessary to be positioned at all stages of formal and informal education in order to ultimately realise a sustainable society (Council of the European Union, 2010).

Essentially, sustainability-based education should prepare people to manage and shape complex social, economic and ecological conditions characterised by change and uncertainty (Sterling, 2012). Yet despite this, embedding sustainability within the HE curriculum has proved difficult, often being met with indifference and sometimes resistance (Winter & Cotton, 2012), as demonstrated by a significant Australian study which considered education both *about* and *for* sustainability (Tilbury et al., 2004). It found that in the majority of Australian MBA degrees there was a distinct lack of the skills needed to empower graduates to become change agents for sustainability. The main barriers behind this were a shortage of staff with the necessary experience and knowledge, a lack of faculty support and a lack of demand for such provision. Even so, some commentators suggest that for ESD to be *"genuinely transformative",* it needs to go beyond embedding and integration, rather it requires *"radical and fundamental change"* (Bessant et al., 2015:48), thereby placing sustainability at the heart of HE's raison d'etra (Blake et al., 2013).

Business in the Community (BITC) advise that developing leaders with the necessary skills for the transition to sustainability is both urgent and critical to our future economic, social and environmental well-being (BITC, 2010). Their organisational-based study, Leadership Skills for a Sustainable Economy (BITC, 2010), found that 99% of over 700 respondents (at board-level or with a sustainability mandate), recognised that developing the leadership and management skills needed for a sustainable

economy is important to the success of the UK economy. Indeed, 70% agree that the gap in these skills will become one of the most pressing challenges facing UK businesses in the near future. And, 84% thought that third parties, such as universities, need to do more.

This raises questions regarding the adequacy of the skills and attributes that graduates destined for management carry into the societal and employment settings. Indeed, organisations are increasingly demonstrating a sustainability dimension in their resourcing requirements and agendas, with sustainability-related abilities becoming a key competence within an increasing number of careers and appointments – particularly those pertaining to sustainability management (Sterling, 2012; Hesselbarth & Schaltegger, 2014). Interestingly, research by the HEA (Cade, 2008) explored the links between sustainability and graduate employability in relation to HE teaching and learning. It found that students and graduates considered the social and environmental ethics of an employer before making a career choice and were concerned about the preparation for their employment provided by their institution, believing that sustainable development and CSR should be taught more. Employers were found by the study to consider the social/environmental ethics, values and experience of university students as part of their graduate recruitment processes, and required graduate recruits with specific competencies to support their social and environmental responsibilities. They also believed that universities should do more to prepare students for working with employers who are socially and environmentally responsible. Similarly, employers wanted more inter-disciplinarity within universities as a way of teaching social and environmental responsibility.

Students, partly due to employability drivers and partly because of their own sense of ethics and responsibility, are keen to gain the necessary skills to enable sustainable change in their working lives (Sterling, 2012). A broad and significant survey of around 25,000 university and college applicants in 2007/08 by Forum for the Future and UCAS found that nearly two-thirds of the respondents wanted more sustainable development coverage within curriculum content (UCAS/Forum for the Future, 2008). UCAS' chief executive, Anthony McClaran believes that, "*Applicants to higher education still dream of a better world and the part they can play in creating it. The choices they make … in the time they spend at university or college, will be critical in helping them to play that part."* (UCAS/Forum for the Future, 2008:1). However, Hahn and Reimsbach (2014), advocate advancements in the curriculum for future managers that foster critical thinking rather than using sustainability information superficially. They suggest that rather than viewing sustainability as an 'add-on' to existing provision, it is better to aim for a combination of integrating sustainability issues in core business curricula and to offer stand-alone sustainability-based programmes.

A more recent longitudinal study by the HEA (Drayson et al., 2014) tracked and investigated student attitudes towards, and skills for, sustainable development throughout their university career. It found that: The vast majority (over four-fifths) of students consistently believe that sustainability should be actively incorporated and promoted by universities, and this increases as respondents progress through their studies; Over two thirds consistently believe that sustainability should be covered by their university courses with over 60% of students wanting to learn more about it; Interestingly, and in-part contrary to Hahn and Reimsbach's argument, there is a continued preference amongst students for a reframing of curriculum content rather

than additional content or courses – though there is also a desire for teaching to include extra-curricular activities within the range of learning opportunities for sustainability; and significantly, the majority of students continue to interpret sustainability as being predominantly about the environment, with less recognition of the social and economic aspects. In-line with the discussions in Chapter 4, this latter finding is supported by Godemann et al. (2014) who found that frameworks published by various HE initiatives refer to a range of environmental issues, but appear to lack reference to key social sustainability concerns.

5.4 Sustainability Literacy:

"The world needs a generation of sustainability-literate young people and there is a growing expectation that the higher education sector will be able to deliver in this respect." (UCAS/Forum for the Future, 2008:1).

Sustainability literacy refers to an individual's insight, perspective and understanding of issues relating to sustainability, and the ability to make reasoned, strategic choices which are conducive to sustainable development (Parkin et al., 2004; Murray & Cotgrave, 2007; Stibbe, 2009; Murray, 2011; Sterling, 2012; Winter & Cotton, 2012; Kokkarinen & Cotgrave, 2013). Although the term is controversial (Sterling, 2012; Winter & Cotton, 2012), it is regarded a core competency (HM Government, 2005).

The literature highlights the holistic, complex and multi-perspective nature of sustainability as being key to developing sustainability literacy, and recommends that effective sustainability education must be derived from interdisciplinary approaches and pedagogy within HEIs (e.g. Lugg, 2007; Pappas, 2012; Hahn & Reimsbach, 2014). This then, would enable future managers to advance beyond mere acknowledgement

and superficial acceptance, towards a deeper, questioning criticality which allows them to cope with the polytonality of sustainability. Sterling (2012) goes further and suggests that sustainable literacy is *essential* for graduate understanding of, and ability to cope with, the uncertainty of post-modern society and the challenges of climate change, inequality on a local and global scale, and resource depletion. However, Hahn and Reimsbach, (2014) raise an interesting point, questioning whether future managers have the capability or inclination to demonstrate the necessary knowledge, understanding and criticality of notions of sustainability - or whether they accept that if something merely *says* 'sustainable' it will probably *be* sustainable.

The key constituents of what makes a sustainability-literate person are disputed (e.g. Parkin et al., 2004; Winter & Cotton, 2012). However, the HE guide from the Higher Education Partnership for Sustainability defined a sustainability literate person at the highest level as one who could be expected to:

- understand the need for change to a sustainable way of doing things, individually and collectively;
- have sufficient knowledge and skills to decide and act in a way that favours sustainable development;
- be able to recognise and reward other people's decisions and actions that favour sustainable development. (Parkin et al., 2004:9)

Nevertheless, as asked at the 2014 WCED in Japan, how can universities assess and report on their global performance and be sure that they are producing sustainability literate graduates? (Carteron & Decamps, 2014). Although the literature in this field is very sparse, there is a growing demand for HEIs to demonstrate advancement in this area - for a metric to gauge student progression and assess the effectiveness of the

curricula and pedagogy in achieving sustainability literate graduates (e.g. Zwickle et al., 2014; Carteron & Decamps, 2014).

Interestingly, early studies using Likert scales before and after educational input, which investigated the potential for education to change student attitudes towards sustainability (again, usually environment-based), produced conflicting results, and found that any positive outcomes tended to be short-lived (Rickinson, 2001; Winter & Cotton, 2012). More recently, phenomenographic research of 230 final-year students at Liverpool John Moores University (Kokkarinen & Cotgrave, 2013), indicated that the vast majority of students were demonstrating skills relating to sustainability literacy. The study found that the students had experienced sustainability literacy in two ways. The first was through direct experience, such as multi-disciplinary group or project work where students felt that their attitudes towards, and knowledge of sustainability improved. Students thought that the discursive nature of group work encouraged their personal communication skills, and was correspondingly valuable for conveying sustainability literacy to others. The second was through reflection. The study found that students were beginning to show sustainability literacy in their reflections on other areas – that they were also considering the role of wider stakeholders beyond their discipline, such as education providers and government, in disseminating the sustainability message further.

In terms of 'testing', the University of Ohio recently developed and trialled an across-campus sustainability literacy test which, crucially, recognises the sustainability skew against social factors, and investigates all three pillars of sustainability (Zwickle et al., 2014). It represents an initial attempt to quantify knowledge of the conceptualisation of sustainability. It is longitudinal, showing students' progress throughout HE, assessing

the effectiveness of provision at achieving sustainability knowledge goals. However, the limited number of multiple-choice questions (16), are heavily rooted within the American context. And more generally, as with many multiple-choice formats, there are limitations when used to measure knowledge of a concept – particularly one as multifaceted and subjective as sustainability. Indeed, the authors acknowledge that they *"nearly always ceded complexity for simplicity"* in the response-rate trade-off (Zwickle et al., 2014:21). Similarly, the test struggles to provide a full assessment of the multiple levels of learning (e.g. analysis, synthesis, criticality), and so arguably falls short of providing a full assessment of sustainability literacy. Nevertheless, it does provide a consistent basis for systematic, longitudinal comparison.

Very recently, a tool created by over 200 volunteers from the academic community was launched - the global Sustainability Literacy Test (Sulite) (Carteron & Decamps, 2014). It was largely in response to the Rio+20 Conference and the UNESCO World Conference of ESD which highlighted the role that Higher Education Institutions hoped to play towards realising sustainable development. As a tool, it provides a platform for HEIs to assess and report on their performance and asks how HEIs can be certain that they are producing sustainability literate graduates. It is designed to be applicable internationally, in any kind of HEI, on any tertiary-level programme. The test is supported by key international agencies, principally UN-based, including UNESCO (United Nations Educational, Scientific and Cultural Organisation), UNEP (United Nations Environment Programme), UNDP (United Nations Development Programme), PRME (United Nations Principles of Responsible Management Education), and the Foundation for Sustainable Leadership. The significance of this test is also demonstrated by the volume of involvement: following the launch of version 1 in 2014,

261 universities, more than 24,500 students, representing 30 countries took part. These are substantial numbers. One of the universities taking part was and is Plymouth University.

The test aims to ensure that "*future graduates have basic knowledge on sustainable development and both individual and organisational sustainability and responsibility*" (www.sustainabilitytest.org, 2016). And thus, the test consists of two broad question themes: those relating to challenges facing society and the planet; and secondly, questions concerning organisational responsibility in general and corporate responsibility in particular. The test consists of 50 multiple choice questions randomly selected from a pool of questions at two levels: global challenges and, national and regional topics. Of those questions, two-thirds concern the global level, with one-third linked to national and regional level. As the test is taken internationally, the questions are subject to broad consensus – a difficult proposition given the many-sided and contested terrain that is sustainability. The questions are based on the founding principles of sustainable development and are framed by ISO 26000 - the voluntary international standard for organisational social responsibility (see the Historical Overview). The core subjects of the standard are: Labour practices, the environment, fair operating practices, consumer issues, community involvement and development, and human rights (GRI & ISO, 2014). They include basic definitions, trends and key figures of global issues, and sources in international texts and forums such as the UN. Crucially therefore, as with the Ohio trial, Sulite only tests the minimum level knowledge in economic, social and environmental responsibility, not multiple levels of learning.

Plymouth University (PU), a signatory for the Higher Education Sustainability Initiative for Rio+20, has opted to pilot the Sulite with first-year under-graduates from the Plymouth Business School (PBS), with the view to rolling it out across the School and then across the university. The staff (including the author) involved with the administration of Sulite are critical of the test in similar terms to the criticisms levelled at the University of Ohio's tool, not least questioning how something as multifaceted and complex as sustainability could be reduced to 50 multiple choice questions. Another major concern is that the test itself may negatively influence how participants feel towards sustainability, turning students off sustainability and dissuading their future engagement with other sustainability-based initiatives at PU.

Given the impressive initial uptake of this particular tool, perhaps sustainability-literacy tests, used in conjunction with other initiatives, can potentially have an impact at international level, capable not only of providing a useful metric to measure sustainability literacy across the globe, but also of engaging and raising the awareness of our next generation of managers. The wide spectrum of involvement with this initiative certainly appears to be indicative of the demand for such a platform. Therefore, given the pedigree of the test, the existing and expected uptake (both at PBS/PU and globally), and the very limited discussion and analysis currently available (Carteron & Decamps, 2014), it is pertinent to ask within the scope of this study, whether and in which ways the Sustainability Literacy Test influences how future managers perceive sustainability.

To conclude, there is a shift in focus within management education from the traditional *"what should business be and do?"* towards a focus on the individual, asking *"who should the manager be, what should he or she do, and how should he or she do*

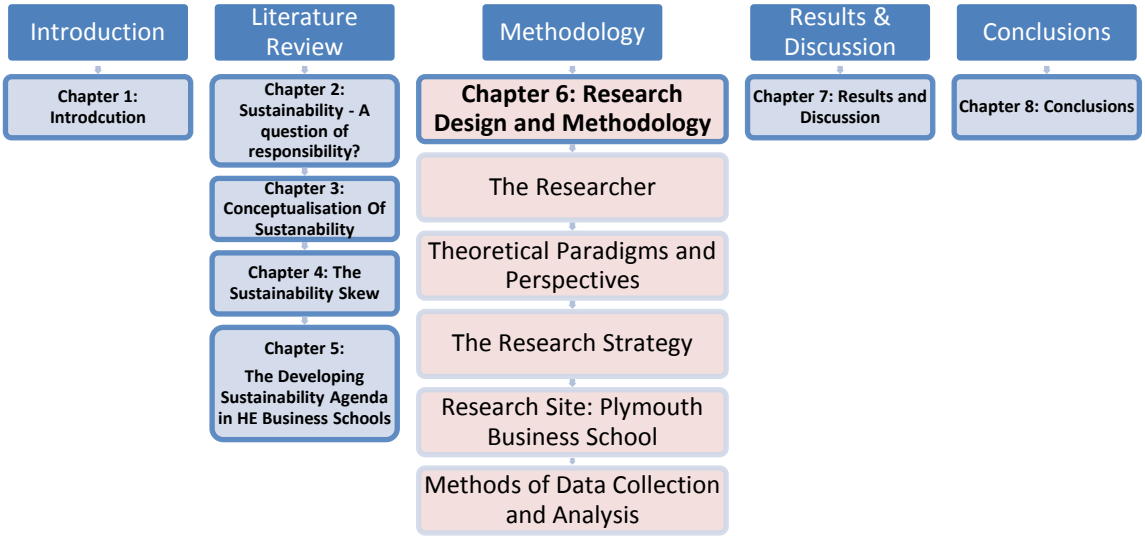
it?" (Laasch & Conaway, 2015:vii). There is strong political support for, and a growing expectation that HE will provide a generation of sustainability-literate young people (UCAS, 2008), with business leaders of the future skilled in responsible management (Parkes, 2012). However, pursuing sustainability within HEIs, and more specifically within business schools, poses structural and cultural challenges, not least because sustainability is perceived as an ideology – the promotion of which is juxtaposed to the self-determination, liberal educational ideals of HE (Lugg, 2007; Winter & Cotton, 2012). More and more, there is an expectation to deliver on the competing demands of being academically rigorous in the face of increasing peer review, whilst remaining relevant to business needs and meeting students' growing expectations (Ivory et al., 2006; Rayment & Smith, 2013; Siebert & Martin, 2013).

However, whether HEIs can be sure that they are producing sustainability-literate graduates is challenging. Emerging sustainability literacy tests point *towards potentially useful platforms which hope to address this.* Indeed, various authors (e.g. Lugg, 2007; Pappas, 2012; Sterling, 2012; Hahn & Reimsbach, 2014) highlight the holistic, complex and multi-perspective nature of sustainability as key to developing sustainability literacy. Achieving this would enable the next generation of managers to advance beyond mere acknowledgement and superficial acceptance, towards a deeper, questioning criticality which allows them to cope with the protean nature of sustainability.

This marks the end of the literature review. Given that the overarching aim of this study is to explore how sustainability is conceptualised by the next generation of managers, the literature review consisted of three chapters which considered the following themes: The sensemaking and positioning of sustainability in terms of ethics

and responsibility; definitions, models and frameworks; the sustainability skew; the positioning of higher education and business schools relative to notions of sustainability and their influence over sustainability-related practices, frameworks and education; and finally, sustainability literacy.

Chapter 6: Research Design and Methodology



"Research Methods can become a fetish, either a set of procedures that must be followed to achieve rigour or a second-order account of procedures to convince readers of the authenticity of research." (Ball, 2011:xvii).

Social research is concerned with people and their life contexts, asking philosophical questions relating to the nature of knowledge and truth (epistemology), values (axiology) and being (ontology), which underpin human judgements and activities (Somekh et al., 2011). It is a requirement for a successful research-outcome to establish that the results obtained are trustworthy, providing a sound theoretical foundation upon which to base interpretations, thereby giving the practitioner credibility (Goulding, 2002). To achieve this, researchers are presented with a choice of philosophies, each of which can significantly bias the outcome of the investigation. Indeed, the credibility of the study may be brought into question if the methodology employed is not appropriate (Sarantakos, 2013).

Crotty (1998:2) reminds us that research answers two questions in particular:

1. Which methodologies and methods will be employed?
2. How can this be justified?

The justification for particular methods and methodology will depend on the assumptions about reality which the researcher brings to the research (Crotty, 1998), because differing levels of abstraction lay the foundation for specific approaches (Creswell, 2013). The gendered, multiculturally-situated researcher approaches the world with a set of ideas - a framework that specifies a set of questions, which are then examined in specific ways. To which end, guided by Denzin and Lincoln's phased framework for the research process (2013:25), this chapter shall be organised into the following sections: The Researcher; Theoretical Paradigms and Perspectives; The Research Strategy; The Research Site; and, Methods of Collection and Analysis.

As discussed in Chapter 1, this study has adopted the interpretative conceptual lens of 'Sensemaking' which, broadly, is a "*collaborative*" process (Cunliffe & Coupland, 2012:65), through which people interpret both themselves and the world around them through the *"production of meaning"* (Whittle & Mueller, 2012:114). Therefore, notwithstanding the acceptance of the inevitable 'blurred genres' and bricolage, (e.g. Crotty, 1998; Lewis, 2009; St. Pierre, 2011), it is recognised that the subjects of research rarely provide full reasoning pertaining to their actions or intents. Rather, the subjects are far more likely to offer accounts or stories about what they did and why. Thus, it is probably helpful to bear in mind that the ongoing subtle variations in the human experience are unlikely to be grasped by a single method. Consequently, researchers tend to use a wide-range of interconnected methods in the pursuit of finding better ways to make worlds of experience more meaningful (Denzin & Lincoln, 2013). To that end, this research comes largely from a postmodern perspective, in

that there is *"no clear window into the inner life of an individual. Any gaze is always filtered through the lenses of language, gender, social class, race and ethnicity"* (Denzin & Lincoln, 2013:24).

6.1 The Researcher:

This section considers what the researcher brings to the inquiry, reviewing the history and traditions of research, the conceptions of self and 'other', and the ethics and politics of research. This will serve to locate this research and researcher, providing both guidance and constraints relating to epistemology, ontology and methodology.

6.1.1 History and Traditions of Research:

This research sits within the realms of social research essentially because it draws on the social sciences for conceptual and theoretical inspiration. Social research aims to generate knowledge through purpose and rigorous investigation and has been used extensively for more than two thousand years (Bryman, 2012; Sarantakos, 2013). In the seventeenth century evidence-based science began to gain ground (Alastalo, 2008). It was furthered by Comte (1848) through his report to the Positivist Society, to be further developed to offer a scientific impression of the world (Sarantakos, 2013). Positivism and positivist research prevail as the dominant type of research in the social sciences (Bryman, 2012). Positivism is challenged by a number of schools of thought, particularly by symbolic interactionism, ethnomethodology, phenomenology and philosophical hermeneutics (Denzin & Lincoln, 2013). Marxists, Feminists and supporters of action research also offer criticisms, centring on perception of reality, the methods used, the relationship between the researcher and the researched, and the goals it serves (Denzin & Lincoln, 2013).

Qualitative research is multidisciplinary, ranging from *"social science to art form"* (Saldana, 2016:3), nevertheless remaining *"fractured"* and less studied than statistical thinking (Alastalo, 2008:27). Denzin and Lincoln (1994, 2013) suggest that qualitative research has more recently progressed through a number of 'moments'. Some suggest that these moments are Anglo/North American-centric, over-determined, and do not generalise well across disciplines (e.g. Holt, 2003; Alastalo, 2008). Others argue for a conception of overlapping moments rather than a staged historical progression (e.g. Wright, 2006; Bryman & Bell, 2011). Be that as it may, despite the limitations of reducing qualitative research into moments, the distinctions are worthy of a brief overview here as they frame different traditions, thereby assisting in the locating and defining of this research (Bryman & Bell, 2011).

The first moment was the Traditional Period: 1900's-World War II. *"Imbued with positivism"* (Bryman & Bell, 2011:388), and suggesting complicity with imperialism, researchers of the first moment aspired to write objective colonising accounts of field experiences (Holt, 2003). The over-riding concern centred round offering valid, reliable, and objective interpretations in their writings. The 'subject' studied was considered alien, foreign, and strange.

The second moment refers to the Modernist Phase or Golden Age (Post-war years to 1970s) and was concerned with formalising qualitative research to make it as rigorous as its quantitative equivalent (Holt, 2003). Postpositivism functioned as a powerful epistemological paradigm and researchers were drawn to qualitative research because it allowed them to give a voice to society's 'underclass' (Denzin & Lincoln, 1994).

Blurred Genres (1970-1986) signalled the third 'moment', when the qualitative researcher had a fuller complement of paradigms, methods and strategies to employ in their research. Computers were becoming more prevalent and applied qualitative research was gaining in stature. The boundaries between the social sciences and humanities became blurred and the researcher was acknowledged as being part of the research process (Denzin & Lincoln, 1994). Nevertheless, there continued a proclivity towards positivism (Bryman & Bell, 2011).

Marcus and Fischer coined the expression, *''crisis of representation"* (1986:166) which characterises the fourth moment: mid-1980's (Holt, 2003). Interpretative theories as opposed to grounded theories were more common as writers challenged the traditional models of truth and meaning. Qualitative research in this period called into question the issues of gender, class, and race. (Denzin & Lincoln, 1994).

Then, stemming from the fourth moment, the next three (moments five, six and seven), refer to a "*triple crisis"* (Bryman & Bell, 2011:388). The fifth moment, denoting the Postmodern period of experimental ethnographic writing (mid 1990s), is characterised by an awareness of the different ways of representing participants when writing-up research findings (Bryman & Bell, 2011). Post- experimental enquiry (1995 – 2000) heralded the sixth moment and is characterised by political concerns (Heaton, 2004). This moment was influenced by, and debatably was synonymous with, AltaMira Press - a publisher of qualitative research which encouraged experimental and interdisciplinary writing, and the breaking of long-standing boundaries (Bryman & Bell, 2011). The seventh moment is the methodologically contested 'present', spanning from the year 2000 to 2010 (Denzin & Lincoln 2013). Arguably, innovative qualitative research is put under threat as this is a moment characterised by an awkwardness of

'paradigm talk', conflict, great tension and entrenchment about how qualitative research should be conducted and the directions it should take (Wright, 2006; Bryman & Bell, 2011).

The eighth moment, 'Now' (2005 -), is not explicitly separated from the seventh moment by Denzin and Lincoln (2013), but it is by Bryman and Bell, (2011). This is a period in which qualitative research confronts a backlash associated with a fundamentalist, post/positivist conception of empirical research (Wright, 2006). It is characterised by a reassertion of the value of traditional science in government circles (Bryman & Bell, 2011).

The Fractured Future indicates the ninth moment. A post 'post' period (St.Pierre, 2004). This moment represents a decisive response to the neo-liberal global environment, which increasingly confronts interpretive practitioners (Thompson, 2014). It moves away from encouraging the claiming of "*tiresome"* definitive paradigms in research, and welcomes the messy and multi-voiced (Denzin & Lincoln, 2013; Pettigrew, 2013:124). It represents a time when a more collaborative approach is gaining ground, with a loosening of (often antagonistic) positions (Flyvberg, 2013).

This research can draw from various moments. For example, the recognition of the researcher as part of the process in the third moment and the interpretative challenge to truth and meaning of the fourth moment. Intuitively however, particularly when viewed through the sensemaking lens, this research sits most comfortably within the multi-voiced ninth moment given the values-laden, multi-faceted, fluid nature of sustainability, and the contested terrain between it and the more unconnected, neo-liberal, reductionist approaches (Wells, 2011; Lozano et al., 2013).

6.1.2 Conceptions of Self and Other:

Denzin and Lincoln (2013:24) claim that research in its interpretive form makes two assumptions or, as they put it, has been haunted by a *"double-faced ghost"*. The first assumption is that the researcher can competently report on their own observations of the social world with objectivity, clarity, and precision. Secondly, that a real subject is capable of reporting on his or her experiences. As reflected in the brief overview above, these assumptions have more recently been called into question – largely by poststructuralists and postmodernists. Chiefly because information provided by the 'other' is interpreted by the researcher and as such, is subjective. Arguably therefore, it is impossible to take a totally neutral stance due to the researcher's own attributes, life experiences and perspectives which will influence the research interaction. And, coupled with this, seldom are subjects able to provide complete explanations, instead offering accounts and stories about what they did and why. This has been succinctly illustrated by Denzin and Lincoln (2013:24): *"Poststructuralists and postmodernists have contributed to the understanding that there is no clear window into the inner life of an individual. Any gaze is always filtered through the lenses of language, gender, social class, race, and ethnicity…no single method can grasp the subtle variations in ongoing human experience."*

This research is centred on how future managers give meaning to sustainability. Thus, it will be important to consider the impact of the researcher-presence and the reactive effect, not least because the participants' knowledge that they are participating in research may confound the data (Webb et al., 1966). Webb et al. (1966) suggest that the reactive effect could manifest itself in four ways, the first being 'the guinea-pig effect' where the participant wishes to create a good impression. Or, with links to the

Hawthorne effect (Landsberger, 1958), as 'role selection' where participants will adopt a particular role, whether falsely or otherwise, depending on their perceptions of the aims of the research. Thirdly, by 'measurement as a change agent', where the researcher by being present changes the context in some way. And finally, 'response sets' when participants respond in consistent but inappropriate ways – for instance, always selecting 'yes' regardless of meaning. Webb et al. (1966) suggest the remedy for this is to use methods which do not let the participants know of the researcher's involvement, *id est* unobtrusive measures or non-reactive methods. Although some research makes use of deception in this way in order to preserve the naturalness of data (Bryman & Bell, 2011), deception is not perceived to have any place in this particular research and as such, the researcher-presence and reactive effect represent a limitation of this study.

A researcher's values are rooted in their psychological and sociological contexts and govern their beliefs, behaviours, interpretations and judgements, which in turn can lead to very different methodological approaches and interpretation of data (Fischhoff, 1991). Therefore, in an attempt to uncover the researcher's values and position them within the research, the researcher took part in a 'Values Elicitation Exercise' (please refer to appendix 2). This revealed the primary importance of family wellbeing to the researcher and the significance of being a mother, followed by ethics and morality, then teaching practice. This colours the researcher's perspective of the world and reflects the deeper-seated motivations and drivers behind the research.

For the majority of the participants, the researcher is their module leader. And, although the researcher tries to be a 'facilitator of learning' rather than a 'teacher' positioned within a hierarchy, it is recognised that that role and the 'mothering' values

probably spill into the relationship with the student/participants. This conceivably places the relationship within a hierarchy, and therefore it is perhaps inevitable that the students are influenced by the researcher – however much the researcher tries to allay this. It is a privileged position to have access to the participants' stories and renders it crucial that the participants' voices will be represented with as much truth and respect as possible (Elliot, 2006). The onus will be on uncovering the participants' sensemaking of sustainability, rather than imposing (implicitly or explicitly), the researcher's. Clandinin and Connelly recognised the impact of research-interpretation when they wrote*, "when I summarise and interpret, I express my own voice in the midst of an inquiry designed to capture the participants' experiences and represent their voices"* (1999:172).

6.1.3 The Ethics and Politics of Research:

Ethics and politics have become an essential facet of research (Liamputtong, 2012), and affect the type and nature of knowledge produced by social inquiry. Research ethics comprise of a collection of moral principles which aim to prevent research participants from being harmed by either the research or the research process (Liamputtong, 2012). Participants have rights which need protecting, and should be treated with dignity and respect (Randor, 2002; Murray & Beglar, 2009).

When designing a study, ethical issues need to be anticipated and planned in advance (Creswell, 2013). Elliot (2006) suggests that 'ethical issues' are those which relate to the relationship between the researcher, the subject and any political factors - such as the potential implications that the research has on wider society. Within the research process ethical and political issues arise in many phases, for example: prior to conducting the study when seeking approval for the inquiry; during data collection

with respect for the site and the participants, during the data analysis phase when consideration must be given to the 'other' and bias; in the reporting and publishing phase of research when inquirers need to be honest, openly sharing data with others (Creswell, 2013). Therefore, adherence to ethical standards is expected and not to do so would call into question the integrity of the research and of the disciplines involved. (Bryman & Bell, 2011; Sarantakos, 2013).

It is acknowledged by this research that writers differ over their stances on ethics and what is considered ethically acceptable, and that much of the debate has not progressed since the 1960s (Bryman & Bell, 2011). The British Educational Research Association (BERA), guidelines "*unequivocally recognize and celebrate the diversity of approaches in educational research*" (2011:2). Indeed, Foucault (1985) claimed that the existence of a universal approach would be catastrophic. The BERA promote respect for all those who engage with research and provide tenets of best ethical practice. These guidelines, coupled with the Plymouth University Ethical Research Policy, and the advice offered by The Social Research Association (SRA) and that of the British Sociological Association (BSA) underpin the considerations taken below regarding this study.

Within this research, none of the participants will be asked to do anything physically harmful or risky. It is also acknowledged that harm can incorporate various guises such as harm to participant self-esteem or in the form of conflict (Bryman & Bell, 2011).

Research participants have a right to have '*their private world'* protected (Liamputtong, 2012:25). Indeed, the Data Protection Act requires that anonymity should be protected and maintained wherever possible. Confidentiality aims to

conceal the true identity of research participants, thereby maintaining their anonymity (Liamputtong, 2012). Conscious of Grinyer's (2002) argument that some participants may not want to be an anonymous participant, each participant will be nonetheless explicitly informed that they will retain anonymity within the research. However, methods such as focus groups necessarily require more than one participant to attend. The researcher will ensure their own confidentiality and the observation of confidentiality by group members beyond the focus group will be agreed at the start. However, the researcher cannot reasonably guarantee this will be maintained (Liamputtong, 2012).

The researcher's employment position and thus by extension, this PhD, is funded by Plymouth University. At the time of writing it was the only source of funding impacting upon this research. Thus, there are no perceived conflicts of interest outside of the university's interest in the findings relating to how future managers conceptualise sustainability. Apropos to the Missenden Code, any future sources of funding or sponsorship will be acknowledged in any resulting publications.

More particularly, the following ethical considerations are made:

- The Plymouth University Ethical Approval Application submitted to the Faculty Research Ethical Approval Committee for consideration and approval. Approved on 7.11.14 (please see appendix 3);
- Information regarding identity is confidential. To ensure confidentiality, each participant will be given an alpha/numerical designation and this will be used throughout, including during the processes of data management;
- Participants comments will not made attributable to any identifiable individual in the written report and will be anonymised in transcripts;

- All participants will be made aware of the purpose of the study and what will be required of them;
- Participation will be voluntary and participants have the right not to participate;
- Participants will have the right to ask questions about the study and their role within it;
- Truth and respect:
    - A value elicitation exercise undertaken.
    - Participants will have the opportunity for a debriefing and, in the case of interviews, to comment on their contributions before these are included in the final report. Thus, participants will be invited to view the interview transcripts for accuracy checks and to provide the opportunity for the individual to modify their commentary or to withdraw remarks entirely from the research.
- To employ a methodology which was fit for purpose;

6.2 Theoretical Paradigms and Perspectives:

"…objectivity is a chimera: a mythological creature that never existed, save in the imaginations of those who believe that knowing can be separated from the knower." (Denzin & Lincoln, 2013:250-251).

This phase of the research process considers theories, paradigms and perspectives, thereby providing the study with a basic *"set of beliefs that guide action*" (Guba, 1990:17). It is commonly held that the research process has three major dimensions: ontology, epistemology and methodology (e.g. Terre Blanche, Durrheim & Painter 1999; Denzin & Lincoln, 2013). These elements define the nature of enquiry through a

research paradigm, sometimes called an interpretative framework, which is an all-encompassing system of interrelated practice and thinking (Guba, 1990). These dimensions make available a context for the process, grounding logic and criteria whilst providing for different conceptualisations of the world (Crotty, 1998). And it is these conceptualisations which determine the planning and methods adopted for a particular study, reflecting the research paradigm and perspectives held by the researcher (Kuhn, 1970).

There are variations of the theme, with authors and researchers using a range of terms, depending on their core discipline. Notably, Denzin and Lincoln, incorporating the work of Heron and Reason (1997), suggest that the major interpretive paradigms are:

- Critical theory;
- Participatory;
- Positivism;
- Postpositivism;
- Constructivism.

  Denzin and Lincoln (2013a:204)

Pettigrew, whilst recognising the importance of being aware of underpinning assumptions and their influence, describes these distinctions as "*tiresome*" (2013:124). Knox (2004) reminds us that the very act of classifying philosophical approaches creates an artificial linkage to the various tools used which in itself can be detrimental to the purpose of the research. And, as can be derived from the *History and Traditions of Research* above, it is clear that the landscape of social research has altered, with a

move towards postmodernism and a collaborative approach, signalling more fluid, interpretative, and critical perspectives for which a set of conventions or universally applicable rules are unlikely (Flyvberg, 2013). This facilitates the blurring of genres, with non-distinct boundaries between philosophies and the potential for bricolage, or 'cherry-picking' (e.g. Geetz, 1988; Niglas, 2010; Saunders et al., 2012; Flyvberg, 2013). Denzin and Lincoln (2011a) welcome the messy and multi-voiced approaches identified in the 'ninth moment', claiming a decisive response to reductionist distinctions. Coupled with this, there is a breakdown of a clear distinction between ontology and epistemology – particularly within the areas of the constructivist and participatory paradigms (Howell, 2012; Crotty, 1998; St. Pierre, 2004). Hence, labelling this research as purely constructivist, participatory or postmodern is perhaps unhelpful as there is, *"great potential for interweaving of viewpoints, for the incorporation of multiple perspectives, and for borrowing…"* (Denzin & Lincoln 2013:207).

Nevertheless, establishing that the results obtained from research are trustworthy is an essential requirement for the research's successful outcome and, as argued by Goulding (2002:10), "*a sound theoretical basis upon which to base interpretations…give the practitioner creditability*." Thus it is appropriate to regard the framework adopted here, not as a distinct set of separate philosophies, but rather, as a *"multidimensional set of continua"* (Saunders et al., 2012:129).

Critical theory echoes much of the above discussion in explicitly recognising bricolage. Under this framework, critical theorists use intuition, being a 'jack of all trades', in seeking practical, pragmatic knowledge which results in action – changes that can transform the status quo (Bryman & Bell, 2011; Denzin & Lincoln, 2013). As this is exploratory research, it does not come from the position of eliciting change. Rather, it

hopes to 'discover', and gain insights about conceptualisations of sustainability, which may or may not lead to tangible, practical outcomes in the form of 'actions' or change. Nevertheless, the pragmatic overtones of this approach do resonate with the researcher and aspects of this study. In particular, the inclusion of a quantitative element within the questionnaire to satisfy the Sulite pilot requirements.

The participatory framework on the other hand looks to dismiss the objective-subjective dichotomy, proposing that reality is co-created by both the mind and what is 'out there', - the cosmos (Denzin & Lincoln, 2013). Whilst having sympathy with this position and it sitting more comfortably with this study than some of the other approaches, as sustainability is a human construction not existing in nature, it remains, to the researcher's mind, a subjective notion. The researcher does not believe that *"knowing can be separated from the knower"* (Denzin & Lincoln, 2013: 250-251).

Positivism has been considered the dominant force in science research for over 150 years and is described as the *"received view"* (Guba & Lincoln, 1994:106). Positivism tends towards reductionism, often evoking a Newtonian approach, focusing on verifying hypotheses often stated in quantitative proportions which can ultimately be adapted into mathematical formulas expressing functional relationships (Guba & Lincoln, 1994; Creswell, 2013). Its overarching aim is to compartmentalise findings in order to make generalisations (Crotty, 2008), leading to the prediction and/or control of a given occurrence, suggesting a rigid uniformity of nature and the existence of a true and identifiable reality (Silverman, 2014). Postpositivists, whilst also exhibiting reductionism, take a less strict position regarding Newtonianism, recognizing instead that cause and effect is *"a probability that may or may not occur"* (Creswell, 2013:24).

Positivism and postpositivism do not rest favourably with multidimensional notions of sustainability as derived from the literature (e.g. Colbert & Kurucz, 2007; Bryman & Bell, 2011). Particularly as there are considerable discursive difficulties associated with sustainability and the defining thereof, with sustainability often perceived as a novel and elusive concept (e.g. Filho, 2000; Gloet, 2006; Mariappanadar, 2012; Kramar, 2014). The researcher considers there to be the existence of multiple frames of reality, individual to the person experiencing that reality – which is constructed within the mind of the individual (Schwandt, 2007). Unlike modernist epistemology, postmodernism permits the co-existence of multiple realities (Hansen, 2010), emphasizing multiple, local truths rather than a singular, universal truth and narrative model (White & Epston, 1990). It implies an appreciation of how knowledge can be contested, and what is not knowable, instead of delving constantly for certainties that may not exist (Fawcett, 2006). Such plurality provides the opportunity to reconstruct knowledge and break down perceived barriers between the perspectives of stakeholders - particularly when considering the more holistic notions of sustainability. However, the Sulite pilot required data on whether the test was easy to navigate and whether a participant was more or less likely to be interested in sustainability after taking the test. This element, although not representing the main thrust of this study, does invoke post/positivism.

The certainty and clarity which are hallmarks of positivistic research are not associated with interpretivism (Denzin & Lincoln, 2005), rather that interpretivist research delivers multiple and diverse explanations to individual phenomenon. Of the interpretative paradigms therefore, constructivism adheres most appropriately to this relativist position. Although, in line with the ninth moment, post modernism and the

blurring of genres (e.g. Geetz, 1988; Niglas 2010; Saunders et al., 2012), there are also parallels with the participatory position, critical theory and post/positivism. Constructivism is a notably distinguished paradigm which describes meaning as being internal, varied and multiple, rather than an externally singular event (Creswell, 2013). It represents how a belief is shaped by social factors, offering valuable insights and reflections of individual sensemaking surrounding a topic (Burr, 2015). Given that the over-arching aim of this study concerns itself with the conceptualisation of sustainability, the constructivism approach suitably leads the researcher to look for the complexity of views as opposed to narrow, categorised meanings (Creswell, 2013).

As emphasised in Chapter 1, this study is underpinned by the belief that research into how sustainability is conceptualised by future managers is too new and exiguous to be understood well enough to derive reliable assumptions that can be built on. Therefore, this research is inductive in nature, and supports the stance taken by Selden (2005), Strauss (1987) and Corbin and Strauss (2008), that the literature review, in exploring the field and the surrounding rhetoric, thus informs the construction of conceptualisations and thinking. The outcome of which, will in turn have implications for the research process. This is particularly relevant when considering the ontology within which, having reviewed the literature, a relativist assumption is made - that reality is subjective for each participant and that multiple realities exist, depending on the participant's construction, participation and consequent actions (Saunders et al., 2012). The conceptualisations of sustainability as derived from the participants are reflective of their own realities. Sustainability cannot therefore, be considered separately from the context within which it is identified – it is context-dependent, emerging from context and as part of that context. The review of the literature

consolidated the view that any context-free understandings would therefore be rendered invalid. Hence, apropos to a constructionist approach, data obtained will not be viewed as objective verifiable accounts of what actually constitutes these constructs.

However, as discussed more fully previously, it is recognised that there is a certain unavoidable level of co-construction and interpretation with constructivism, namely between researcher and participant, which may confound the data (Webb et al., 1966). It is argued that it is not possible to derive an objective reality from the person who is experiencing and processing it, not least because of the researcher's own attributes, life experiences and perspectives which will influence the research interaction (Silverman, 2014). It is incumbent upon the researcher therefore, to be reflexive in interactions with the respondents - to take care to accurately report the participants' meaning, and be aware of their own subjectivity and attaching their own meaning to those of the participant, in order to derive knowledge that is reflective of their subjective reality (Saunders et al., 2012; Denzin & Lincoln 2013). It is recognised that the researcher is 'positioned' within this study and as such, interpretation has been filtered through the lenses of language, gender, social class, race, and ethnicity (Creswell, 2013; Denzin & Lincoln 2013).

Inevitably there are criticisms of the constructivist approach to research. Primarily, the unorthodox nature of data capture and the non-standardised organisation of findings make it difficult to create a satisfactory level of comparability (Silverman, 2014). This places intricate demands on the researcher to disseminate findings and renders most constructivist findings stand-alone, non-generalisable, and subject to their own

interpretation by readers - which potentially miscommunicates valuable discoveries made.

It is important to be able to establish the quality of both the research design and its findings (Saunders et al., 2012). The more quantitative-based notions of reliability and validity rest on whether the study would derive the same data and results if repeated by another researcher. However, as previously discussed, this study has taken the theoretical position that the sensemaking of sustainability occurs in specific socio-cultural contexts. Because of the contextual nature, notions of validity and reliability are of less concern and cannot be satisfactorily applied as the removal from context would in itself compromise the validity and reliability of the study (Jorgensen et al., 2012). Hence it is questionable as to how generalisable the findings are to the wider population because attempts to generalise would stray from its designated purpose as the data would be held apart from the context from which it was derived (Creswell, 2013). Therefore, this research does not claim generalisability. Rather, it cedes internal and external validity of post/positivist paradigms, for the trustworthiness and credibility of constructivism (Denzin & Lincoln, 2013). This is exploratory research and as such, an outcome will be the identification of conversations and further research which can be posed to a wider audience so that generalisability can be tested.

6.3 The research strategy:

The research strategy is informed by the researcher's epistemological perspective and the research design (Denzin & Lincoln, 2013). The research design is a general plan which includes techniques or procedures used to gather and analyse data, with a clear focus on the purpose of the study and of how to answer the research aim and questions (Crotty, 1998; Saunders et al., 2012; Denzin & Lincoln, 2013).

The literature indicates that there is clearly merit in exploring how future managers give meaning to and make sense of sustainability. Thus to reiterate, the central aim and purpose of this research is to explore how the heterogeneous and complex phenomenon of sustainability is conceptualised by the next generation of managers. Within this aim, the following research questions will be addressed:

1 a) How do future managers make sense of, and give meaning to, sustainability?

b) What are the drivers behind their sensemaking?

2. Is there a skew within their conceptualisations in favour of environmental explanations?

3. Does the Sustainability Literacy Test influence how future managers perceive sustainability?

As previously discussed, this is essentially an exploratory study positioned within a subjective, constructivist ontology, based on the assumption that social phenomenon are not independent of social actors. Epistemologically, it comes chiefly from an interpretivist perspective, being concerned with the access and understanding of individuals' perceptions of the world – in this case, their conceptualisations of sustainability. However, it also supports elements of positivism in order to facilitate a fuller exploration of the findings – specifically, those derived from the questionnaire and when analysing interview and focus group response data. Research questions 1 and 2 seek to capture the circumstances and conditions of a situation, whist research question 3 and the Sulite pilot represents an unusual and, to a point, a revelatory case. By focusing on addressing 'how' questions when interpreting a contemporary phenomenon such as sustainability through the use of interactive and humanistic data collection methods, a case method approach is recommended (Yin, 2014). This

informs the strategy which asks for a single exploratory case study with elements of exploratory survey.

To some commentators, case study research is a methodology – a strategy of inquiry (e.g. Denzin & Lincoln, 2013; Yin, 2014; Merriam, 1998; Creswell, 2013). To others, choosing to employ a case study approach is less a methodological choice, but more a decision about what is to be studied (e.g. Stake, 2005; Flyvberg, 2013). Therefore, given that definitions of 'case study' abound – and not all of them useful (Flyvberg, 2013), a case study is taken here to mean an extensive examination of a single phenomenon within its real-life context (Yin, 2014).

Unlike other research methods, there is an absence of well-documented procedures for case studies, with a standard framework for case study research design yet to come to the fore (e.g. Merriam, 1998; Creswell, 2013; Yin, 2014). This research accepts the notion that conceptualisations do not emerge from data, rather they are sourced from within the researcher and thus no analysis is neutral anyway, and is subject to researcher bias (Selden, 2005; Roller & Lavrakas, 2015). Conversely, the lack of 'technique' presents a strength of the case study in its *"naturalness"* and the ability to provide deeper analysis compared to more traditional quantitative methods or cross-unit analysis (Flyvberg, 2013; Roller & Lavrakas, 2015:306). It can also reduce the possibility of missing data and thereby increasing verification (Crano et al., 2015). On the other hand, it is also recognised that case studies can oversimplify or exaggerate a situation, encouraging the researcher to mistake the *"slice of life"* presented as an account of the whole (Guba & Lincoln, 1981:378). Similarly, Yin (2014), cautions that two-case and multiple-case studies are preferable over a single case such as this, because of their inherent vulnerability – this is a limitation of the research. It will be a

recommendation of this study, therefore, that other cohorts in other institutions are studied for analytic benefits and to augment this initial exploration. Even so, despite being *"held in low regard, or simply ignored",* (Flyvberg, 2013:195), the case study approach is uniquely anchored in real-life situations and thus offers potential capacity for providing rich and holistic accounts of complex social phenomenon (e.g. Simons, 1996; Merriam, 1998; Roller & Lavrakas, 2015).

From a practical perspective, a case study tends to generate a lot of information which is challenging when it comes to analysing and representing complex in-depth data within time constraints. Coupled with this is the lack of objectivity and generalisability in more conventional terms (Hodkinson & Hodkinson, 2001). Yet, whilst Flyvberg argues that it is *"incorrect to conclude that one cannot generalize from a single case"* (2013:176), Stake (2005:8) calls for *"particularization, not generalization".* Nevertheless, given that sustainability is a contemporary phenomenon in an emerging discipline, case studies within the field remain valuable as they can generate theoretical constructs, propositions and mid-range theories whilst examining the real-life context, even though the case study may not be effectively subjected to statistical generalisation (Yin, 2014). Indeed, as Jorgensen et al. suggest, *"Rather than searching for general laws and cause-effect correlations… [sensemaking] reconstruct[s] prevailing, and potentially divergent, constructions in a particular local context"* (2012:108).

Being confined to a single study, the methods of data collection are integrated, to derive complementary data (Yin, 2014). The methods of data collection will consist of focus groups, interviews and questionnaires. Although principally qualitative in nature allowing for the complexity of the situation to be uncovered (Fielding & Schreir, 2001),

as two or more types of data, philosophy and strategy will be utilised, this research falls within the realms of a multiphase, mixed method approach. It sits in that landscape of social scientific inquiry which has altered, with a move towards postmodernism, indicating more fluid, interpretative, and balanced perspectives for which a set of conventions or universally applicable rules are unlikely (Flyvberg, 2013). It signals a loosening of (often antagonistic) positions (Flyvberg, 2013).

Recently, limitations of the mixed method approach have been recognised from both within and outside of the mixed methods community, highlighting the multiple perspectives which have emerged since the approach's rise in popularity over recent years (Creswell, 2013a). The literature is not settled and tends to cast the net wide, rather than analysing any singular controversy in-depth. So, due to necessary brevity, these controversies shall only be alluded to here. However, Creswell (2013a) provides a comprehensive overview of the eleven key controversies and questions being raised in mixed method research at the moment (see appendix 4 for a tabular outline). Even so, employing mixed methods within an overall qualitative methodology, although more difficult to execute (Yin, 2014), can benefit the study because each method offers a different *"line of sight"* for perceiving social-symbolic reality (Berg, 2007:5). It is the "*cornerstone*" of case-centred research (Roller & Lavrakas, 2015:306), allowing participants the freedom to express themselves in varying ways and for them to be heard. Triangulation in this way, although sometimes argued as simplistic, provides a medium by which findings can be confirmed and validated (Bryman & Bell, 2011; Denzin & Lincoln, 2013), deriving richer, stronger evidence, and a greater in-depth understanding than can probably be achieved by any single method alone (Creswell, 2013; Yin, 2014).

This research is centred on the target population Plymouth Business School (PBS) first year students. It is focused on a single site within boundaries determined by the location and experiences of participants in that environment. The case equates to the *"entire target population of interest"* (Roller & Lavrakas, 2015:313). That is, the study attempts to collect data from every member of the population being studied, although it is recognised that this is probably unlikely (Jupp, 2006). Nevertheless, potentially the data could be collected from the complete population and therefore, as the research is not claiming generalisability nor attempting to make causal inferences, there is no need to sample (Saunders et al., 2012; Crano et al., 2015). It is acknowledged that if the census does not achieve a 100% response rate, it presents a challenge in establishing whether non-respondents would have provided different data (Jupp, 2006), – this is a limitation.

The research plan below (Table 8), indicates the methods, sequence and time frames employed against the research question (RQ). As can be seen, this study primarily adopts a sequential qualitative approach, with elements of concurrent mixed method research, in a multiphase design.

	Autumn/Winter 2014	Spring/summer 2015
Survey/questionnaire (Pilot)	RQ 1,2	
Survey/questionnaire 1	RQ 1,2	
Survey/questionnaire 2	RQ 1,2,3	
Focus groups	RQ 1,2,3*	
Semi structured Interviews		RQ 1,2,3

Table 8: Primary Research Plan. (RQ: Research Question. *: It is likely that the focus groups shall have a mix of RQ12 and RQ123).

As recommended by various commentators (e.g. Yin, 2014; Roller & Lavrakas, 2015), the research strategy shall fall short of making priori decisions about the number of interviews and focus groups which are necessary to produce the data required. Instead, given its explorative nature and interpretivist framework, it shall attempt to remain flexible and responsive to the data as it is uncovered.

6.4 The Research Site - Plymouth University Business School

"Our students are entering a world characterised by rapid change, uncertainty and risk which will affect them throughout their professional and personal lives. Globally, societies are facing urgent and unprecedented challenges and opportunities relating to how an economically, environmentally, socially and politically sustainable future for our planet and for present and future generations can be realised and sustained." Plymouth University Sustainability Strategy, 2014.

It is the intention of this section to briefly justify and establish the nature and context of the institution which provides the case study for this research, an institution with a nationally and internationally recognised reputation for leading sustainability – Plymouth University (PU). Due to necessary brevity, it shall hopefully serve as a precis of sustainability-positioning, both at university and business school level.

Plymouth University has a 150 year history reflecting the naval heritage of Plymouth, beginning with the establishment of the Plymouth School of Navigation in 1862. It now has an annual income of around £160 million with over 30,000 students and 3,000 staff. It is consistently ranked as one of the top three 'modern' universities (PU, 2014).

PU is a leading, award winning University for sustainability - establishing itself as *The* Sustainable University. Indeed, the institution's record regarding its sustainability

curriculum, when judged against the sector, is very good, ranking first in the 2015 People and Planet Green League (People & Planet, 2015). PU ranked top in the Green Metric World University Ranking by some margin regarding the incidence of sustainability programmes, judged against 301 international entrants from 61 countries. It achieved Silver Accreditation in the Learning in Future Environments (LiFE) Index (2013), and was the Green Gowns Award winner in 2011. It is accredited with the ISO 140001 for its Environmental Management System, is working towards ISO 50001 for its Energy Management System and has implemented ISO 26000 guidance for Social Responsibility. PU has Fair Trade Status, and holds the title of Most Sustainable Public Sector Organisation in Education (Cotton & Winter, 2014). Currently, the university is moving towards applying the internationally recognised Global Reporting Initiative disclosure framework. As discussed in the *Historical Overview* (Chapter 1), the GRI is an international independent organisation, providing a globally recognised framework for sustainability. It enables the university to report on the impacts related to economic, social and environmental performance against aspects which align with the sustainability targets (PU, 2016).

The university has *"three big goals":*

- To have a sustainable campus.
- To enable learning about sustainability and to research solutions to the world's most pressing sustainability challenges.
- To motivate the next generation of students to go out and tackle the sustainability challenges they'll find in their workplace". (PU, 2016)

PU's approach to sustainability is tri-cameral involving:

- a research institute (ISSR – Institute for Sustainability Solutions Research),
- a teaching innovation centre (CSF-Centre for Sustainable Futures which has the role of supporting sustainable education being developed across the university), and,
- operations, sitting within the Finance and Sustainability team. (Cotton & Winter, 2014)

The strategic approach to sustainability is driven by three main documents:

- Plymouth University Strategy 2020;
- Teaching, Learning and the Student Experience Strategy 2013-2020;
- University Sustainability Strategy 2014

In line with the above, there are various initiatives and reviews conducted by PU which focus on embedding sustainability into the curriculum. For example, the annual report for the Centre for Sustainable Futures monitors and supports sustainable education being developed across the university. Similarly, the Sustainability in the Curriculum Review assesses the incidence and status of sustainability in degree programmes (Wyness & Sterling, 2015). More specifically, the Green Audit reviews sustainability-related courses for the current academic year. And, the Sowing the Seeds initiative combines information/advisory sessions for teaching staff and a guide to writing and modifying modules to incorporate sustainability principles.

Students, who are styled *'Partners in Sustainability Education'*, are very much encouraged to get involved with the sustainability agenda at PU. There are a raft of initiatives to support engagement, from light-touch and fun (such as 'Sprout'[1] and the

[1] Sprout: Free sprouting pencils available at a variety of student locations. The pencils contain seeds in a dissolvable tip so when the pencil is pushed into soil it will start growing. They are completely non-toxic,

'Trail'[2]), to the more substantial and sophisticated. Three of the most popular initiatives are:

- The Future Leaders Programme
- Student sustainability ambassadors
- The Global Challenge Programme (PU, 2016).

At business school level, the active *Sustainability in the Curriculum Project Group* offers specific bespoke sustainability-related provision and conducted the 'Sustainability within the PBS Curriculum Review' (Ashby, 2012) which considered each discipline within each of the schools existing in 2011, and highlighted which modules have sustainability components. The group is working towards having sustainability represented within at least one core module on every programme at Level 6 within two years. The group's key aims are to:

1. Ensure students are given every opportunity to explore issues of sustainability throughout the curricula in the Plymouth Business School (PBS).
2. Support and drive the visible presence of the PBS as a centre of excellence in study and research for sustainability in the business world.
3. Become an authoritative voice on the impact of sustainable strategies on the business community in the UK and through contacts with other universities on a wider international stage.
4. Consider the need for a flagship programme relating to sustainability in business.

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made from sustainable sourced timber and convey the message that the throwaway culture can be rejected and products can be created that have another life after its original purpose has been fulfilled.

[2] Trail: downloadable interactive application. Takes students on a 'Sustainability Tour' around campus highlighting sustainability activities and technology on campus, much of it hidden behind the scenes in the building's structure.

5. Work closely with other partners throughout the university to enhance the position of the university as a sustainable organisation.

Phenomenographic research to explore students' perceptions of the 'hidden' sustainability curriculum at Plymouth University was conducted by Winter and Cotton (2012). It aimed to identify how the hidden (or informal) curriculum of the campus influences students' conceptions of sustainability. Although small-scale, its findings are very much in-line with discussions elsewhere in this study in that, students:

- are very aware of energy and climate change issues, but less cognizant of social and economic sustainability issues;
- are critical of the limited actions by their peers and wider university community; and,
- feel dis-empowered from decision-making about sustainability. (pg 11)

The findings indicate the importance and impact of the campus and the informal hidden curriculum on student conceptions of sustainability. Of particular relevance to this study, it demonstrates the discursive difficulties associated with the conceptualisation of sustainability, with a range of meanings which, as discussed previously, can render a shared consensus, and thus effective engagement, challenging (e.g. Filho, 2000; Rayment & Smith, 2013; Sharma & Hart, 2014; Godemann, Haertle et al., 2014).

The chosen cohort for this study is the 530 PBS first years (this is particularly beneficial given the limitations of time, money and geography). The students belong to a range of ten different programmes (see Figure 15).

The field work will be conducted during the 1st semester of the first year of their degree programmes, when the students are at the beginning of their university career. So, taking the point raised by Van Maanen and Schein (1979), of being taught to see the world as the more experienced do, the students are less likely to be overly-socialised and influenced by the university's own espoused sensemaking of sustainability. It is also reasonable to consider the cohort as future managers[3].

Programme Title
BA (Hons) International Business
BA (Hons) International Business with French
BA (Hons) International Business with Spanish
BSc (Hons) Economics
BSc (Hons) International Business Economics
BSc (Hons) Business Management
BSc (Hons) Business Management
BA (Hons) Business
BSc (Hons) Marketing
BSc (Hons) Business Enterprise and Entrepreneurship

Figure 15: Participants' programmes of study

6.5 Methods of Collection and Analysis:

Having previously discussed the philosophical perspectives underpinning this research, the following section shall focus on how the study will be conducted by considering the methods of data collection and analysis employed.

Although principally qualitative in nature, this research, as with many case studies, falls within the realms of a multiphase, mixed method approach. Employing mixed methods within an overall qualitative methodology can benefit the study as each method offers different ways for perceiving social-symbolic reality (Berg, 2007), providing a *"mutual enhancement"* and complementing the other methods used (Liamputtong, 2012:93). Triangulation in this way will allow findings to be confirmed and validated (Bryman &

[3] Sixteen delegates at the 2nd International Sustainable HRM Conference at Kaiserslautern University in collaboration with the Louvain School of Management agreed during an open discussion that it is reasonable to consider Faculty of Business students as being part of the next generation of managers. This notion was also later confirmed by the research-participants themselves during interviews and focus groups.

Bell, 2011; Denzin & Lincoln, 2013). The methods of data collection will consist of questionnaires, focus groups and interviews.

6.5.1 Survey by questionnaire:

Questionnaires are typically used to measure internal states or dispositions such as an individual's personal thoughts, attitudes, values and sensemaking (Crano et al., 2015). Specifically, this study shall make use of two self-completion questionnaires. Whether on-line or paper-based, self-completion can benefit from the absence of an interviewer by removing a potential source of bias and by making it easier for respondents to be honest (Brace, 2015). It also allows respondents time to consider their responses, without the pressure of having someone waiting for an answer. Given the focus on conceptualisation, it is important that respondents are awarded this time to consider what their sensemaking of sustainability is. One of the disadvantages of not having an interviewer present at the point of completion is the inability of the respondent to ask for help or clarification (Brace, 2015). The piloting of the questionnaire and the introduction and explanations given to participants prior to data gathering should aid in ensuring the questionnaires' accessibility by the case cohort.

Given the inductive nature of this research, it is critical that the questions are open to gain insights into the broader range of response. However, practically it is not always advisable to use questionnaires in exploratory research due to handling the significant volume of responses to open-ended questions (Saunders et al., 2012). Brace (2015) adds that open-ended questions can actually deter respondents' participation. Nevertheless, an open-ended question does not constrain the response, offering greater "*fidelity*" than closed questions (Crano et al., 2015:324). As this is exploratory research, and there is therefore an uncertainty of response, it is appropriate to use this

type of information gathering in an attempt to find out what is uppermost in the respondent's mind (Saunders et al., 2012).

Aside from the usual demographics and an invitation to take part in a focus group or interview, the two surveys (RQ12 and RQ123) shall consist of the following questions (please see Table 9):

	Question	Associated research question	Survey	
			RQ12	RQ123
1	What does sustainability mean to you?	RQ1a	*	*
2	What has influenced this perspective?	RQ1b	*	*
3	Did you find the test easy to navigate? If not, why?	-		*
4	Are you more or less likely to be interested in sustainability after taking this test? (Please circle). *Much more likely More likely No change Less likely Much less likely*	RQ3		*
5	Could you sum-up in a couple of words how taking this test has made you feel about sustainability?	RQ3		*
6	Do you have any other general feedback that you want us to take back to the test organisers in the UN?	-		*

Table 9: Survey Questions

As can be derived from the table above, not the entire target cohort will be able to take part in the Sustainability Literacy Test (research question 3), principally due to practical constraints such as timetabling. However, they can still contribute to research questions 1 and 2. Therefore, the first survey and its participants are referred to as 'RQ12' and represent about one fifth of the cohort. RQ123 pertains to the second survey whose participants can take part in the Sulite and so can provide data for research questions 1, 2 and 3.

Question 1 and 2 have purposely avoided any mention of environmental sustainability in an attempt to not influence respondents and thereby biasing the research outcome (Crano et al., 2015). Question 4 in the RQ123 survey shall take the form of a Likert

(1932) question and will measure participants' interest towards sustainability following the test. Although this type of question does not sit entirely comfortably within the overarching interpretivist framework of this study, it is nonetheless useful, in terms of efficiency and practicality, but also for reliability (Crano et al., 2015).

Pilot and Survey 1: It is preferable to conduct a pilot study before administrating a self-completion questionnaire (e.g. Bryman & Bell, 2011; Brace, 2015). It provides the opportunity for refinement, ensuring that it makes sense to the respondents and that they have no problems in answering the questions. Piloting is also useful for error-trapping and enables some assessment of its validity in terms of generating the intended data in line with the research aim and questions, and the likely reliability of that data (Saunders et al., 2012; Brace, 2015). A pilot will be given to 30 RQ12s in a paper format which represents approximately 6% of the PBS first year cohort. Following the pilot, the questionnaire (survey 1) will be issued to the remaining 90 RQ12s in digital form via Survey Monkey (chiefly because of its easy distribution and access for participants).

Survey 2: Following the RQ12s, a further 410 students will be invited to participate in research questions 1 and 2, and to take part in the Sulite trial (research question 3) - these participants are referred to as 'RQ123s'. This questionnaire needs to fulfil three roles. Firstly, to provide data for this research. Secondly, to inform the decision-making processes within the Business School and university regarding the suitability of Sulite as a sustainability literacy metric and sustainability-awareness tool. And lastly, to feedback to the Sulite creators, *id est*, the academic community and UN-based agencies. This influences the questionnaire format, (indeed, the functional questions

[q3 and q6 above], whilst informative about student opinion of the test, are not directly related to the focus of this research).

Principally because of time constraints associated with the test scheduling, these additional questions will not be piloted. This is a limitation of the study. However, they have been reviewed by the Centre for Sustainable Futures who have a co-ordinating role between the Sustainability Executive and the test creators. Paper copies of the questionnaire will be issued to the participants immediately after the Sulite. Due to limited IT provision and room-booking constraints, they cannot be issued electronically.

6.5.2 Focus Groups:

Complementing the questionnaire, focus groups can reveal multiple perspectives and provide insights not otherwise achieved, facilitating how data is interpreted (Liamputtong, 2012). A focus group can be separated from other forms of group interview by the concentration on a particular issue and the encouragement of interactive discussion between participants (Saunders et al., 2012; Roller & Lavrakas, 2015), thereby providing insights into the participants' attitudes, perceptions and opinions (Krueger & Casey, 2009; Crano et al., 2015). The literature varies on the ideal group size, but generally suggestions range from between 4 to 15 participants (e.g. Hedges, 1985; Fox, 2009; Krueger & Casey, 2009; Saunders et al., 2012; Liamputtong, 2012; Crano et al., 2015). However, they can be just as effective with two or three (Fox, 2009).

Focus groups within exploratory case studies are particularly useful for uncovering complicated and burgeoning subjects such as sustainability, where opinions, attitudes,

and how and why participants think what they do can be multifaceted (Krueger & Casey, 2009; Liamputtong, 2012). The *content* of group conversations cannot be readily separated from the *process* of communication and the *social structures* (Burgess et al., 1998). Weick refers to the process of *"Polyphony"* in focus groups, where participants take into account the voice of others through the overlap of sensemaking and sensegiving, (2011:147). Therefore, with the interaction found in a group, focus groups are more likely to reveal diverse understandings about the sustainability field which may be less accessible and uncovered with greater difficulty than by more traditional methods of data collection (Crano et al., 2015).

Focus groups can offer a more socially orientated, natural environment compared to other methods because, as in real life, participants both influence and are influenced by others, encouraging candour and openness (Krueger & Casey, 2009; Liamputtong, 2012). This can also pose a limitation as individual group members may prove over bearing or lead the discussions on a tangent, beyond the focus of the research (Krueger & Casey, 2009). Likewise, some participants may be reluctant to voice their opinions and experiences in front of others (Liamputtong, 2012).

Due to the flexibility of focus groups, the researcher can explore unanticipated themes by responding to events as they evolve (Liamputtong, 2012). However, despite their expediency for exploring inter-personal communications and influences, focus groups offer the researcher less control and are a less effective method than interviews for exploring and gaining deeper individual perspectives and insights (Krueger & Casey, 2009; Liamputtong, 2012; Roller & Lavrakas, 2015). These limitations add credence to the decision to complement the focus groups with individual interviews.

This research necessitates homogeneity to a point, because participants are all undergraduates studying within the Plymouth Business School. This can work in the favour of discussions as a commonality can create *"comfort"* and a climate of mutual respect and understanding, thus encouraging more fluid discussion within the group (Liamputtong, 2012:35). Conversely, a lack of homogeneity can restrict openness and sincerity. It is perhaps important to highlight Liamputtong's (2012) clarification that homogeneity within focus groups eludes not to a participant's views or attitudes, but rather to their background or personal characteristics. Although heterogeneous group composition can be favourable in circumstances where multiple perspectives are focal, in the case of this research, it is the sensemaking of sustainability from the perspective of future managers which is important.

6.5.3 Interviews:

An interview is a purposeful conversation (Saunders et al., 2012), enabling a researcher to gain detailed and descriptive information from the subjects being studied (Roller & Lavrakas, 2015). It is a method of data collection for understanding multiple perspectives in which participants *"verbally communicate information about their behaviour, thoughts, or feelings in response to questions verbally posed by an interviewer"* (Crano et al., 2015:280). Interviews are commonly combined with other methods such as focus groups and questionnaires (Gubruim & Holstein, 1997; Saunders et al., 2012; Liamputtong, 2012). For instance, despite their expediency for investigating individual perspectives, interviews are a less effective method than focus groups for exploring inter-personal sensemaking and influences. Therefore, given the over-arching exploratory-inductive nature of this research, face-to-face semi-structured interviews will be employed, to facilitate depth and breadth and to further

explore and expand on themes which emerge from the use of the questionnaire and focus groups (Liamputtong, 2012; Yin, 2014). A semi-structured interview is taken here to pertain to when the researcher has *"a list of themes and possibly some key questions to be covered, although their use many vary from interview to interview"* (Saunders et al., 2012:374).

Both the interview's significant strength and weakness lies in its interactive nature (Crano et al., 2015). It is incumbent upon the interviewer (in this case the researcher), to remain flexible and responsive to the subject, allowing the subject to talk freely and determine the important aspects of the discussion (Dunsmuir & Williams, 2002). Yin (2014) suggests that the desired result during data collection is to create a rich dialogue whilst, importantly, maintaining an inquiring mind. Therefore, semi-structured interviews have the potential to offer a high level of validity, and are useful and preferable when generating knowledge inductively as they allow for questions to be adjusted, added to or excluded; wording to be adapted; and, the interviewer to make clarifications (Berg & Lune, 2013).

However, Saunders et al. (2012) suggest that it is this very lack of standardisation which can render reliability problematic. Similarly, particularly given the intrusive nature of semi-structured interviews, reliability can be affected if trust between the interviewer and interviewee is not effectively established, or indeed if the interviewer lacks credibility, thereby limiting the value of the data. Saunders et al. (2012), also recognise a further limitation in the form of bias. For instance, the possibility of the verbal or non-verbal behaviour of the interviewer influencing the way in which the interviewee responds, or the variety of ways the responses can be interpreted. As Derrida (1978) suggests, we are all mediators, translators.

6.5.4 Administration of data collection:

The focus group and interview stage of data collection represents a qualitative aspect of the research and, as such, needs to be flexible to allow for the flow of the conversation (Saunders et al., 2012). Nevertheless, a list of key questions will be used not only to help frame the conversation, but also to ensure that the research objectives are covered. Although there is little in the way of research directed specifically towards best practices for developing interview questions in social science (Crano et al., 2015), an interview 'guide' (Saunders et al., 2012) has been compiled, informed by the literature and through a desire to address the specific research questions (this can be found in appendix 5). It is anticipated that the list will be added to as the research progresses. Therefore, the questions within the guide are not definitive, nor are they necessarily to be delivered verbatim, thereby not dictating the way the theme is approached (Crano et al., 2015). The purpose of the questions is to allow participants to articulate their thoughts, in particular relating to conceptualisations of sustainability. The questions are not intended to be followed tightly; rather, to provide a flexible framework allowing the conversation to flow more naturally, with the opportunity to probe responses to elicit deeper conversations from the participants (Liamputtong, 2012). However, it is important to acknowledge that neither the interviews nor focus groups can be considered a neutral exchange of data – not least because the event, researcher and participant are historically and contextually located (physically and socially) – thus the process is humanised, subjective and difficult (if not impossible) to replicate (e.g. Rosaldo, 1989; Saunders et al., 2012; Crano et al., 2015).

As discussed previously, in line with advice from the literature (e.g. Yin, 2014; Roller & Lavrakas, 2015), this research shall shy away from making priori decisions about how much data or how many interviews and focus groups are required. Rather, it shall attempt to remain responsive to the data as it reveals itself. Fox (2009:11) cautions against the "*temptation to conduct as many interviews as one can*", suggesting although it may be comprehensive, it may be very wasteful in time. It is recommended that as few as six interviews can adequately facilitate the development of meaningful interpretation (e.g. Guest et al., 2006; Braun & Clarke, 2013). Indeed, Fox advises it is feasible that *"after interviewing three people in a setting, all the subsequent data generated is repetition: the same points come out time and time again"* (2009:11). Similarly, with focus groups, the literature suggests continuing until data saturation, i.e. when little new information is provided, (e.g. Krueger & Casey, 2009; Liamputtong, 2012). It is recommended that this is evaluated by the end of the third focus group, and, only if new insights are provided, progress with additional groups (Krueger & Casey, 2009; Liamputtong, 2012). However, the character of different groups can vary significantly, so it is suggested that enough groups are included to balance out any idiosyncrasies of individual sessions (e.g. Krueger & Casey, 2009).

All students within the cohort will be invited to attend a focus group and interview. Krueger and Casey, (2009) advise the use of incentives to participation, not least because focus groups require time and effort on the part of the participant – often more than other methods of data collection. Liamputtong, (2012) adds that compensation signals the researcher's respect for the participants and their time and contribution. The faculty will provide each focus group participant with a £10 Amazon gift card, and a £20 gift card for interview participants.

The participants will be provided with appropriate and relevant information introducing the research before any data is collected. Indeed, as previously discussed, this is an ethical requirement and is crucial in securing respondent cooperation, whilst also providing the potential respondents the information they need to make an informed decision about whether or not to participate (Brace, 2015). Doing so will also advance the credibility of the study (Saunders et al., 2012). The cohort's role within the research process will be discussed, explaining that this research is interested in what sustainability means to them, that there are no correct or incorrect responses and participation is entirely voluntary. The research background, aims, methods, an invitation to participate and schedules for participation etc. will also be made clear through communications, lectures, seminars and wherever possible and practicable (Liamputtong, 2012). This shall be supported by a follow-up email reiterating the above. Likewise, the questionnaires, focus groups and interviews shall include a further introduction. The introduction and explanations will be delivered in as clear and concise manner as possible and shall follow the advice provided by Brace (2015:201-2), by including:

- The name of the organisation conducting the study;*
- The broad subject area;
- Whether the subject area is particularly sensitive;
- Whether the data collected will be held confidentially or used at a personally identifiable level for other purposes, and if so, by whom and for what purpose;*
- The likely amount of time required;
- Any cost to the respondent;

- Whether the interview is to be recorded, either using audio or video, other than for the purposes of quality control.*

  (* as required by the Data Protection Act, 1998).

For reasons of practicality, participant accessibility and familiarity, the focus groups and interviews will take place in a pre-booked classroom within the Faculty of Business. At the end of each data collection session, participants will be invited to add anything else and be given the opportunity to question or comment on any aspect of the research. The participants will be thanked and the anonymity of their contribution reiterated, as will the researcher's contact details should they wish to discuss anything.

As discussed earlier, confidentiality aims to conceal the true identity of research participants, thereby maintaining their anonymity (Liamputtong, 2012). Participants' names will be removed from all responses, transcripts and discussions, to be replaced with an alpha-numeric designation (e.g. I3= interviewee 3; FG1:R5= focus group 1, respondent 5; RQ12:19= research question 1&2 questionnaire, respondent 19; Pilot 10 = pilot questionnaire, respondent 10). However, it is recognised that methods such as focus groups necessarily require more than one participant to attend. Therefore, the researcher will ensure their own confidentiality and the confidentiality of group members beyond the group will be agreed at the start, though the researcher cannot reasonably guarantee this (Liamputtong, 2012). This is an ethical limitation.

The majority of the students are known to the researcher, being students on the researcher's core module, which may have some bearing on how they conduct themselves within the study. Conversely, as the module will have finished by the time of the interviews and focus groups, the student-tutor relationship should not be

compromised significantly. Nevertheless, it remains important to hear the voice of the participant in a way which is empowering and constructive (Denzin & Lincoln, 2013), and it should be recognised that power-relations between the interviewer and interviewee can affect the validity of the data and its analysis (Fontana & Frey, 2005:697). Similarly, as focus group and interview participants will be invited specifically to discuss sustainability, it is possible that social desirability bias may occur – where a respondent consciously or unconsciously desires to emphasise their beneficial social role (Saunders et al., 2012).

With the permission of the participants, a digital recorder will be used, firstly to reduce the likelihood of note-taking interfering with active listening and the spontaneous nature of dialogue (Krueger & Casey, 2009); secondly, that the derived data is an accurate and unbiased record of the conversations; and thirdly, to allow the revisiting of data later in the process. These will subsequently be transcribed verbatim.

6.5.5 Methods of Analysis:

Given that qualitative data is complex and subject to human frailties, the approach to data analysis shall inevitably be framed by the researcher's theoretical perspective which makes relativist assumptions – that reality is subjective for each participant and that multiple realities exist, depending on the participant's construction (Saunders et al., 2012). As such, sensemaking of sustainability as derived from participants is reflective of their own realities. Therefore, apropos to a constructionist approach, data obtained will be viewed through the sensemaking lens, and will not be viewed as objective verifiable accounts of what actually constitutes these constructs. As discussed more fully earlier in the chapter, it is also recognised that there is a certain unavoidable level of co-construction and interpretation between the researcher and

participant which may confound the data and its analysis (Webb et al., 1966). It is incumbent upon the researcher therefore, to be reflexive and to take care to accurately report the participants' meaning, being aware of their own subjectivity and interpretation, in order to derive knowledge that is reflective of their subjective reality (Denzin & Lincoln, 2013; Saunders et al., 2012). It is recognised that the researcher is 'positioned' within this study and as such, interpretation has been filtered through the lenses of language, gender, social class, race, and ethnicity (Creswell, 2013; Denzin & Lincoln, 2013).

Strategies and *"cookbook recipes"* for the analysis of case study data remain under-developed and under-defined (Yin, 2014:133). That given, the nature of this exploratory study renders data analysis somewhat an iterative process, with analysis of data collected influencing further data collection. For instance, a theme may emerge within a focus group which will be further investigated within an interview. This implies a need for reflexivity and adaptability. To which end, rather than employing a 'systematic protocol' such as that advocated by Krueger & Casey (2009), the researcher shall *"play"* with the data (Yin, 2014:135), whilst remaining mindful of the theoretical propositions that led to, and shaped, the case study (Yin, 2014). It was the original intention to use computer-assisted qualitative data analysis software (CAQDAS) such as NVivo. However, there are various limitations espoused by the literature (e.g. Creswell, 2013; Grbich, 2013; Yin, 2014). Chief amongst these is that meaningful outputs to 'how' and 'why' questions are likely to be *"conceptually more primitive",* requiring much additional thinking and analysis beyond the software (Yin, 2014:134). Therefore, in-line with personal preference, the sensemaking framework and given the need to make meaningful interpretations of the "*elastic and complex"*

non-standardised data (Saunders et al., 2012:546) occurring within complex real-world contexts (Yin, 2014), a decision has been made to manually manage data (albeit through a personal computer) and to *"craft"* the analysis and interpretation (Grbich, 2013:270).

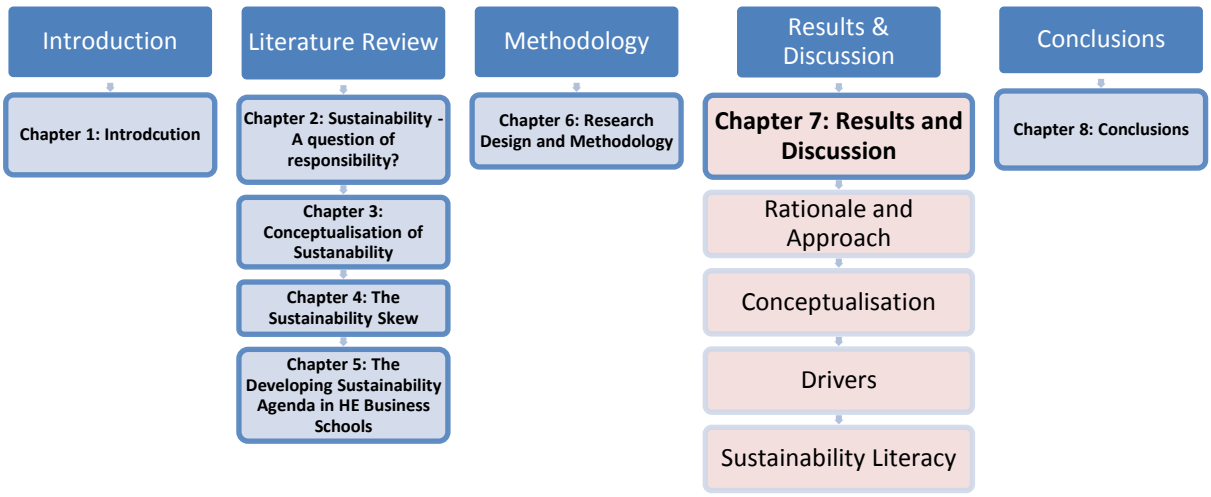
The digital records of the focus groups and interviews shall be transcribed verbatim by the researcher, in this way being re-familiarised with the data and initiating the analysis process (Liamputtong, 2012). It is recognised that this can be very time consuming, with data derived in this way being voluminous and difficult to analyse. Krueger & Casey, (2009) draw our attention to the danger of lifting comments out of sequence and context, thereby too readily drawing conclusions prematurely.

This research is principally inductive in nature, taking a grounded approach in which the nature of the theory or explanation emerges as a result of the research process itself, whether or not they subscribe to the theory (Saunders et al., 2012). Therefore the transcripts shall be read and made sense of individually in the first instance, then examined as a collective group (Liamputtong, 2012). Acknowledging that there is no one best way to analyse qualitative data (Saldana, 2016), coding will play an integral part of the process, principally in the deconstruction of the data, and will involve initial and axial coding to uncover the themes. A code is most often a word or short phrase that *"symbolically assigns a summative salient, essence-capturing"* attribute to qualitative data – representing the critical link between data collection and explanation of meaning (Saldana, 2016:4). Given the researcher's interpretative standpoint welcoming the messy and multi-voice of the ninth moment (Denzin & Lincoln, 2013), it is felt appropriate not to produce priori codes, thereby curtailing the

practice of anticipating and possibly biasing the outcome. Instead, the coding shall principally emerge from the data. For a worked example, please see page 199.

It was not the intention of this chapter to enter into the wider philosophical debate, nevertheless, whilst aware of the need for brevity, it remained appropriate to establish certain salient aspects of this research, explaining the underpinning philosophy and research design adopted, and introducing the research site. In summary, given the values-laden nature of sustainability, this is essentially an exploratory study positioned within a subjective, constructivist ontology, based on the assumption that social phenomenon are not independent of social actors. Epistemologically, it comes chiefly from an interpretivist perspective, being concerned with the access and understanding of individuals' conceptualisations of sustainability. However, it also supports elements of positivism in order to facilitate a fuller exploration of the findings. This informs the strategy which asks for an exploratory case study with elements of exploratory survey (the chosen case study is discussed further in the next chapter). The methods of data collection are focus groups, interviews and questionnaire. And so, although principally qualitative in nature, the research falls within the realms of a multiphase, mixed method approach. The next chapter shall explore and discuss the data provided by the participants.

Chapter 7: Results and Discussion.



"Sense may be in the eye of the beholder, but beholders vote and the majority rules" (Weick, 1995:6).

The overarching aim of this research is to explore how future managers conceptualise sustainability because, to borrow from Foucault (1980): the ways in which we think about our reality structure our reality. As discussed in Chapter 1, this study's approach is framed by the theoretical framework of sensemaking – a social, retrospective and constructive practice, grounded on identity (Sandberg & Tsoukas, 2014). And, whilst this study recognises that findings, analysis and thereby discussion, can derive different meanings for different researchers leading to various approaches and presentation, it should nevertheless remain methodical, scholarly and intellectual (Denzin & Lincoln, 2013; Yin, 2014). Therefore, in the context of the overall aim and research questions, this chapter shall revisit the rationale behind the chosen conceptual framework of sensemaking, and outline the approach to the analysis of data. It shall then move on to explore and discuss the data provided by the PBS students. Initially, the intention was to arrange the analysis and discussion as discreet

thematic chapters, or failing that, under key sub-headings following the themes as derived from both the literature and the responses. However, it became apparent fairly early on, that given the interconnected nature of the subject matter, this could not be done with any decisive clarity, and was at risk of demonstrating the very "*counterfeit coherence and order*" as espoused by Boje (2001:2). Nevertheless, one must also keep in mind the reader, and the need for a logical progression from one conversation to the next. To which end, somewhat contrary to the sensemaking framework, four subheadings are used which will hopefully not render the content of the story-threads disparate and of diminished meaning, whilst still providing a sense of direction for the reader. These sub-headings are: Rationale and Approach, Conceptualisation, Drivers and Sustainability Literacy. Figure 16 offers a broad map of the route the conversations and their content take.

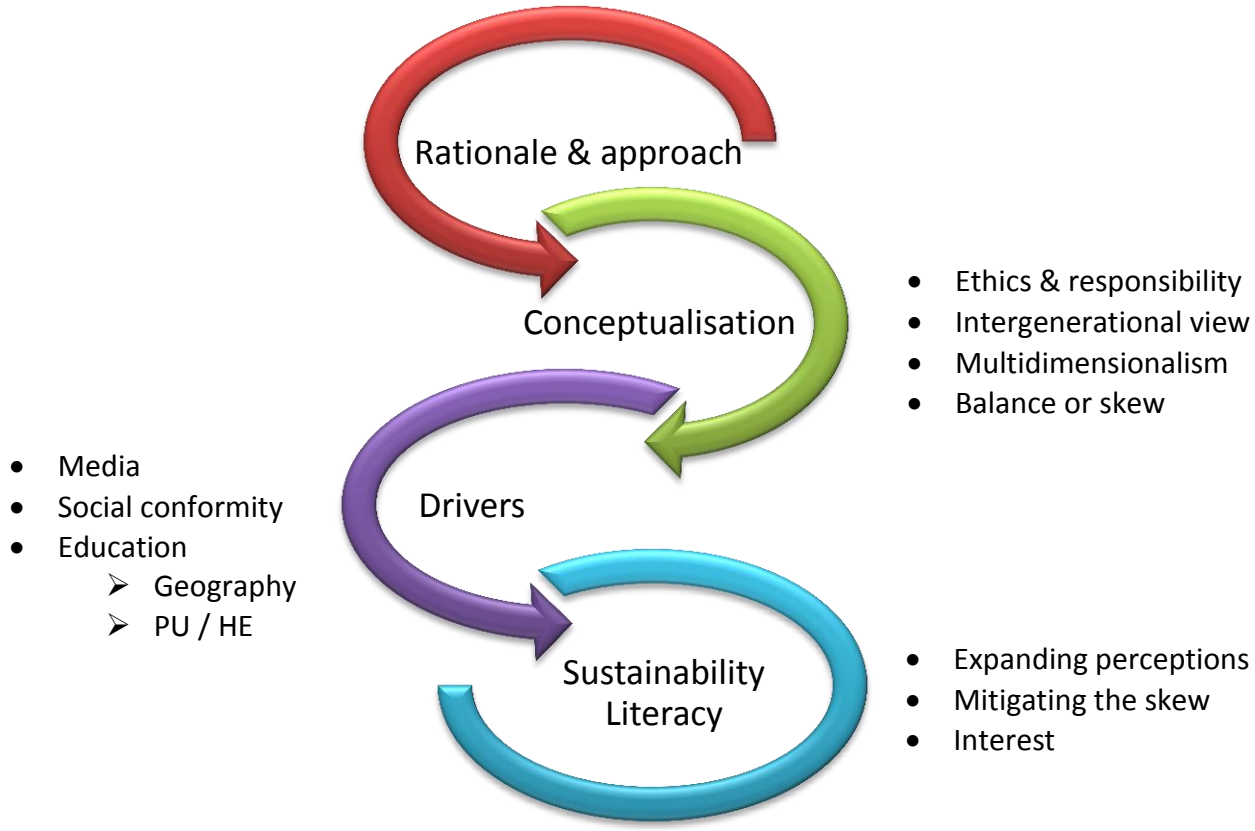


Figure 16: Chapter 8 route map.

7.1 Rationale and Approach

As already alluded to, it is not assumed here that the data derived is epistemologically neutral or representative of an underlying truth, providing a window on an independent reality 'out there'. Indeed, even the term *'findings'* is used loosely, its definitive connotations not sitting comfortably with the philosophical position of the researcher. Because, whilst perhaps not going so far as to condemning the search for an independent reality as an *"old-fashioned, intolerant, and theoretically and philosophically unsophisticated"* idea (Alvesson & Karreman, 2011:4), this research does nonetheless come largely from a postmodern-interpretive perspective, one in which there is: *"no clear window into the inner life of an individual. Any gaze is always filtered through the lenses of language, gender, social class, race and ethnicity"* (Denzin & Lincoln, 2013:24). Alvesson and Karreman (2011:4), suggest that any derived data are *"seldom so strong or clear-cut that a researcher can claim to have produced unproblematic knowledge about how complex social reality looks or operates".* They propose a *"relaxation of the emphasis on 'data'",* to instead have a greater interest in how that data is constructed for the benefit of theoretical reasoning.

Therefore, in line with a postmodern-interpretivist perspective, and to echo Alvesson and Karreman (2011), the challenge is to work with empirical material and to take it seriously, without giving it a non-motivated robust status; condensing a volume of material into manageable data, whilst acknowledging and balancing against the inherent selective, bias and reductionist filtering at play (one of the espoused challenges facing the conceptualisation of sustainability). "*We would thus emphasise the creative and imaginative constructions of empirical material. Rather than assuming that 'data', like a signpost, point in a specific direction, 'data' read as empirical*

material make a variety of readings possible and may also make different knowledge results possible" (Alvesson & Karreman, 2011:5).

When analysing the data, Boje (2001:2) cautions against imposing contrived organisation and division on otherwise multi-layered and fragmented experiences - a process of *"typification"* (Jeong & Brower, 2008:231); a *"retrospective post-mortem"* (James, 1987:739). Nevertheless, the iterative process of connecting indications to interpretations and back again to indications and so-forth, is perhaps a fundamental act of sensemaking (e.g. Hansen, 2008; Weick, 2011). Therefore, it was important to bear in mind when analysing the data for this study that whilst there may be a dominant story shaping the organisation and sensemaking of the data, there may also be a dominant way of organising, or a dominant sensemaking, which may constrain the other two (Weick, 2011; Cunliffe & Coupland, 2012). Similarly, it is recognised that any observation, interpretation and discussion included in the forthcoming chapter are *"an abbreviated and succinct simplification,"* with much left to the reader's imagination (Boje, 1991:115).

In line with advice from the literature (e.g. Yin, 2014; Roller & Lavrakas, 2015), this research shied away from making priori decisions about how much data or how many interviews and focus groups were required. Rather, it attempted to remain responsive to the data as it revealed itself and until data saturation was reached (e.g. Krueger & Casey, 2009; Liamputtong, 2012). Thereby, 3 digitally recorded focus groups (please see Table 10), and 7 semi-structured interviews, totalling around 5 hours and 50,000 words of transcribed material contribute to the data. This is in conjunction with 485 returned questionnaire responses from the 530 PBS first year students. This is a 91.5% response rate and is exceptional. As acknowledged in Chapter 7, the researcher is

mindful of the reactive effect and the impact of the researcher presence (Webb et al., 1966), particularly given the hierarchically-positioned role of the module leader on a core first year module. Similarly – or perhaps alternatively, the high response rate could be indicative of the perceived importance of sustainability by the students (see also UCAS/Forum for the Future, 2008; Sterling, 2012; Drayson et al., 2014). Table 11 details the frequency of responses in relation to the questions.

Focus Group	Number of Participants
1	3
2	12
3	6

Table 10: Number of participants in focus groups

Research question 1	Research question 2	Research question 3	
What does sustainability mean to you?	What has influenced this perspective?	Are you more or less likely to be interested in sustainability after taking the sustainability literacy test?	How has taking this test made you feel about sustainability?
Total responses: 482	**Total responses: 468**	**Total responses: 360**	**Total responses: 352**

Table 11: Frequency of questionnaire responses

As discussed previously, it was preferable to conduct a pilot study before administrating a self-completion questionnaire (Bryman & Bell, 2011). It provided the opportunity for refinement, ensuring that it made sense to the respondents and that they should have no problems in answering the questions. It also enabled some assessment of the trustworthiness and credibility of the data collected (Denzin & Lincoln, 2013). The pilot was given to 30 RQ12s in a paper format which represented approximately 6% of the PBS first year cohort. It generated 27 responses. The first

question was answered by all respondents and appeared to function well. However, of the 27 responses, 3 students failed to respond to the second question and, as the questionnaire was anonymous, the students could not be asked why they did not respond. Consequently, following the advice of Bryman and Bell (2011), a closer look was taken of the question by both the researcher and independent colleagues in terms of confusing or threatening phrasing and poor wording. Also, the other 24 responses were reviewed and it was found that the second question had garnered the type of response anticipated. Therefore, the questions asked appeared appropriate and fit for purpose, thus remained unchanged.

In qualitative data analysis, a code is widely considered to be a researcher-generated construct (Saldana, 2016). Coding is an interpretive act - a way within the data analytic process whereby information is categorised and organised in to themes and issues, thereby possibly revealing repeating notions and sensemaking which different respondents express in the same or similar words, phrases and manner (Silverman, 2014; Saldana, 2016). As discussed more fully previously, researcher positioning was considered a significant factor to mitigate, and so coding principally emerged from the data and were continuously developed and refined throughout. Please see Table 12 which details the codes, organising themes and global themes. A focus group and interview transcript can be found in Appendices 7 and 8 respectively. A sample of survey responses can be accessed at: www.surveymonkey.com, username: cp.hughes, password: sustainability.

Table 12: Codes, organising themes and global themes.

Codes			Organising Themes	Global Themes
Future generations	FG	LT	Long term / Intergenerational	Conceptualisation
Future				
Maintain	Main			
Preserve / conserve				
Keep				
Continue				
Prolong				
Carry on / on going				
Long term	LT			
Period of time				
Longevity				
Tomorrow				
Test of time				
Environment	Env	Env	Environment	
Green				
Ecology				
Eco-friendly				
Planet/ globe/ earth/ world				
Resources	Re			
Recycle / reuse / renew				
Pollution	Poll			
Waste				
Ethics/ morals /responsibility	EMR	Soc	Social	
Culture	Soc			
Social / society / community				
Wants	Con			
Needs				
Consume				
Self sufficient	SS			
Politics	Pol			
Health	Hea			
People/ humans	Peop			
Population				
Investment	Mon	Ec/Bus	Economic / business	
Finance				
Profit				
Cost				
Business / organisation	Bus			
Production	Pro			
Balance	Bal	MD	Multidimensional	
Equality				
Equilibrium				
Stakeholder	SH			
Multi-dimension	MD			
TBL / Venn / Pillars				

Education	Ed	Ed	Education	Drivers
School	Sch			
A-level				
GCSE				
College	H.ed			
University				
Module				
Lectures				
Geography	Geog			
General knowledge	Gk	Ex	experience	
Experience	Ex			
Life				
Work	Wk			
Family	Fam	Soc Con	Social conformity	
Parents				
Home				
Friends	Fnds			
Peers				
Students				
Media	Med	Med	Media	
Television	Tv			
Internet	Int			
News	News			
Advertisements	Ads			
Research	Res	Dr	Other	
Politics	Pol			
Reading	Reading			
Articles				
Interesting	Int	Int	Interest	Influence of Sulite
Relevant	Sig			
Significant				
Want to know more	More			
No change	Nc			
Not bothered	Nb			
Wider field than thought	Ku	KU	Perspectives / Understanding	
New knowledge/meaning				
Increased awareness				
Didn't realise / know	Dk			
Angry	Neg	Feel	Feeling	
Shocked				
Ashamed				
Bored				
Surprised	Surp			
Fine	Fine			
Pleased with result	G.res	T.perf	Test performance	
Disappointed with result	B.res			
Confident	Conf			
Difficult	Diff			

Table 12: Codes, organising themes and global themes.

In an unsophisticated attempt to simply *"increase accessibility through visualization"* of the qualitative material derived from the questionnaire, coded and quantified comments were used to generate word clouds (Bletzer, 2015:1). Word clouds are an effective way to display text in graphical form (DePaolo & Wilkinson, 2014), though the subjective nature of this process, and the dependence on *"holistic perception",* are acknowledged (Bletzer, 2015:4). They offer a starting point and summarisation to frame the discussions derived from the focus groups, interviews and questionnaires. Given the range and frequency of responses, the generated word clouds contained some words that were very small in comparison to the more popular words and could not be deciphered. These words were enlarged and are therefore not to scale.

An explanation for the labelling of the transcript excerpts used throughout the analysis and discussion can be found in Table 13.

Data collection type	**Identification**	**Respondent/ group number e.g.**	**Label**
Survey: Pilot	Pilot	Respondent 13	**Pilot:13**
Survey: Research questions 1 and 2	RQ12	Respondent 27	**RQ12:27**
Survey: Research questions 1, 2 and 3	RQ123	Respondent 176	**RQ123:176**
Focus Group	FG	Focus Group 3, Respondent 2	**FG3:R2**
Interview	I	Interviewee 4	**I4**

Table 13: An explanation for the labelling of the transcript excerpts.

7.2 Conceptualisation:

As repeatedly demonstrated throughout previous chapters, there are considerable discursive difficulties associated with sustainability, with the conceptualisation of what it is and what it means in practice proving various and challenging (e.g. Filho, 2000; Marshall & Toffel, 2005; Gloet, 2006; Docherty et al., 2009; Saul & Kramar, 2011; Donnelly & Proctor-Thomson, 2011; Mariappanadar, 2012; Kramar, 2014). The literature argues that to explore sustainability an exploration into responsibility and ethics is necessary (e.g. Jones, 2011; Gray et al., 2014; Laasch & Conaway, 2015). Indeed, sustainability, ethics and responsibility are frequently perceived as parallel and often overlapping issues, both within the organisation and within business education (Hahn & Reimsbach, 2014). It is appropriate to consider therefore, whether ethics and responsibility, in their various guises, are considered a subset of, separate from, or the same as, sustainability by tomorrow's managers. Given the hitherto unprecedented pressure for organisations to be more responsible, the well-established and widely accepted CSR model (Carroll & Buchholtz, 2015), and the attention to ethics currently confronting organisations in all fields (Crane & Matten, 2016), it is interesting how little the language[4] of responsibility and ethics is explicitly represented in the participants' sensemaking of sustainability. Only 2 of the focus groups, 2 interviewees, and 22 of the 482 survey respondents referred directly to notions of ethics and responsibility when asked "*What does sustainability mean to you?"* For example:

> *RQ123:16: The abilty to maintain and re use natural resource through methods of preservation. From a business perspective it encorporates the use of CSR.*
>
> *RQ123:93: The ability to be socially responsible for all actions you are accountable for*

[4] Includes derivatives of: responsibility; CSR; ethics; morals.

RQ123:250: Growth in a good way, being environmentally ethical and improving CSR.

RQ12:38: Being responsible when using resources.

Pilot:25: Not using all resources being considerate/responsible about future generations. Renewable energy/recycling or maintaining a certain level of standard and ensuring its future.

FG3:

R2: I think this is my question as well, because when I think sustainability, I put CSR (corporate social responsibility) with sustainability because I think it's all part of being sustainable. It's about the planet, the people that work for you, people that bring your products in like fair trade and all of that.

FG2:

C: …what does sustainability mean to you?...

R1: Acting in a responsible manner that means you can keep going about things the way currently you do...I'm on about using natural and human resources

R6: Yes, I agree with xxxx. Don't deplete resources unnecessarily. Keep an eye on the environment and stuff, efficiency and stuff.

R7: Especially in business, you say CSR, corporate social responsibility. It's all about looking out for the planet for the future. I mean, we are not all going to be here in 70 years' time but we have all got to think about what's going to happen. We don't want to use up all of the resources we have in the current climate today because we are not going to see what the next world looks like really after that but you want there to be a similar outlook I think.

Even though only a minority of participants referred directly to ethics and responsibility, it does not necessarily imply that only these few included them as part

of their sensemaking. Indeed, through further exploration, they may have been found to be embedded and threaded through the conceptualisations of the participants. Nevertheless, those respondents, who did explicitly expound on notions of ethics and responsibility, seem to have consistently placed them within sustainability. This consistency is somewhat contrary to the literature which has yet to settle on the positioning of sustainability, ethics and responsibility. For example: whether or not they are complimentary and non-hierarchal (e.g. Garavan & McGuire, 2010; Laasch & Conaway, 2015); whether ethics sits *within or separately from* CSR and sustainability (European Parliament, 2007; Parkes, 2012); or whether sustainability is achieved *through* CSR (European Commission, 2011), *et cetera*. Of course, this research is quite clearly couched in terms of sustainability, so by simply asking '*What does sustainability mean to you?'* it has failed to unpick the perceived relationship between ethics, responsibility and sustainability and has possibly led the respondents to position ethics and responsibility *within* sustainability. This study is therefore limited in this regard, but signals the opportunity for further research to unambiguously consider the relationship between the 3 notions from the perspective of tomorrow's managers.

The publication of the WCED's Brundtland Report was a historic moment, triggering a new wave of discussion and sustainability-related activity (Laasch & Conaway, 2015). It continues to offer a widely used and often referred-to explanation, being utilised extensively as a starting point for the development of policy for government, business and community (Doppelt, 2010). In parallel with the UNCED principles, it incorporates a broad multidimensional view, has a long-term intergenerational perspective, and an inclusive approach (Pierce & Madden, 2009). However, as highlighted in Chapter 4, the literature remains critical of it (e.g. Escobar, 1995; Marshall & Toffel, 2005; Seghezzo,

2009; Doppelt, 2010; Jones, 2011; Pal & Jenkins, 2014; Laasch & Conaway, 2015). Nevertheless, at a fundamental level, the WCED's underlying conception ignited debates concerning the competing interests of corporations for economic growth and environmental stewardship (Pal & Jenkins, 2014). It proved a visionary and important starting point, bringing focus to the UN agenda, representing a new social and political contract between the developing and developed world, and, the current generation and generations far into the future – precipitating many attempts to further make sense of what sustainability means (e.g. Jones, 2011; Saul & Kramar, 2011; Fleurbaey, 2015). This led to an abundance of differing conceptualisations, with the spectrum of what is considered 'sustainable' varying enormously, particularly from an organisational perspective, ranging from economically-based to ethically-based interpretations, pointing towards differing core rationalities, which pose difficulties for the integration of the various dimensions (Gladwin et al., 1995; Marshall & Toffel, 2005; Colbert & Kurucz, 2007; Rimanoczy & Pearson, 2010; Ehnert at al., 2014; Benn et al., 2014; Pal & Jenkins, 2014). This has been illustrated beautifully by Interviewee 1 and Interviewee 2:

> *I1: I mean, it's got different factors, doesn't it? Sustainability is such a big thing to many people. Different people think of different things. When they hear the word 'sustainability' they think of this, and someone else thinks of that.*
>
> *I2: Yeah. It's weird because it's, sort of, everyone has their own version of what sustainability is and I don't think there is a version of the word sustainability where everyone can agree.*

Whilst the literature has yet to come to a consensus, and it is clear that many conceptualisations have evolved, there are nonetheless three key themes and basic principles offered by UNCED, which the literature appear to agree on:

- concern for the wellbeing of future generations;
- awareness of the multidimensional impacts of any decision broadly categorised as economic, environmental and social;
- the need for balance among the different dimensions across sectors, themes and scale.

(UNCED, 1992)

As underpinned by both Brundtland and the UNCED principles, the future generational theme is a regular ingredient of sustainability models and frameworks. For instance, the Two Tier Sustainability Equilibrium (Lozano, 2008), explicitly considers the element of time and inter-generational concerns, incorporating it with economic, environmental and social dimensions. This was furthered by Moir and Cater (2012), resulting in the Conflated Model of Sustainability which addresses the *"multifarious, spatial and temporal"* attributes in concert (p1484). Similarly Seghezzo (2009), recognising the absence of temporal elements in some early models of sustainability at a conceptual level, developed a model with a '*Permanence'* aspect. Nevertheless, given the proclivity towards the Brundtland definition and its clear intergenerational aspect, it is perhaps expected to find reference to it in the participants' sensemaking of sustainability. Indeed, some were very close to the Brundtland phraseology (*"development that meets the needs of the present without compromising the ability of future generations to meet their own needs" - WCED, 1987:8)*. For instance:

RQ123:150: Satisfying the needs of today without putting at risk the needs of future generations

RQ123:210: Not compromising the ability of future generations to meet their needs

RQ123:218: Meeting the needs of today without compromising the needs of future generations

RQ123:298: Sustainability is the way in which we operate which doesn't negatively effect future generations

RQ123:26: Meeting the needs of today without compromising those of future generations.

Through the questionnaire, 165 respondents used the terms '*future'* and '*generation*', with 98 of them referring to *'future generations'*. I3 threaded it throughout their explanation, seemingly positioning a consideration for the future as the core principle:

I3: I think to a lot of people it's just sort of being green, but to me it's more about sort of practising things which you can actually sustain easily. So not just saying 'let's recycle'. You have to think about more for the long term. So yeah, recycle, but how can we do that and how's it sort of going to affect the future as well. Not just sort of doing things blindly with no idea about what it's about – how it's going to affect future generations.

As did I6, drawing their sensemaking from the perspective of business:

I6: …it's essentially making sure that you are using the resources around you efficiently and not overdoing it on any resources basically enough for the future … making sure you are using efficiently now so that there is enough in the future.

I6 was asked to elaborate further on the *'resources for the future'* during the interview and, remaining with a long term perspective, went on to explain that alongside natural resources, it is:

I6: …the business one, it does mean making sure that the way you're operating as well. Means that you are going to last efficiently in the long run as well…thinking of the long run in terms of business…so when you

> *are investing into your company, you want that investment to last essentially…I think the most important aspect is the general idea of long term.*

I7 employed a hierarchal approach, apparently ranking the future perspective second in importance, behind environmental impact:

> *I7: Sustainability to me mostly means firstly how we or our products, or how organisations impact the environment that's the first thing. The other thing is how the period of the company will last. You have to be with the times, you have to plan for the future. That's the way I look at sustainability so lots of companies have to be greener, you know, you have to be greener so they have to implement things that will make their company grow and not just do you – last for a decade or so, you know, have to keep the legacy, you know, companies have to keep legacies and grow and grow and improve as they grow.*

Respondent I5 seems to place the future element more on the periphery compared to I3, I6 and I7, outside of the environmental considerations. Nevertheless, it is still represented in their sensemaking, signalling it with the verb *to keep*:

> *I5: I'll say it's like keeping the Earth clean and sort of like looking after the environment. I say like what stuff like influencing people into looking after the environment and everything in it. That's what sustainability is to me.*

Ehnert and Harry (2012) also stress the importance of a temporal element in conceptualisations of sustainability, proposing that if organisations engage in the regeneration and development of the resources that they themselves consume today and will need in the future – by maintaining the systems and relationships from where these resources originate from – that this can lead to sustainable organisational behaviour and thus be called sustainability (2012). Indeed, inherent in the meaning of

sustain is the idea of maintenance, of enduring systems over long, if not indefinite, spans of time (Perey, 2015). Similarly, Doppelt (2010:58) suggests that sustainability is simply about "*protecting our options",* arguing that a new economic paradigm is needed which, *"can be maintained for decades and generations".* This ability to '*maintain*' revealed itself as a notion that 50 respondents articulated through the questionnaires in their conceptualisations of sustainability. For instance:

> RQ123:139: *maintaining the economy without risking future generations*
>
> RQ12:45: *The ability to maintain current operations, for along time into the future without causing long term damage*

Other verbs used by the respondents which have been subjectively interpreted as having close meaning to *maintain* with similar temporal connotations are to 'keep', 'preserve', 'carry on', 'continue', 'prolong' and 'conserve'. Combined, these were expressed in 93 responses (143 if including 'maintain'), to 'What does sustainability mean to you?'

> *RQ12:87: For things to be continued and prolonged*
>
> *RQ12:53: Carrying on a process in such a way that it can be repeated continuously. Whether it be economically, or environmentally*
>
> *RQ12:55: Sustainability to me is the ability to keep things maintained or able to sustain itself*
>
> *RQ123:127: I believe that sustainability means to preserve something and keep it in a working condition*
>
> *RQ123:211: Keeping the earth alive for future generations.*

In line with the contribution made through the questionnaires and interviews, two of the focus groups explicitly drew on temporal elements within their sensemaking of

sustainability, again casting it as to 'keep going', 'the future', 'long term' and 'future generations', for example:

> FG3
>
> *C: …what does sustainability mean to you?*
>
> *R1: umm it's known as several factors anyway isn't it, it's like the social aspects and then the environmental and then sort of like making sure everything like...I'm struggling to define it.*
>
> *R2: basically everything is long term*
>
> *R1: yeah long term.*
>
> *R2: yeah everything is long term and things like*
>
> *R4: I just know that the environmental bit and stuff and keeping it like - but I don't wanna just use the word green because always use it but obviously*
>
> *R2: green yeah I think it's green*
>
> *C: You can use green if you want to, if that what it means to you.*
>
> *R4: yeah, green or something, just looking after it for the future generations. Yes, put it that way -that's what I think it is.*

However, despite the espoused significance of the concern for future generations, not all explanations of sustainability within the extant literature explicitly articulate it (e.g. Alange, 2014). For instance, despite the clear reference to it in the title, the HEA's Future Fit Framework suggests that *"'Sustainable Development' describes the processes and activities that help ensure social, economic and ecological wellbeing, at any focus – local, regional, global – where these three dimensions are seen as systematically interdependent and inseparable."* (Sterling, 2012:10). Similarly, Sood et al., (2011:196), whilst claiming that it is based on the UNCED shared principles, fall short of unambiguously including a long term element, although they do refer to

maintaining financial viability: Sustainability is *"to ensure decisions and subsequent programs and projects are carried out in a manner that maximises benefits to the natural environment and humans and their cultures and communities whilst maintaining or enhancing financial viability."* Indeed, the impelling Club of Rome's *'The Limits to Growth'* (Meadows et al., 1972), explored uninhibited industrial growth and the effect on the environment, humans and society. And, whilst a future-perspective is its *raison d'etre,* it too fails to be explicit: *"A sustainable society would be interested in qualitative development, not physical expansion"* (Meadows et al., 1992:210), arguing that material growth is a *"considered tool, not a perpetual mandate"* (pg. 210). Not including an explicit temporal element within their sensemaking is reflected in the substantial remaining portion of the participants' authored responses and discourses, for example:

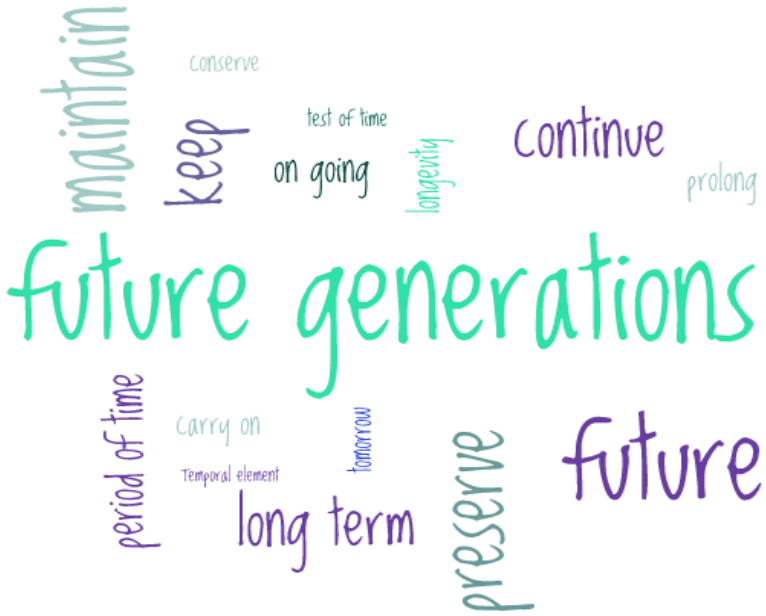
> FG1
>
> *C: …what does sustainability mean to you?*
>
> *R2: Just recycling. Literally just recycling. Because there are so many words isn't there, linked to sustainability. Just recycling, eco-friendly. I didn't realise about the humanity aspect of it, which xxx touched on about poverty and stuff like that. I wouldn't have linked that to sustainability at all.*
>
> *R3: Yeah. Exactly, just about being green.*
>
> *I2: It means using sustainable resources more often just basically being more greener, recycling, helping people, well it's just helping people out really and that's just thinking about others, other than yourself. And yes, using renewable energy is the top one.*
>
> *RQ12:85: Is the circular economy in which businesses operate by using re-used materials to make new products.*

RQ123:326: The ability to create a business that can support itself whilst looking after the environmental, community alongside its operations

RQ123:4: Helping the well being of the planet.

In all, when asked, "*What does sustainability mean to you?"* the temporal element was an explicit part of the sensemaking within 355 of the 483 questionnaire responses, 2 of the 3 focus groups, and 5 of the 7 interviews. This is shown in the word cloud below (please see Figure 17). In a small way, this perhaps signals a mitigation of the short-termism *"disease"* (Rappaport, 2005:65), espoused by much of the literature (e.g. Elkington, 1999; Lozano, 2010; Kirsch, 2011; NEF, 2014).

As can be garnered from previous discussions, given the 2030 Agenda for Sustainable Development calling for a multi-dimensional approach for *"people, planet and prosperity"* (UN, 2016a), and perhaps most particularly due to the Brundtland definition, Elkington's (1994) Triple Bottom Line, and the 2005 UN World Summit's 'pillars', sustainability is often shown to consist of multiple dimensions – these predominantly being variations of environment, society and economy. Barbier (1987) used the Brundtland's three dimensions to create the renowned three-circle Venn diagram demonstrating how the dimensions interact to achieve sustainability (see Figure 5).



Temporal element	Freq.
future generations	98
future	67
maintain	50
preserve	35
keep	28
continue	22
long term	21
period of time	12
longevity	6
tomorrow	4
prolong	4
carry on	3
on going	2
test of time	1
conserve	1

Figure 17: The temporal element word cloud and frequency table (questionnaire responses).

It has proved a popular and adaptable method of representing the complexities of sustainability conceptualisation, for example the substitution of the original dimensions for people, planet and profit, or culture for society, or the amalgamation into socio-cultural, perhaps even the addition of further dimensions such as education, peace, democracy and ethics (Kerr, 2002; Rimanoczy & Pearson, 2010; Waas et al., 2011; Moir & Carter, 2012). Interestingly, only one student (FG3:R1), referred directly to the Venn Diagram, with the rest of the group expanding on multidimensional aspects:

> FG3:
>
> *R4: Yeah, green or something, just looking after it for the future generations. Yes, put it that way -that's what I think it is.*

R1: More like the way - if you actually do look it up on Google or something, there is like a Venn diagram, and basically it combines all the different aspects, so it's like education I think might be one of them, social, environment and all combined it creates what's known as sustainability. So I assume social would be…

R2: …how it affects people?

R1: Yeah

R2: I'm guessing? Like how it affects people because I'm guessing green would be like the earth and recycling and…

R1: …Yeah and that's the one that most people think about when they talk about sustainability and you think like oh you've got the recycling you've got to make sure the world keeps safe

R2: and social as well. Could also mean maybe like with businesses that want to grow and want people to remain maybe projects or charities. I didn't even know they education or social, I just knew they'd different types

R1: it's like improving, like potentially improving…let's say you have your own business, like improving who you have and like rather than just sort of hiring and firing every few months I would say. It's becoming more resourceful, I guess.

The need for multidimensionalism is further advocated by John Elkington's Triple Bottom Line model (1994). It is used as a public reporting framework which is being increasingly adopted by a growing number of organisations which overtly acknowledge the importance and relevance of an organisation's economic success and its relationship with its social and environmental performance (Elkington, 1999). Indeed, TBL requires that for a firm to be considered as operating at its peak, it must be performing simultaneously against these three aspects (Jones, 2011; Gray et al., 2014). At its broadest, the TBL is employed to capture the multidimensional set of values, issues and processes which organisations need to address to minimise harm (Carroll & Buchholtz, 2015). At its narrowest it is simply a metric or framework for reporting

performance in terms of economic, social and environmental indicators (Carroll & Buchholtz, 2015). Nevertheless, it is often regarded as the "*keystone*" for any sustainability management activity (Laasch & Conaway, 2015:70). Indeed, research by Colbert and Kurucz's (2007) found that depending on how the multidimensional aspect of the TBL was made sense of, affected how an approach was framed and thus how it was disseminated within the workplace and ultimately, how it was put into practice. Nonetheless, as with the Venn diagram, only one participant in this research referred directly to the TBL, and even then expanded upon the trifecta, to include other dimensions – perhaps reflecting some of the espoused limitations of models such as this:

> *RQ123:181: Improving the environment, economic, environment, legal, sustaining the environment, triple bottom line.*

There was evidence however, of students making sense of sustainability through multidimensional notions, without referring directly to the named models, for example:

> *RQ123:45: sustainability is about being able to profit within your business but also being consciously aware of the social, political and environment around you.*
>
> *RQ123:23: To provide longevity and making resources last longer than before a certain period, whether it be environmental, business associated, socio cultural etc.*
>
> *Pilot:15: Something that is strong enough to last the test of time – environmental, business and social.*

It is the very simplicity and adaptability of the Three Pillars, the TBL, Barbier's Venn Diagram, and other similar constructs, which are accused of being beguiling for interpretative reasons, for being only an article of faith, vague, confused and often contradictory (Giddings et al., 2002; Laasch & Conaway, 2015). For instance, the

intrinsic relationship between each of the dimensions may be overlooked and that, by characterising the dimensions as independent systems, they fall into the Newtonian reductionist epistemological trap which compartmentalise – thereby lacking holism and failing to account for the inherent interactions between the parts and the whole (Mebratu, 1998; Lovelock, 2007; Lozano, 2008; Wells, 2011; Moir & Carter, 2012; Laasch & Conaway, 2015). Similarly, the more philanthropic approach to the social elements – such as the gifting of money to worthy community causes under the TBL - can be considered disingenuous (Porter & Kramer, 2006; Jones, 2011), merely "*tokenism*" (Willis, 2015:1), and hypocritical window dressing (Friedman 1970). *"A badge of honour"* (FG2:R2), or *"pretend, glazing-it-over"* (FG2:R11). Indeed, as one interviewee argues, political "*Lies*" (I2).

Notwithstanding the reductionist nature of multidimensional models, it is argued that the absence of a multidimensional approach is in itself unsustainable - not least due to the futility of only tackling a portion of the sustainability concerns in an interconnected world (e.g. Elkington, 1999; Makower, 2014; Benn et al., 2014). Such an approach misses several important criteria which organisations should satisfy if they want to become truly sustainable, falling short of capturing the full spectrum of sustainability and its implications (Dyllick & Hockerts, 2002; Oskarsson & von Malmborg, 2005; Lozano, 2010). Indeed, as discussed elsewhere in the study, perhaps this is where notions such as multi-stakeholderism, and other models which progress beyond the three circles-pillars-bottom-lines come to the fore (e.g. Colbert & Kurucz, 2007; Kramar, 2011; Biedenweg, 2013; Dentoni & Bitzer, 2015). Within the data, none of the respondents explicitly articulated '*multi-dimension*' or '*multi-stakeholder*', or even '*stakeholder*'. This may be indicative of the ubiquitous and perhaps easily

grasped/remembered nature of trifecta models – even if they were seldom cited by name.

Even so, many students did offer a one-dimensional explanation of their sustainability sensemaking, which tended to be rooted in environmental terms:

> *RQ12:52: Maintaining the planet.*
>
> *RQ12:64: To prevent further environmental damage.*
>
> *RQ123:250: To ensure we can sustain the planet*
>
> *RQ123:259: Preserving the world's natural resources for future use.*
>
> *Pilot:1: Not using as much un needed energy and actively helping to reduce global warming.*
>
> *Pilot:2: Sustainability is the ability to sustain natural resources it should be continued.*

Whilst on the contrary, others were impressively succinct in implying the multifaceted nature of sustainability:

> *RQ123:37: The ability to continue*
>
> *RQ123:39: Everything we need to survive.*

The UNCED principles (1992), as underscored by Barbier (1987) and others, defend the notion that true sustainability can only be reached if a *balance* across the multiple dimensions is achieved. For instance, if a country focuses mainly on economic and social development, the results may indeed be equitable, but they would fall short of being bearable or viable (Laasch & Conaway, 2015). However, Chapters 2 - 5 of this study explicitly and implicitly recognise the claim by much of the literature that there is an imbalance and that environmental dimensions are firmly at the forefront of sustainability (e.g. Dyllick & Hockerts, 2002; Dunphy, et al., 2003, 2006; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Bostrom,

2012; Ehnert et al., 2014; Godemann et al., 2014; Makower, 2014; Alange, 2014; Laasch & Conaway, 2015). Even when there is apparent attention given to the social effects of organisational actions, the focus tends to be on the consequence of economic development, sustainable financial outcomes and the achievement of competitive advantage - not on the consequences of management practices for the individual in terms of work-life balance, happiness and health and well-being in their own right (Pfeffer, 2010; Kramar, 2011; Mariappanadar, 2012a; Benn et al., 2014). This is compounded by the lack of integrated environmental management / people management literature and research, further relegating social aspects (Renwick et al., 2013). FG2 take a more positive (yet perhaps still cynical) view, suggesting that things are starting to change with more attention being afforded to the socio-human aspects. However, they appear to have sympathy with the *low hanging fruit* analogy (Makower, 2014), and perhaps hint at *green-washing* (Delmas & Burbano, 2011; Anderson, 2011), as change towards social sustainability is often perceived to be more much more complex and radical when compared with some more easily achievable environmental measures such as reducing blatantly wasteful energy and water usage (Makower, 2014):

> *FG2:*
>
> *R1: …when it was first put in the public eye the whole idea about climate change and everything like that, it was obviously associated with the environment and things. But now, because of things like fair trade and social enterprises and stuff like, it's now a lot more based on things like - there is more emphasis on people and say like slave labour and stuff like that - say cocoa farms and stuff like that they are seen also as resources now, and they are seen as things which need to be sustained and things that need to be protected from abuse which is why a lot of companies now are investing in schools for farmers' children, for the villages, there is like investing in hospitals and vaccines, so basically that is an example of sustainability again because they are making sure that vital resource*

of labour is kind of still going to be there hopefully in 10, 20 years. So I think that's another like a modern/recent example of sustainability.

C: Ok thank you.

R10: But then again you can mention like, stories with Primark and how they've got this whole work force in another country - when it's put in the media it doesn't mention it being unsustainable or sustainability. Like I say, in the media it is literally just the environment - like these key things: oh this will damage the reputation but not in the way you think it would. It's trying to hit them morally, although it is about sustainability and stuff like that. So, although I do agree with it, it is just different, it's just not portrayed the same. And I think obviously a lot people's perception of sustainability does come from the media, cause it's one of those things that people don't just go: ah I feel like Googling sustainability, or anything like that. So it is literally just what they see.

C: interesting

R11: And because of that business can use it as a fall back. They can say well we are sustainable because we are helping save the environment and that's what people think sustainability actually is. Whereas if people were more educated as to what it actually means then businesses would have to do other things as well to meet the perspective of what sustainable is. At the moment they can just say, oh we put energy saving light bulbs in we are sustainable. Then people say, yep, I did that too, we're sustainable…

R2: Like a badge of honour, isn't it?

R11: ...I just think yeah, rather than actually doing something that is sustainable they just do this pretend, glazing-it-over type thing.

Proponents of embracing the skew and thereby placing environmental dimensions at the fore, such as Giddings, Hopwood and O'Brian's Nested Circles (2002), reason that mankind's evolutionary development is fundamentally linked to society; that human activity itself is dependent on, and impacts upon, the environment; and, the economy is a societal function and as such is a subset of society, and therefore do not hold the principal position (Giddings et al., 2002). Indeed, that this hierarchy is more

sympathetic with integration (Moir & Carter, 2012). Interviewee 7 seems to have sympathy with this view:

> I7: *the environmental part is more important, because for me, that's what sustainability is actually. Because, if we as humans don't take care of the environment, you know, well, there'll be nothing there for us.*

This position was supported by the attendees of the PU Sustainability Café (please see Table 6), who overall favoured the hierarchically constructed nested circles explanation. It also appears to be reflected in the students' repertoire, often (but by no means always) demonstrating a multidimensional aspect, whilst being primarily couched in environmental terms, indicting hierarchy and a skew in their sensemaking:

> *RQ123:207: Sustainability means being able to run a business be being environmentally efficient and helping the environment.*
>
> *RQ123:229: The ability to ensure businesses / organisations keep natural resources use to a minimum and try to use alternative energy sources and for each natural resource they use, re put it into the environment being carbon neutral.*
>
> *RQ123:249: Growth in a good way, being environmentally ethical and improving CSR. To ensure that we can sustain the planet.*
>
> *RQ123:254: Accomplashing processes in a way that does not have a negative impact on any environment for current or future.*
>
> *RQ12:71: To consider the environment throughout everything you do in the business*
>
> *RQ123:31: Ethical and resourceful way to source products (save the environment)*
>
> *RQ123:35: Moving forward to the future, ethically, consciously thinking about the planet and the environment.*
>
> *Pilot:4: To be environmentally aware of unnecessary waste in our day to day activities and being productive towards the needs of the environment.*

FG2:

R2: In terms of a more micro view of it, because it's all about having to think about the environment and all this sort of stuff, but I thinks it's more the very small changes that you can make and the habits in your own life, the very small things that just kind of make you more aware of how you're, as an individual, impacting on these things. It's not just kind of oh recycling or whatever, it's literally every single kind of thing about the whole idea of how we view everything kind of needs to change. I think the thing with consumerism is it's very difficult to do that because we have kind of got into this habit of where kind of it's a chuck away society - gotta to have the next newest thing and all the rest of it, and it's very difficult to raise the awareness when it's so kind of socialised into you through every kind of media source you can see. I think really its gotta be a root-level kind of change.

R1: It's definitely what signifies isn't it, when you think the initial sort of implication of what sustainability is, you as most people in the street they are going to straight away say environment, recycling.

Interviewee 5 began by making sense of sustainability in environmental terms *("the environment and everything in it that's what sustainability is to me"*), and as the interview progressed, began to expand their explanation to reveal a socio-human dimension, whilst remaining embedded within environmental terms:

I5

R: that includes like nature and stuff, nature like people, animals, plants water, those kind of things like we need like on everyday life in everyday life, essentials and stuff

C: right so when you say 'people', in what way do you think of people when you think of sustainability

R: like say for example like global warming it does affect like all of us in different ways, the ocean and stuff which is not really good for ourselves and that but if we don't look after the earth itself or like the atmosphere then obviously all this radiation will just start pouring onto us and then we started getting cancer and stuff like that and it's not really good for us and there's no cure, make it worse so now that turns big trouble.

This reflects HEA findings that the majority of students continue to interpret sustainability as being predominantly about the environment, with less recognition of the social and economic aspects (Drayson et al., 2014). However, in the interests of parity, there are occasional responses which appear to suggest that other dimensions are dominant, such as people, business, society, profit, employee wellbeing (although it should be noted that these are far less frequent):

> *RQ123:189: Being able to provide for people over a long period of time and the slow development of less fortunate people/countries.*
>
> *RQ12:1: A organisation that makes relevant changes to stay in business*
>
> *RQ12:17: My understanding of sustainability is that it is associated with the development of a society. Economics and politics are also included.*
>
> *RQ123:45: sustainabiliity is about being able to profit within your business but also being conciously aware of the social, political and environment around you.*

> I1:
>
> *R: Money*
>
> *C: Money? Ok right. In what way?*
>
> *R: If a business is sustainable, I would say it's like, on the right track in the terms profits and things but then there's also like sustainability within like the workforce.*
>
> *C: yes*
>
> *R: Whether everyone's happy and it's all flowing nicely and stuff, which I guess isn't to do with money, I don't know I can't think.*
>
> *C: Ok, well that's very interesting so when you think of sustainability you're thinking in two ways: you're thinking, first of all the money, the economic sustainability of an organisation? Is that fair?...*
>
> *R: Yep*

C: …and then also the sustainability of the people within the organisation.

R: yep

C: So if we take that first one first, when you think of sustainability you think of the profitability of the organisation and how healthy it is. Can you expand on that in a little bit more detail?

R: I mean if it's, I suppose if the business is progressing, then it's more sustainable where as if it's not the sustainability is not there. If it's, yeah I mean, if it's progressing gradually over a long period of time, it's sustainable because it could have a big up at one point, and then down the next. It's not sustainable because it's not steadily flowing.

C: Ok so one of the factors to do with sustainability is, is time?

R: yes

C: whether it's over a long period or not?

R: yeah

C: So when you talk about sustainability within the organisation what do you mean there?

R: I suppose all the factors like health and safety and whether the workers are happy or not and stuff, because that needs to be like there for the rest of the business to sort of develop.

C: Yes, so what sort of things could be at play in there, what sort of things are included in that?

R: In terms of like the workers, just happiness I suppose. Like whether they feel like they're happy in their business and feel like they are being credited for what they are doing and the hours aren't bad, like environment is like nice to sort of be in. Things like that for it to stay sustainable.

C: So the wellbeing …

R: …of the workers yep.

When initially asked "what sustainability means to you?" Interviewee 2 put forward:

I2:

R: It means using sustainable resources more often just basically being more greener, recycling. Helping people well, it's just helping people out really and that's just thinking about others, other than yourself.

C: ok

R: and yes using renewable energy is probably the top one

This appears to recognise principally the environmental dimension and, to a lesser extent, a socio-human aspect. Later in the interview, I2 was asked *"Would you say there is a tendency towards environmental and green explanations?"* I2 referred to himself and his own perspective, and to 'others' in his response, again highlighting environmental and socio-human dimensions, but still apparently placing the green elements to the fore, despite underlining, *"the humanitarian side of sustainability"* and admitting to not knowing *"what it actually means, but I guess it means I guess sustainability is sort of a mix":*

I2:

C: Would you say there is a tendency towards environmental and green explanations?"

R: Yeah, yeah. What so what do you mean by tendencies?

C: That when people talk about sustainability it generally means to them green.

R: Yeah, green things - issues

C: It's interpreted as green?

R: Yeah, yeah. I'd definitely agree with that because what people often forget - like the humanitarian side of sustainability, because I guess you get, in other ways, it gets promoted to you as the way sustainability is, in fact the meaning of sustainability is lost somewhere, no one knows where it's gone

C: Yes, and do you find you have that tendency too?

R: Definitely yeah, definitely yeah. I think everyone's really guilty for it. Because as soon as your hear the word sustainability, like I guess there are quite a few different people, some people think that, hippies or

loopy-left, some people think, icebergs are melting, some people think renewable energy, some people think oh, the animals are in danger and some people think that people are poor. I don't know what it actually means but I guess it means, I guess sustainability is sort of a mix of all of them, that sort of thing.

I4 and I1, like I2, appear to broaden their explanations of sustainability through discussion and having had the sustainability skew suggested to them. This perhaps signals the Socratic nature of the questions, the *ex-duco* of drawing out answers, exploring the arguments wherever they lead and the critical thinking of the participants, thereby *"driving thinking forward"* (Elder & Paul, 2006:3). Indeed, when I1 was asked whether the interview influenced their conceptualisation of sustainability in any way, they replied: *"Yeah, sort of. Yeah. Talking to you has sort of helped me to understand how I see it in different ways and how I've seen it, how I've sort of come across it, in sort of different parts of my life".*

I4:

C: …Would you say there is a disparity in the focus on sustainability?

R: Yes

C: In what way?

R: People do just think, as I made the mistake earlier, when you first think of sustainability you think the environment.

C: Right. When you first think of sustainability you think of the environment.

R: Yep. So then people do some recycling which is a good thing, but then and I made the mistake earlier, you do forget the other parts of sustainability like people and what money the government has got, and whether that can go into schools, and if less people are like choosing to be unemployed that there's less money to spend on people in hospital. So it's just people need to kind of like get in their mind what priorities are for the future because it's just not going to work how it's going. Need to allocate resources better.

I1:

C: Do you think there is a tendency towards environmental or 'green' explanations when it comes to sustainability?

R: Yes, definitely. But I think that's because of the media. Everyone sees it in the media sort of thing. So it's like well-known I think.

C: And do you think you tend towards environmental explanations?

R: Yes. Probably because I mean yeah cause I think from a younger age, that's how I've understood what sustainability is so that's how I think about it. When I first came into the module they started talking about sustainability I instantly thought the environment but then I never saw it in detail of like a business so I think definitely it's more seen as an environment thing.

Regardless of which dimension takes the fore, as with 'balanced' models, critics suggest that a hierarchical approach is once again a compartmentalising over-simplification which does not account for governance; nor the diverse environments, societies and economies that exist; it does not account for whether or not they have a beneficial or detrimental impact; nor is it an adequate representation of the intrinsic link between human enterprise, well-being and the environment (e.g. Jacobs, 1961; Giddings et al., 2002; Langley & Mellor, 2002; Lozano, 2008; Seghezzo, 2009).

It is argued that sustainability confronts and challenges one issue: the belief that the ultimate goal of companies should be to maximise profits (Pfeffer, 2010). Nevertheless, the literature is consistent, claiming that the emphasis within organisations is squarely on the natural environment in terms of research attention and company initiatives, with the physical environment being more prominent, at the expense of other dimensions (e.g. Dunphy et al., 2003, 2006; Donnelly & Proctor-

Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Bostrom, 2012; Ehnert et al., 2014; Godemann et al., 2014; Alange, 2014; Laasch & Conaway, 2015). Indeed that 'sustainability' is synonymous with 'environment' (Dyllick & Hockerts, 2002; Makower, 2014). This notion is reflected in the contribution made by the PBS students. Indeed, as a rudimentary and crude illustration, 440 responses to the survey garnered 'environmental'-based[5] dimensions, whereas only 172 responses explicitly referred to other dimensions[6]. On the face of it, this appears to support the literature and show evidence of the sustainability skew. Nevertheless, as a collective, the respondents did reveal various dimensions, please see the word cloud (Figure: 18).

7.3 Drivers

The extant literature has identified various drivers behind the reported disparity which were brought together in Chapter 4 under four broad headings: Lack of shared meaning; Engagement with Reality; Visibility; Ideology. Yet, despite the apparent imbalance between the dimensions of sustainability, there remains a dearth of studies investigating the skew from the perspective of managers, HEIs, students or future managers. Therefore, this study asked the cohort what were the drivers behind their own conceptualisations of sustainability. Figure 19 offers a visualisation of the responses from the 468 students who completed the questionnaire.

[5] E.g. environment, planet/globe/Earth/world, waste, pollution, reduce/reuse/recycle, green, natural resources

[6] E.g. Culture, social, politics, people/humans, health, production, business, profit, finance, ethics/morals/responsibility

Figure 18: The dimensions of sustainability word cloud

Figure 19: The drivers behind conceptualisations word cloud

Of the 468 students who responded to the survey question asking what has influenced their conceptualisations of sustainability, 124 cited the media and its connotations (*id est*: television, advertising, internet and the news) - approximately a quarter. Whilst still a significant proportion, this finding is not entirely in line with the literature which argues that the primary source of information and knowledge about sustainability for

the public is drawn from the media and the exponential increase in information availability (e.g. Anderson, 2011; Sood et al., 2011; Pfeffer, 2011). Indeed, for the purposes of comparison, the various facets of organised education achieved 327 mentions (discussed later).

> *RQ12:43: Some media influences like television advertisements and programs, also educational influences like university lectures or pastoral sessions throughout secondary education.*
>
> *Pilot:5: The media*
>
> *RQ12:21: Media, lectures and the Internet*
>
> *RQ12:4: The media and education*
>
> *RQ123:360: Lectures, internet, TV, news, newspaper*
>
> *RQ12:61: the news and the media*
>
> *RQ123:8: School, news, social media*
>
> *QR123:36: Increasing knowledge of related issues that we face today. Often led by media, uni, news*
>
> *RQ123:19: Studying economics, business and geography, watching news reports and noticing the growing importance of marketing and its link to sustainability*
>
> *RQ123:120: One thing that has influenced me is the media. The media constantly talk about how difficult things will be in life 20+ years from now if we continue like we do*
>
> *RQ123:127: This perspective has been influenced by any type of media I have viewed in relation to sustainability*
>
> *RQ123:173: A level geography, BBC news and general knowledge*
>
> *RQ123:237: Mainly my course at university and social media, and it is visible to the eye that if nothing is done against preserving earth then there is no future*
>
> *RQ123:271: From the news and recent figures produced showing are finite resources are depleting and will one day run out*

As can be derived from the above excerpts, often, when media and its connotations were mentioned, it was alongside other drivers, sometimes implying a hierarchy. This is also reflected in the interviews and focus groups. For instance, Interviewee 7 initially discussed the influence of university and first-hand experiences. It was only when asked for any other drivers that the media was mentioned.

> *I7:*
>
> *C: So, the things that are influencing your perspective on sustainability, am I right in summarising are: you're first hand experiences of seeing the consequences of poor business practice…*
>
> *R: yeah*
>
> *C: …and business practise in society and so on, so it's first hand experiences. Coloured then by your experiences in university?*
>
> *R: Yeah my awareness I've gotten from university, education as well, yeah. It makes it more obvious. I now see what things are. Really it's different having an opinion and thinking oh this is right this wrong, but then coming to school and learning what things are and what should actually change and what things are.*
>
> *C: Yes. It has helped inform that view and strengthen that view?*
>
> *R: Yes*
>
> *C: That's very interesting. Do you have any other influences on this perspective you have? Has anything else influenced you?*
>
> *R: Maybe the media. Because like I said, I'm green so I tend to watch a lot of documentaries and listen to and read a lot of news and things that concern the world or the environment - like with food. There was one documentary I watched a few years ago about you cannot believe that the war that we're running out - that there is a food shortage. A war, like this is a fact. It can't be, well it is true and you see people throwing away food, and hear about this, and what about GM products, how about droughts here. And you know, some people leaving. You have these things in your mind and you think, this is absolutely there are some places that haven't had rain or water for so long that people are actually dying of hunger. So all of them, because of the media as well, because it's giving me more awareness, and the more aware I am, the more I want to learn about it, and know what things are happening, and*

know what people are saying about it, and what ways they are making things better.

C: Yes. So we've got your first hand experiences then, from your locality in western Africa. You've got the information and the theory you are learning in university and how that's informing your view, and your conceptualisation is also formed through the media.

R: Yes

C: Anything else?

R: No. I can't think of anything. No, there's probably other things but no – there maybe things I can't pinpoint about where information and knowledge from. I think, okay, I'm following this. I come to school I love being in school because you are teaching me so much. And then I pull myself back in situations when I go back home or when I'm back home and I see these things in practice like seeing it in real life. Not just someone telling me so. Saying I these people in China, or these people did that there. You are actually seeing all these things for real.

I3 also discussed media, but only fleetingly, framing her very limited time at university as being more influential.

I3:

C: What informed those perceptions, what influenced those conceptualisations of yours?

R: My lectures really. Before I came to university I didn't really have any idea at all. But I've learnt, I mean, we've had to, in the first module I did, we had write an essay all about sustainability, it was only 500 words or something, but it was part of a larger essay and what we've learnt and what we've known before. It was more of a reflective essay. So yeah, I mean university has informed me a lot more than I was before.

C: So some of your impressions some of your thoughts have come clearly from university. Where else has that come from? Throughout your life, what's helped to inform these views of yours?

R: I mean I watch news. I mean issues that are covered there. But then you have to think that the stories might be biased. So like, you know, sometimes you have scientists on there saying that global warming's not a thing, that it doesn't exist, then you have someone saying it does,

there's obviously a lot of conflicting views on the news but yeah from there really. But sort of growing up, I mean obviously, at home we would always have recycling bins and stuff but that is as far as it's gone really, in my household growing up. In previous schools, secondary schools it wasn't really a topic.

However, FG2 suggested media straight away.

FG2:

C: Ok, marvellous. What do you think are the drivers behind that disparity, why is there that disparity?

R1: The media

R2: yeah

C: media?

R3: The Inconvenient Truth, was the Al Gore film, that made everyone kind of switched on to climate change and from there sustainability. You just automatically link the two. Yeah. I bit more, but maybe not before that test. I pretty much nine times out of ten you think sustainability you think of polar bears and melting ice caps that kind of thing, switching your lights off when you leave the room, and obviously there is more to it than that - but that is what I think.

C: Ok thank you.

R4: And news articles and they talk about oil and such, they all use the word sustainable so if you keep hearing it over and over as soon as someone says sustainable to you, you're going to think of where your heard it and about resources that aren't sustainable.

FG3 implied a media influence on their perceptions of sustainability, alongside the more explicitly discussed role of conformity through fashion, image and trends. This was embedded in their conversations about environmentally-friendlier cars, as seen on television shows such as Top Gear:

FG3:

R3: But, you see these cars here, I think the reason why people don't get them is just they don't look good like

R2: But they do! Have you seen the new one? They do though.

R1: Have you seen the new Tesla?

R3: Yeah, I think I've seen that one. But how much is it like I dunno?

R1: It's about £80,000.

R3: As they get better people will buy them. Like if you look at the new BMW the electric one. It's half electric, half…

R1: Did you see that one top gear on Top Gear?

R3: Yeah I saw it on Top Gear.

R1: That's not actually that good. Didn't they find out it's only 27 mpg or 20 mpg?

R3: It's not really that good as well and you have to charge it like probably like every 5 hours

R1: It just looks crap.

R3: Yes. But as I say, as they get better, as they start to look better, people can probably say, 'you know what, that's something that I can drive', but if you look at these little ones it's not really something that I can drive, not cool.

C: So fashion. Is it fashion, image, what word would you use to describe that influence on how you perceive sustainability?

R2: Yeah, fashion, people, yes, looking nice is better.

R4: Trends

R1: Yes, trends,

R3: Yeah I probably go with that like

R1: Yeah the only reason you would buy like one of those electric cars or some sort of hybrid or whatever they are, is simply because you want to do it for the environment.

R2: You are not doing it for looks.

R1: But if anyone actually knows cars you realise, that's a car but not actually that good. I'd would much rather buy a second hand BMW which is half the cost and three times better as a car, but that's just from a person that knows cars. You don't, the only reason you would actually buy - no actually it was the hybrid cars the new one the Toyota.

C: So does this influence how people perceive sustainability do you think? Is this a driver behind people's perceptions of sustainability?

R1: I think it helps understand why we might not be moving as quickly as we should.

C: Right okay. Can you explain that a bit more?

R1: Well like we were saying, it's about conformity isn't it. So you are going to conform if other people do it. But it's getting that trend started. That's what I think we're missing. I mean it's begun, like to do with sustainability especially at Plymouth Uni. Like, you've even got it like printed on the grass. Like, but it's just getting the trend just getting more people to talk about it and getting it all…

R2: Yer, awareness.

I2 referred to the media as having influenced his perspective, in terms of the part the media plays in establishing a company's reputation. The beginning of his excerpt also alludes to another driver – that of his peers, the deemed negative behaviours of people around him:

I2:

R: I mean what I see around me every day is probably a big one as well. Because when you see people like it's, an ideal example is like university halls. Like I said about ten times, and apparently people have said last year, and the year before – there's so much waste from halls. No there's so much like bottles and cans and, well bottles and cans from drinking beer too much admittedly, but there's so much things that could be recycled like in these halls. I mean, I don't know if it's just a Plymouth thing, we don't have recycling in Plymouth halls, or whether its nationwide in halls, or whether it's even further than nationwide. People just seem to waste so much and they don't even realise they are doing it, that's the sad thing about it. I mean that influences my perception of

sustainability a lot. And companies I guess do it as well, because you look at companies and you think some of them, you think 'you shit'. And then others you think you're helping out because, but some companies are really bad for it, like yeah.

C: Give me some examples of what you mean about companies which are good and then companies which are really bad for it.

R: Yeah the companies that are good for it, they're sort of, like the Co-op is really good example of a good company because they recycle, they use everything fair trade. I mean, if every supermarket used that philosophy it would be a lot greener place. I mean, I know supermarkets do recycle and they do, but it seems the Cooperative are more sort of, they're trying harder to do it rather than companies that are having a negative effect. Companies probably like Nestle is one.

C: In what way?

R: I mean, in the way - did you see that thing on the news wanted to patent a flower? This flower, wherever they are based, and this flower has these healing properties, it had some sort of property, and they wanted to patent it. Put a patent on a flower! And see things like that. Like Nestle have said they want to privatise water, that water isn't a right. Things like that. It's just its quotes like that. Then there's so much things like the Kit Kat advert, the orangutan fingers. That's more company and media affecting my view on sustainability.

C: Right that's quite interesting because the two companies you discussed there, which influence your perception of sustainability, they seem to be green issues? Would that be fair to say?

R: Yes. Yeah.

In a similar vein to I3, I6 also included the media alongside higher education. She also referred to general discussions, again, pointing to the influence of other people on her perceptions of sustainability, although manifested more positively than I2:

I6:

C: Ok that's interesting that's an interesting perspective that you've got. What's influenced that perspective?

R: ummm

C: What's informed your view of sustainability?

R: Well for example when people talk about climate change in terms of sustainability they are always saying: well it's about the future, the way we are using resources now. It's not technically sustainable if we are to continue it in the long run. Hence why I'm thinking the long run because pretty much whenever anyone mentions sustainability it's always about the long run. And that is to me, what it is about.

C: Okay, so 'when people talk about it', you say? What do you mean by 'when people talk about it'? Which people, where, when?

R: Anywhere from lectures, tutorials, news, journals, anything.

C: Right, so the things which are influencing your perspective of what sustainability means, what it is, is coming from higher education because you said lectures, from the media you said…

R: Media, yep

C: …Where else, what else has influenced this? Throughout your life, what is influencing this?

R: I suppose just the impact of general discussions with colleagues and friends

C: ok so social chat and so on so your social circles are influencing your perspective higher education, you mention and the media

R: Yep

Similarly, I4 recognised the influence of her contemporaries, elaborating further than I6 and FG3 in that it works both ways – her flatmates influencing her, and she influencing them. Interestingly, her discourse is again couched in environmental terms, and the role of the university and lectures is threaded throughout:

I4

C: …what does sustainability mean to you?

R: Well actually, it has come to my realisation, I think it does need to happen especially as I do currently live with an environmental science

student and a geography student. Constantly I'm getting water levels rising and especially in exam time they are throwing out facts saying that countries won't be available, that the Maldives will be gone in 10 years. And it's almost like we're going to lose the all the luxuries and they are all going to go. And it's quite worrying. Living with them makes it quite visible all the time. I think it just means like we're losing stuff already, so it's only going to run out. So you kind of even think of even your kids are going to have nothing and even their kids will have even worse. So kind of, it makes me a bit selfish I think.

….

R: …So I feel that something needs to happen.

C: Something needs to happen.

R: This uni is good at starting it I feel.

C: Okay, thank you. You touched earlier on about the influence that your housemates are having over your conceptions of what sustainability means and what we're talking about. What else has influenced your perception of what sustainability means?

R: We had a lecture in our business - in our business module that was about Nestle Palm Oil and actually it was about sustainability. And we watched this horrific video about a chimpanzee biting – no - a Kit Kat and it turns into a chimpanzee's finger and that was horrible. That was a good lecture anyway, but it got to that video and actually, wow! Like that is horrible. And I went home and I showed my flatmates and now they have actually gone to the People and Planets Society and they have put the video onto that. So, it actually was good so we shared the information from the lecture that I had learnt. Shared it to them, they hated it and we have started this thing in our flat where we can't buy Nestle products.

C: Right.

R: Yeah.

C: Gosh, so you're influenced first of all by flatmates and your contemporaries around you, you're influenced by some of the things that have been covered within the business school as part of the curriculum…

R: Yeah. There were a few of them, but then you go home and they are reinforced by flatmates because they are really interested.

C: when you say go home and tell them…

R: Oh my flatmates. Yeah, they seemed really interested so I kind of would share my lectures with them almost.

As can be seen from I4's account, she referred directly to a media campaign against Nestle and its product: Kit Kat. This media clip was apparently used in a lecture elsewhere in their studies and seems to have had an impact as it was also referred to directly by I2 above, and FG3:

FG3:

R3: Same here. Because when I came here, well I have heard of in the media, but I didn't really like care about it, not care about it – just didn't really think about it. But obviously, when I started the course that's when I started to think about it. Obviously we did this Nestle thing with cutting down trees

R2: Yes, Kit Kats. I've had to stop having Kit Kats because I didn't know before.

….

R4: What's the Kit Kat?

R1: They are using some oil from a tree or something like that and then saying that they are killing one of the types of animals there really shocking advert where they're eating the finger from the animal.

R2: Really shocking I know, it thoroughly put me off. Yeah that's the advert.

As demonstrated by Figure 19, and as alluded to in discussions and much of excerpts so far, education and its various connotations and stages, features significantly in the students' responses when considering the drivers behind their sensemaking of sustainability. For example:

I2:

C: Thank you, what has influenced your perspective of what sustainability is?

R: Education

C: Education? Could you expand on that please?

R: Well, when you go through primary, secondary and sixth form college, they put a lot of emphasis on sustainability and here in university they put, we've had to do sustainability test and modules not modules like within a module they'll like talk about sustainability even in accounting they will talking about sustainability, which I was surprised about. So education plays a big part in how I think about sustainability.

The importance of education across the stages also featured in FG2's discussions. The conversation appears to indicate the presence of the sustainability skew in educational institutions. Interestingly, the participants recognised this as a limitation, suggesting that a broader perspective is required to incorporate other issues such as child poverty.

FG2:

R7: Education

R10: I'd say now its education…

C: Education?

R10: …we are being taught about it now - obviously only select things, so maybe it should become more of a widespread kind of thing instead of just in the business kind of part of it. It's like the university is always going on about sustainability and how it's like top in the lists or whatever. One our lecturers turned round and pretty much went, 'Puh, I don't see how. Just for turning off a few lights every now and then.' She said she can't see it, so it's clearly something that is trying to be incorporated, but a lot of people still aren't learning about it. So although it is coming into education and we've been learning about it and stuff, a lot of people still aren't.

C: Right, so education's a driver. There are 4, 5 of you that nodded your head and said 'yes' to that. How else do you think education has informed your view?

R4: Primary

C: Primary school? Ok, in what way?

R4: As young kids you're often told to put, you know, paper in the recycling bin and turning the lights off again – the same kind of things, because you are saving the environment. And that's the term that always crops up. If that's been put in your head from a young age, then that's what you're going to focus on.

C: Ok, so again there's still that environmental focus,…

R8: If you learnt more in schools, they look more at, like, local issues and national issues. Whereas there are global issues. So you won't be addressing child hunger poverty, you'll look - say what's happening within the UK, so you won't see those things. So when they do say sustainability within the UK, it would be the environment because we don't have as many problems outside of that. So perhaps we need to address more of a global issue in schools instead of just a national issue.

C: Ok, thank you.

Also making reference to the imbalance between dimensions, I3 spoke about the role school played in *pushing* recycling, rationalising it as being *"a really easy change that people can make"*, implying the low-hanging fruit analogy (Makower, 2014).

I3:

R: yeah I think the recycling thing is sort of really pushed while you're at school and stuff because you can do that really easily at home it's like something that everyone can do and everyone does on a daily basis, everyone throws stuff in the bin so that's like a really easy change that people can make so I think that why it's probably heavily focused on.

I3 went on to argue that sustainability needed to be covered in school more thoroughly in order to increase awareness and illicit change:

R: I just think there needs to be a lot more awareness really I don't think people are very clued up on it. It's probably myself included as well. I don't know, it's not something that's at the back of everyone's mind I think. It's not really talked about, known about as much as it should be. It should be taught in schools more and there would be more of a sort of, more of an awareness because at the moment people don't really, don't really know what they are on about and I think that's why we are not really seeing much difference.

Some respondents actively dismissed education, particularly at school level, as a driver. For instance FG1:R1 stressed the narrowness of provision at school, and, similar to FG2's discussions, recognised this as a limitation:

FG1:

R2: I think socialisation and education, school, high school and also the media there are lots of documentaries. It's all over the news and the work place as well – they try to be sustainable.

C: Ok thank you.

R1: I, mine wasn't from school because, to be honest, this is the first time going through the education thing / going through the education system that I have really had to do anything to do with sustainability. Like the word in itself hasn't come up all through college 6th form, secondary school and primary school. You get obviously, you get taught about renewable energy and stuff but you don't, I don't know, it never really gets explained to you until it's, I don't know, whether that was just because of the schools I went to, but I think that it would be good if people started to have knowledge at an earlier age of what sustainability is and my, I would say I've formed it from the news, social media and things that are televised.

C: Ok thank you.

R3: For me, I did learn some of it in school, like A-levels and stuff, especially in the environmental side. But for the other stuff, was mostly just media, newspaper, internet and other things - things like that.

An unanticipated finding from the data, and perhaps offering an opportunity for further research, is the importance that the respondents placed on the role of

Geography GCSE and A-Level in influencing their conceptualisations of sustainability. Indeed 38 of the questionnaire respondents referred to it directly. To put that in context, although it is not known how many students elected Geography GCSE or A-level (with it not being a 'compulsory' subject), the other school-level subjects which featured in the questionnaires were 'business' (x7), 'economics' (x6), 'biology' (x3), 'sociology' (x1), and 'science' (x1).

> *RQ123:62: A level and GCSE geography*
>
> *RQ123:326: Study of geography, biology and business A-levels and GCSE*
>
> *RQ123:362: Doing geography through school and college and generally being interested in the environment*
>
> *RQ12:35: Studying sustainability in other subjects such as geography.*
>
> *Pilot: 13: Geography A level*
>
> *Pilot: 4: Geography GCSE*

This relationship was further explored through the interviews and focus groups. I2 volunteered geography and history as drivers. History was not mentioned by anyone else in this study. I2 anticipated that their geography-influenced perception would be carried forward with them into their future career, expressing it in 'green' terms.

> *I2:*
>
> *C: Was there any particular aspect of your formal education, any particular subject which influenced your perception of sustainability more than others?*
>
> *R: Probably the humanities: geography, history. Definitely geography because you do the whole - like that's pretty much what your GSCE is about.*
>
> *C: Yes.*
>
> *R: So definitely geography*

C: And do you think that that the influence geography GCSE had, are you going to take it with you to your future role as a manager?

R: Yes. I mean, I would like to think that when I am a manager, (I might just be stuck in a call centre somewhere) that, yeah well, hopefully if I get where I want to be, then I hope that I'm going to stay green.

Also couching it in environmental terms, I4 likewise cited geography as an important influencing factor behind their conceptualisations of sustainability.

I4:

R: I studied geography A-level

C: Right ok, so tell me some more about this.

R: We learnt loads. It's just stuff like you see all the methods of recycling and what not then you also do see the effects. I remember watching this video on the undersea Maldives meeting we had to show what it's like to have a meeting under sea level and obviously you can't live under water.

C: Right

R: I thought that was really cool actually. And, so kind of I also had to go to the Maldives a few years ago and people all say they want to go kind of like I feel like a bit mean almost but there's loads of things we do in geography like climate change and glaciation and that's all like completely going and sea levels rising massively and those other effects with like climate change that were imposing on it. Temperatures and all fruits and stuff even things growing, they can't deal with the new temperatures so then it could lead to a loss of food and loads of effects that people don't realise. People kind of think, "I like hot weather". Really it's actually, it's not what the environments meant to do. It's going to kill most of what you're used to.

One of the rationales behind the chosen cohort for this study was that the module was delivered during the first semester of the first year of their degree programmes, when the students were at the very beginning of their university career. So, taking the point

raised by Van Maanen and Schein (1979), of being taught to see the world as the more experienced do, it was thought that the students would be less likely to be overly-socialised and influenced by the university's own espoused sensemaking of sustainability. Yet, as can be seen by Figure 19, even so early in their collective university careers, the data seems to strongly suggest that PU, and its teachings are directly influencing student perspectives of sustainability. Further, that 'lectures' was the most frequently cited single driver in the questionnaires (98 times). This perhaps signals a *"disruption"* to the reliability of their understanding (Perey, 2015:152), in that the university experience appears to have interrupted the flow of experience and become an extracted cue upon which meaning is constructed (Weick, 1995).

As a case in point, having previously discussed their sensemaking of sustainability, and identifying *"different factors" ("…money…profit…sustainability in the work force…over a long period of time…health and safety…whether workers are happy…wellbeing…environmental")*, I1 went on to explain and confirm that prior to coming to PU, she had only really considered the environmental aspects:

> *I1*
>
> *C: Okay, thank you very much. What do you think has influenced your perception of sustainability?*
>
> *R: In terms of like the business side I've very much learnt from the sort of module.*
>
> *C: Which module is that?*
>
> *R: The one we did – the HRS101. So I've seen it from that perspective, because I'd always thought of it as more of a broadly spoken in the newspapers about environment and stuff like that.*
>
> *C: Right*
>
> *R: Whether it's a non-sustainable world, sort of thing.*

C: So that's quite interesting, before you took the HRS module…

R: Yes

C: …you had considered sustainability more in its environmental terms?

R: Yes. But not in as much detail as sort of what I've learnt now - about business terms.

C: Right, so ok, that's a very interesting point actually. So before you came to university you had thought of sustainability (please correct me if I'm wrong), you had thought of sustainability in environmental terms

R: Yes

C: But since coming to university you are now looking at it from an organisational perspective

R: Absolutely. Yep.

C: Which now includes the economic factor

R: and the worker

C: and the workers, from the point of view of the workers and the wellbeing

R: yep

C: in the organisation

C: That's very interesting, so university has clearly influenced your perspective?

R: Yeah. Absolutely.

Similarly, I3 acknowledged that, prior to coming to PU, sustainability was not something she felt informed about.

I3:

R: My lectures really. Before I came to university I didn't really have any idea at all. But I've learnt, I mean, we've had to, in the first module I did, we had write an essay all about sustainability, it was only 500 words or something, but it was part of a larger essay and what we've learnt and

> *what we've known before. It was more of a reflective essay. So yeah, I mean university has informed me a lot more than I was before.*

Indeed, these findings are also reflected in the surveys. Of the 468 students who answered the question, "What has influenced this perspective?" a combined total of 149 referred explicitly to the role that university, lectures and/or modules have played in being drivers behind their perspectives of sustainability – which often directly challenged and broadened previously-held conceptions.

> *RQ12: 83: Most of the lectures on university have made me have a different perspective on sustainability. Saving the planet was always what i looked at but it made me realise how bad it gets and I try to stop it.*
>
> *RQ123:65: Plymouth universitys approach to sustainability*
>
> *RQ123:278: Studying at university. I have learnt a lot more than I previously knew*
>
> *RQ123:301: University lecture talks and reading around the subject during assignments*
>
> *RQ12:59: World of Enterprise has significantly influenced this perspective as this module definitely opened my eyes to the world and how fossil fuels will not last forever.*
>
> *RQ12:7: Reading material on sustainability, attending lectures, own thinking, working in SCM, research into sustainable practices*
>
> *RQ12:55: This perspective has been influenced by different lectures I've attended and things I've heard*
>
> *RQ123:152: Previous lectures have influenced this perspective*
>
> *RQ123:244: Lectures as I didn't have a clue what it was before*

Indeed, within the literature, it is widely suggested that HE is a generator of the values of society, providing a prime context for engaging future managers with sustainability, not least because it offers a fertile ground for critical thinking and innovation (e.g.

Parkes, 2012; Ryan & Tilbury, 2013; Muff et al., 2013; Hesselbarth & Schaltegger, 2014; Godemann et al., 2014; Adomssent et al., 2014; Bessant et al., 2015). Given the highly influential socio-economic nature of business, it is increasingly recognised as pertinent how sustainability is considered in management education (Hesselbarth & Schaltegger, 2014). Sustainability-based education is, however, at the emerging phase, with limited knowledge and expertise regarding the best way forward to most effectively educate the next generation of managers in becoming change agents for sustainability (Johnston, 2013; Hesselbarth & Schaltegger, 2014). Given then, that the students in this study appear to have been influenced by the university's own espoused sensemaking of sustainability, it was perhaps prudent to consider the role of HE and more particularly, business schools in educating the next generation of managers and so was added to the question guide for the latter focus groups and interviews. This perhaps presents a fertile ground for further research, and although this is not explicit within this study's research questions, it does resonate as a driver (research question 1b), was derived from the participants, and is in the spirit of explorative research.

FG3:

C: …What do you think the role of the business school is with regards to sustainability?

R1: Well, they want you to go to corporations or start your own business, and sort of make sure you understand it, make sure you've got social responsibility and just generally think in the long term.

R2: I think if they're preparing us – if we're the leaders of tomorrow, they have to prepare us, and sustainability is a big issue right now and it's only going to get bigger and humongouser. Basically Plymouth University have to prepare us, or we are not getting our money's worth.

C: Right. So Plymouth University have a very important role, they are there to prepare us or you are not getting your money's worth.

R2: That's how I see it.

C: Interesting. I might quote that somewhere!

R1: Why isn't it brought up in A-levels and GCSE though?

R4: I think it's bought up but not in a very effective way.

R2: Also I think people of that age are not really interested, but when you are at university you are kind of more adultish.

R1: You're learning more about life rather than being forced to do something that…

R4: You become more independent.

R2: Yes! Yes, that's what I mean. But at university I think people are more adult and you can I don't know it's like…

R3: mature.

R2: Yes. More mature to understand that actually what sustainability is. Like I said, at A-level they give you ideas but at university it's higher learning, they are not scared of giving you, making you think, and you know, ponder on what sustainability or how does it affect me, or how it's going to affect the company or the company staff or you know.

C: What do you think is the role of the business school?

R3: I dunno. I think it's a new thing sustainability like I totally just started a few years ago I dunno. I remember in one of the lectures I don't know whether it was yours or another one but they were talking about in the 80's or something when computers just started firstly the business school what they did was teach people about technology and stuff to get that generation into like

R1: giving them the skills

R3: teaching them how about obviously for in the workplace, which is what technology is about so they were given that knowledge about technology and computers and stuff. So now we are already there, so they're focusing on saving the planet now so that's why they are teaching us about all this green stuff.

C: green stuff?

R3: Yeah cause obviously, it's all about now like looking after the next generation and stuff like that.

C: So teaching the skills necessary for the future?

R3: Yeah yeah, and like saving the planet and give it a bit more time, before we mess it up

C: Okay, thank you.

C: What do you think the role of the business school is?

R4: I think they've sort of like helped us to realise how sustainability affects things within a business sort of environment as opposed to like green

C: So from the business perspective?

R4: sort of like yeah, finance and also like the workers.

R1: and the corporate responsibility

R3: Yeah. That word I have never heard that word before, but now I'm so obsessed with corporate social responsibility and that. All the big companies they have to sit up!

C: What do you think the role of the business school is with regards to sustainability?

R1: I think just to make sure that the people being taught here all go out knowing more about sustainability and then hopefully implementing it.

Taking the points raised by FG3, encouragingly, the expectation that management education institutions should be at the forefront of both thought and deed regarding responsible management practice and sustainability issues is reflected with the UN-supported Principles of Responsible Management Education (PRME) of 2007. Likewise, the Deans at the 2009 European Foundation for Management Development (EFMD) Conference, agreed unanimously that business schools have a key role to play, and thus should do more, in influencing students so that their future in-work decision-making and behaviour reflects globally responsible leadership (Rayment & Smith, 2013). Indeed, Sterling argues that developing sustainability literate global citizens is "*one of the most significant and pressing issues for higher education in the 21st*

century." (2012:11). I2 appears to agree with the literature, arguing that business school graduates will probably occupy a leadership role of some type at some point during their career, and will thus be in a position to influence decision-making:

> *I2:*
>
> *R: I think the business school might have the biggest role to play really. Because like you say because hopefully we're the next generation of management, middle management, supervisors and all the rest of the bull-shit terms you want to call 'boss'. Yeah, I do think it's important because we've got to have sustainable ideas because otherwise we will just be a replica of companies now. And I think it's important that we, as a generation, do something because slowly we're running out of time. It's sort of like a big clock and its slowly ticking down and it will be interesting to see when it does hit zero what happens, but I guess yeah no. I definitely think business has got to have a big part to play.*
>
> *C: so they've got a big part to play because we don't want to…*
>
> *R: …because we'll be the boss of someone else and then that will be our chance for us to put our views across to them, or lead the company or try and lead the company in a different way. Like I said earlier, you might have all these great ideas about sustainability but if you're management and you'll/I'll probably have a boss and if he says do this you do it. You jump to. You don't you don't sit there and argue so in I guess in a way a lot of it depends on where you get your next job after university. But yes, I would definitely say the business school has a part to play in sustainability.*

The literature suggests that students, partly due to employability drivers and partly because of their own sense of ethics and responsibility, are keen to gain the necessary skills to enable sustainable change in their working lives (Sterling, 2012), a sentiment supported by FG3 and I2 above. A broad and significant survey of around 25,000 university and college applicants in 2007/08 by Forum for the Future and UCAS found that nearly two-thirds of the respondents wanted more sustainable development coverage within curriculum content (UCAS/Forum for the Future, 2008). The HEA

found that the vast majority (over four-fifths) of students consistently believe that sustainability should be actively incorporated and promoted by universities, and this increases as respondents progress through their studies; Over two thirds consistently believe that sustainability should be covered by their university courses with over 60% of students wanting to learn more about it (Drayson et al., 2014). Similarly, unlooked for, participants in this study voluntarily called on PBS to, *"Accelerate programs please"* (RQ123:281); for *"More education on sustainability"* (RQ123:16); and that *"We should be educated more"* (RQ123:330). I7 went further and suggested sustainability provision should move from being a "*choice*" to being made "*compulsory*", because even if a student has no interest in it now, it will be an expected competence when they enter the work place - that the proverbial ball is in the providers of sustainability education's court:

> *I7:*
>
> *R: The more I know about it, the more I learn in class, the more I learn academically, then the more I hope. So as teachers, the ball is now in your court. You must teach us what you want us to go and do, what you think we should learn. That will help us because this is like I said, if companies are not sustainable, they just won't last. So if you know, you need to give us the knowledge we can go now and implement.*
>
> *C: right so you think it is part of the role of the business school…*
>
> *R: …Yes, I agree, it should be part of the role of the business school, I think it should. Yeah it should be, it should even be made compulsory. So for some people, even if they don't choose to do it, if they hear it, if they then one day become managers, once they've heard it, I don't know whether you understand, if they become managers they will have an idea what it is. Because I look at myself I don't really know everything, but I have an idea about a lot of things. So even if it is not something they are interested in at uni, because they've heard it, if they go there and then the companies asking things about sustainability, they can go "oh ok we've heard something about this". They have an idea about what they should do and what needs to be done. Because now it's more*

> *of a choice for us. And even if someone is not interested in such things, it's what an organisation should be doing - working to sustainability. So all students that want to be managers should know how to help their companies be more sustainable.*

It seems that sustainability is meaningful to FG3, I2 and I7 in terms of a skill set that they would carry into their future careers. Indeed, organisations are increasingly demonstrating a sustainability dimension in their resourcing requirements and agendas, with sustainability-related abilities becoming a key competence within an increasing number of careers and appointments (e.g. Cade, 2008; Sterling, 2012; Hesselbarth & Schaltegger, 2014).

7.4 Sustainability Literacy:

Sustainability literacy refers to an individual's insight, perspective and understanding of issues relating to sustainability, and the ability to make reasoned, strategic choices which are conducive to sustainable development (Parkin et al., 2004; Murray & Cotgrave, 2007; Stibbe, 2009; Murray, 2011; Winter & Cotton, 2012; Kokkarinen & Cotgrave, 2013). Significantly, the UK Government has recognised sustainability literacy as a *"core competency for professional graduates*" (HM Government, 2005:16), and there is a growing demand for HEIs to demonstrate advancement in this area, for a metric to gauge student progression and to assess the effectiveness of the curricula and pedagogy in achieving sustainability literate graduates (e.g. Zwickle et al., 2014; Carteron & Decamps, 2014). In 2014, a tool created by the academic community and UN-based agencies was launched - the global Sustainability Literacy Test (Sulite) (Carteron & Decamps, 2014). 360 of the 530 PBS students making up this study took part in the pilot. Therefore, it was pertinent to ask within the scope of this study,

whether and in what ways taking the Sustainability Literacy Test influenced how they felt towards and perceived sustainability.

I4:

C: You did. Right. How did that make you feel doing that test?

R: It made me feel a bit shocked actually, because, if I'm honest, some of the things the test was on I wasn't even aware of some of them. So it was kind of a bit shocking to realise that there was all these organisational problems. And I was like oh I didn't - I wasn't even sure that was happening. So then it kind of does make you think that there's a lot of the world I don't know about. So it makes you want to kind of think 'I didn't know about', that there could be thousands of things going on and there could be problems everywhere that you don't know about. So when you kind of thing like its fine here, everything's fine, there could be crisis somewhere else. So I just think it's, yeah, you have got to think about everyone and it's a bit selfish just to look at what's in front of you and what your life is, because then you've got all these like - in the literacy test they were things (I don't know it was in - I can't remember the country - I want to say a country but it's probably going to be wrong), I remember it was loads of stuff was happening there and this was just like a few months ago, but I remember not having a clue that a quite lot of things were happening, and I just felt really like out of it just like there's a whole world and I'm living in my bubble. So it was very - bit surreal that feeling.

C: Right that's very interesting. So am I interpreting you right when I say it expanded your view of what sustainability is?

R: Yes. Made me realise I want to know a bit more on what else there is.

C: I like that comment, you said it made you look outside your bubble, you were living in a bubble. It expanded your view to look outside of that. Okay, so that test, is it likely to put you off sustainability do you think?

R: No, I wouldn't say it put me off, I would say it just made me think about it and it gave me things to like research and stuff, and they were things I could also I brought to my flatmates and tell them about like. I couldn't make give them the test because like I didn't know how to do that. But then I did go home and ask them 'Did you know about this, and did you know this?' And I think a few of them they had studied in their course, but other things they didn't know about.

C: Right, so the test triggered discussion then?

R: Yes. Yeah. I mean, me and my flatmates we talk about pretty much everything

C: Well that's good so it didn't turn you off sustainability,

R: No

C: It didn't put you off and it actually triggered discussion and it actually expanded your world view of sustainability. Have I summarised that correctly?

R: Yep.

So the test appears to have expanded the world view of I4, triggered discussion with peers outside of the context, and made them want to *"know a bit more".* Expanding the world view was also referred to in FG1, in terms of *"stretch[ing] your concept".* The group articulated how their conceptualisations of sustainability broadened from environmental connotations before the test, to include more social-human dimensions having taken the test:

FG1:

R2: It's just interesting. It goes on every day, it's becoming much more significant as we the world ages. I just think it's just so relevant to today's world.

P[7]*: Ok, so doing the test kind of hit that buzzer of this is relevant to life? Ok.*

R2: Yeah. Definitely.

P: So it's made you think: Yeah. I'm more interested in this.

R1: Yeah. I would say so because it makes you - it's happening, it's not something that like humans as species we don't really, I don't know, it's

[7] 'P' denotes a colleague from the Centre for Sustainable Futures with a co-ordinating role between the Sustainability Executive and the test creators, who helped with the administration of the test and was interested in the implications from a pedagogic perspective.

hard to explain it, in the future where everyone thinks, Oh yeah, that will be alright, someone else will take care of it. But because you know it's happening now. You sort of have to do it for the future rather than – because it is happening now, like there's no denying there's global warming and stuff.

P: Ok.

R2: And also, there were some topics that you wouldn't really, sort of, link with sustainability. Which was interesting because I didn't know about those topics and sustainability...which made it more interesting.

P: So it stretched your concept of what sustainability was all about? Because it was asking these questions about these things that you thought: oh I didn't realise that was linked to sustainability?

R2: Yeah. Yeah. So I want to know why they are linked now.

P: Great.

C: That's very interesting. So, can I ask, what was your conceptualisation of sustainability before the test?

R2: Just recycling. Literally, just recycling. Because there are so many words isn't there, linked to sustainability. Just recycling, eco-friendly. I didn't realise about the humanity aspect of it, which xxxx touched on about poverty and stuff like that. I wouldn't have linked that to sustainability at all.

P: Right. Yeah, just about being green.

R2: Yeah. Exactly, just about being green.

C: What do you think?

R3: Basically I thought of sustainability as environmental issues: recycling, global warming, everything else. But now I realise it's got economic and social as well. So I don't even know much of that first when I saw some stuff in the exam / on the test, I didn't even know what some of the things meant. But now I know a lot about what it means.

R1: I was quite shocked to find out there was quite a lot of politics involved. Dates and stuff like that - I didn't know how that was relevant. It would have been good to know at the end why it was relevant.

P: Yeah. So again, it's that educational potential of the test. That could be followed up in modules and future studies and could also be integrated into the test in some shape or form.

R3: Yeah. Yeah. Definitely.

C: xxxx, what did you think about the conceptualisation of sustainability before the test and then after the test

R1: I have to admit I didn't just think it was green, I wouldn't say I had a broad knowledge on the subject, but I knew it was more than just renewable energy and being green, but the test really opened my eyes as to what / how broad when you say sustainability actually is.

C: Yeah.

R1: Because as soon as you say sustainability you immediately think renewable energy, recycling and trying to lower the amount of fossil fuels we use, but, it was quite interesting to find out that sustainability is more.

Expanding the student's perception of what sustainability is was also reflected in I3's dialogue, suggesting how the Sulite perhaps helped to balance the sustainability skew, and played an active role in stoking interest thereby encouraging further engagement with the field:

I3:

C: …Can you remember back when you did the Sulite, how did that affect your opinions, how you felt about sustainability?

R: There was a lot of stuff on there that I didn't actually know a lot about. So I was a bit like 'oooh maybe I should sort of look all this stuff up'. So a lot of questions I really don't know but a lot of the questions I just had to pick a random answer because I didn't really, didn't know anything about it. Whereas some of my friends which did it as well where like oh, you know, I found it really interesting and we knew stuff so yeah

C: Okay. Did it turn you off sustainability at all?

R: No. No I wouldn't say so.

C: Okay, if I could just pick up on something you said just then when you said, "Oh this is something I need to know more about", or words to that effect…

R: yeah

C: …can you expand on that please?

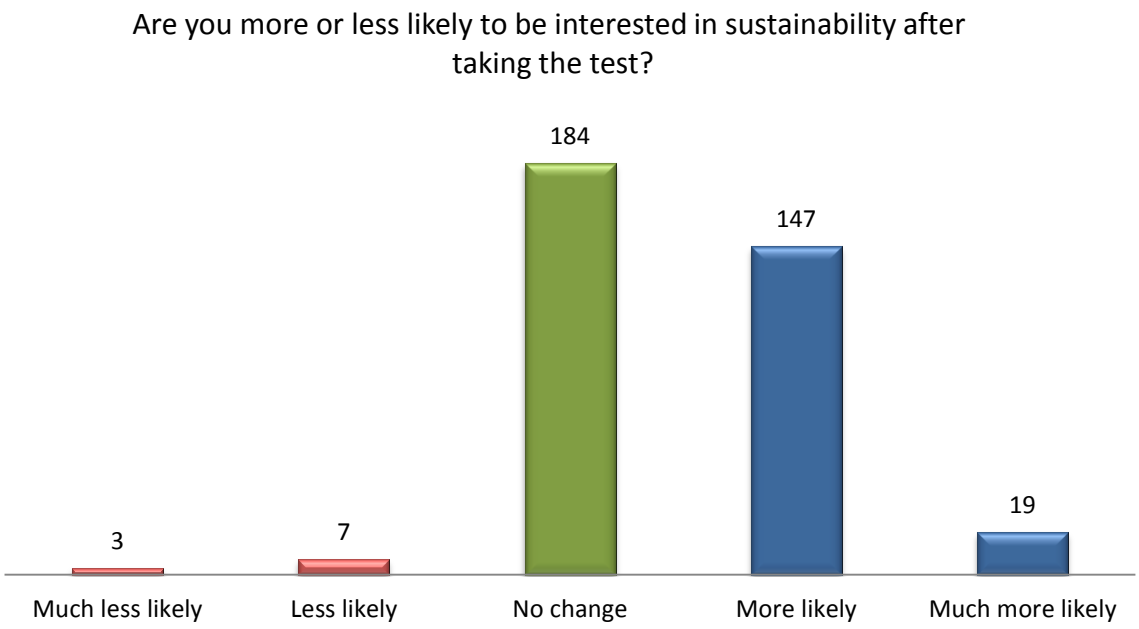
R: It just made me think that there's just a lot more a lot more going on that I don't know about, and I probably should know about. And I don't like knowing that there's things happening that I don't know anything about sort of thing. So it did make me think, not that I have, but it did make me think that I should go away and do some research. Sort of more about what sustainability does entail rather than just the recycling.

C: So it's sparked an interest in?

R: Yeah it did.

As discussed in Chapter 5, the researcher was cautious of the Sulite, not least questioning whether the test could negatively influence how participants felt towards sustainability, 'turning them off' and dissuading their future engagement with other sustainability-based initiatives at the university. Nevertheless, of the interviewees and focus group members who sat the test, all demonstrated through their repertoire that it widened their conceptualisation of what sustainability is, and none of them were 'turned-off' by it. Rather, perhaps through a process of disrupting and reconstructing meaning (Weick, 1995; Perey, 2015), it sparked interest, stimulated discussion, encouraged reflection and helped balance the sustainability skew. This is supported by the questionnaire respondents who were asked explicitly through a Likert scale whether they were *"More or less likely to be interested in sustainability after taking the test?"* Please see Chart 1.

Chart 1: Interest in sustainability post-test



As can be seen, of the 360 responses, only 10 students reported being less, or much less likely to be interested in sustainability having sat the Sulite pilot. Conversely, 166 students claimed that they would be more, or much more likely to be interested going forward. The largest portion of students indicated that the test did not affect their interest one way or the other (184). So it appears that this concern has been somewhat mitigated. However, through further research, it would be interesting to explore whether these outcomes are short-lived as found in earlier studies which, also using Likert scales, investigated the potential to change student attitudes towards sustainability before and after input (see Rickinson, 2001: Winter & Cotton, 2012).

When asked how the test made them feel, the questionnaire respondents offered comments which, on the whole, were positive and reflected the interview and focus group replies. A selection is shown below, with the likelihood of increasing their interest following the test given in brackets.

RQ123:17: Made me realise I don't know as much about sustainability as I thought (No change).

RQ123:18: Fairly confident in my knowledge in sustainability (More likely)

RQ123: 19: It made me think about sustainability in a different perspective (More likely)

RQ123:20: Considering I scored above average, I feel I have a good grasp on sustainability yet there is much to learn. (No change)

RQ123:183: Broadened horizon (Much more likely)

RQ123:184: Too long but it opened my eyes to sustainability (Much more likely)

RQ123:185: Unaware of our economic crisis (Much more likely)

RQ123:263: This test made me realise how broad the topic of sustainability is and how little I know about it (More likely)

RQ123:275: Oblivious to global social issues (No change)

RQ123:292: This test has made me realise that there is far more to sustainability than just the environment. (More likely)

RQ123:301: More open minded toward sustainability and the different subjects in intails (More likely)

RQ123:317: It has made me more aware of wider issues I perhaps don't think about in day to day life it makes me want to look further into the issues (More likely)

RQ123:346: Interested in how I can learn about social and economic issues (More likely)

RQ123:354: Quite motivated, scored quite highly (No change)

RQ123:323: More interested (Much more likely)

Some students appear to have felt negatively following the test. For example:

RQ123:4: It has mde me realise there is a lot more to sustainability than I first thought but it did not motivate me to interest (Less likely)

RQ123:255: Dumb, I feel like I should know a lot more (More likely)

RQ123:247: Uncomfortable (No change)

RQ123:266: Stupid (No change)

RQ123:297: Disappointment that I scored less than average on a topic such as sustainability which is so important (More likely)

RQ123:299: Gutted didn't get average. Happy about organisational governance (100%) (More likely).

RQ123:303 Considering my score – clueless, unknowing, tired (No change)

RQ123:308: Shocked at my knowledge (More likely)

RQ123:314: Annoyed (Much less likely)

RQ123:318: Confused, tired. (No change)

RQ123:320: This test has highlighted a number of issues that I had previously not known about. It therefore angers me as I feel more could be done to improve the standard of living and environmental impact we are applying to the earth. (More likely)

RQ123:331: Unnerved by my lack of knowledge (No change)

RQ123:343: Difficult (Less likely).

RQ123:360: Flustered. So many questions (No change)

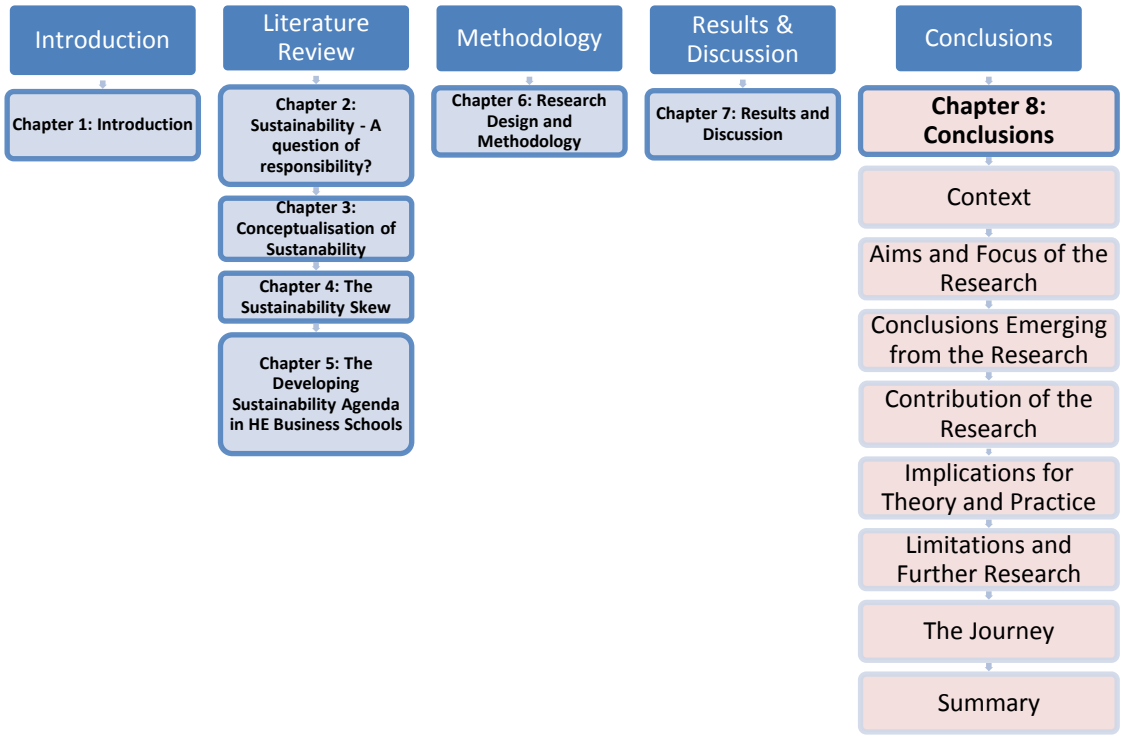
RQ123:325: I don't understand how it is relevant (No change)

This negativity tended to be directed either at their disappointing performance, or the test itself. For some students, this feeling seems to have spurred further interest; for others, it heralded no change in their interest levels; whilst for a very few, it signalled a drop in interest.

This chapter aimed to revisit the rationale behind the chosen conceptual framework of sensemaking, outlining the approach to the analysis of data. It moved on to explore and discuss the data provided by the PBS students whilst acknowledging the risk of

demonstrating "*counterfeit coherence and order*" (Boje, 2001:2). Any observation, interpretation and discussion included within the chapter has left much to the reader's imagination and are merely an abbreviated and succinct simplification (Boje, 1991). With that in mind the interpreted 'findings' emerging from the fieldwork are concluded and summarised in the next chapter.

Chapter 8: Conclusions



"In order to take actions to further sustainability, members of organisations are required to engage a variety of stakeholders who will have different perspectives and values. Engagement in this process therefore requires an acceptance of ambiguity, uncertainty and the development of the skills required to understand different perspectives or mental models" (Kramar, 2014:1071).

There is an urgent need to build a sustainable future (UNESCO, 1997). Although the literature has yet to establish a shared understanding of what a sustainable future means, it consistently recognises that further research is required on how sustainability is conceptualised so it can be translated into a meaningful concept for the organisational context, and thereby become a realistic prospect for the future (eg Colbert & Kurucz, 2007; Jones, 2011; Kramar, 2011; Ehnert et al., 2014).

This thesis has documented an exploration into the conceptualisation of sustainability by tomorrow's managers. The participants made sense of sustainability in various ways, mostly espousing a long-term/intergenerational view, with explanations principally couched in single-dimensional environmental terms, thereby demonstrating the sustainability skew. Education, particularly as provided by PBS, appears to be the main driver behind their sensemaking, although the media and conformity/socialisation also had an important part to play. The sustainability literacy test seems to have broadened perspectives and increased understanding of sustainability without diminishing levels of interest – indeed, for the vast majority of participants, the interest-levels following the test remained the same or increased.

This final chapter shall consider the 'findings', in terms of the research aims and the insights that can be drawn from the study, fully acknowledging the province of the chosen conceptual framework of sensemaking and the positioned researcher's own underlying assumptions surrounding the field, which will thereby render any conclusions merely an interpretation of a specific context. It does not seek general laws and cause-effect correlations, and falls a long way short of claiming that it has produced unproblematic knowledge about how the complex social reality of sustainability looks or operates (Alvesson & Karreman, 2011; Jorgensen et al., 2012). It shall begin with a brief overview of the context and then discuss the overarching conclusions emerging from the research. This is followed by a summary of the contribution, a conversation surrounding the implications for theory and practice, the limitations of the thesis, and some recommendations for further research. It shall end with a *soupçon* of personal reflection: The Journey.

8.1 Context

Sustainability is an emerging field which positions success beyond the continued dominance of profit and financial results, to also include environmental and social measures. Research in this area occupies a knowledge frontier, and much of what is known about the field is derived from innovative practice – which is largely developing faster than it can be studied and written down (Jones, 2011). The literature remains unsettled, and empirical studies demonstrate that the lack of shared consensus concerning the meaning of sustainability inhibits the development of the field, creating difficulties for its enactment, particularly at organisation level (e.g Laasch & Conaway, 2015; Perey, 2015). Indeed, as Marshall and Toffel remind us, *"robust answers to questions such as what is sustainability?, what is a sustainable society?, and what is a sustainable organisation? have proved elusive"* (2005:673).

The sustainability conversation is being engaged at the intellectual, corporate action and consumption levels, and the stakeholders in the debate are wide-ranging (e.g. Wilkinson et al., 2001; Dunphy et al., 2003; Benn et al., 2014). Tomorrow's managers will enter a complex and contentious world beset with urgent global issues and will have to deal with "*bewilderment"* in many forms (Gray et al., 2014:1), requiring multiple interdisciplinary perspectives (e.g. Sterling, 2012; Rayment & Smith, 2013; Lozano et al., 2013). There is a growing expectation that HEIs and business education shall provide sustainability-literate leaders of the future, skilled in responsible management, thereby enabling the next generation of managers to advance beyond mere acknowledgement and superficial acceptance of sustainability, towards a deeper, questioning criticality to better cope with the polytonality of the field (e.g. UCAS, 2008; HEFCE, 2009; Parkes, 2012; Adomssent, 2014; PRME, 2014; Morelli, 2016).

8.2 Aim and Focus of the Research

This study joins the ongoing conversation and contributes to the growing stream of research by exploring the sensemaking of sustainability from the hitherto neglected perspective of future managers. Accordingly, the overarching aim was to explore how the ambiguous and labyrinthine phenomenon of 'sustainability' is conceptualised by the next generation of managers. It recognises and accedes to the reoccurring discourses running through the literature which highlight the heterogeneous and values-laden nature of sustainability which question and directly challenge the dominance of reductionist, Newtonian, neoliberal thinking.

This study took the view that research into how sustainability is conceptualised by tomorrow's managers is too new and sparse to be understood well enough to derive reliable assumptions that could be built on. Therefore, given the researcher's post-modern/interpretivist position, this work did not strive to contribute a definition nor a conclusive summative conceptualisation drawn from the participants' sensemaking. Rather than seeking to establish causal relationships between variables, it offered the means for inductive exploration and the opportunity to gain insight through open questions (e.g Saunders et al., 2012; Jorgensen et al., 2012).

There were three research questions, each derived from the extant literature, where opportunities for original contribution to knowledge were identified:

Research question 1:

a) How do future managers make sense of, and give meaning to, sustainability?

b) What are the drivers behind their sensemaking?

Research question 2:

Is there a skew within their conceptualisations in favour of environmental explanations?

Research question 3:

Does the Sustainability Literacy Test influence how future managers perceive sustainability?

8.3 Conclusions Emerging from the Research

The following section is divided into the three key conclusions emerging from the research, loosely titled: Conceptualisation; Drivers; Sustainability Literacy. The largest, Conceptualisation, is broken down into four further conclusions surrounding Ethics and Responsibility, the Intergenerational View, Multidimensionalism and the Sustainability Skew.

8.3.1 Conclusion 1: Conceptualisation

Future managers make sense of sustainability in various ways, mostly espousing a long term inter-generational view, couched in single-dimensional, environmental terms demonstrating the sustainability skew.

8.3.1.1 Ethics and responsibility:

The language of responsibility and ethics is very rarely explicitly represented in the participants' sensemaking of sustainability.

It is argued that to explore sustainability an exploration into responsibility and ethics is necessary (e.g. Jones, 2011; Gray et al., 2014; Laasch & Conaway, 2015). It is perhaps revealing therefore, how seldom the language of responsibility and ethics was explicitly represented in the participants' sensemaking of sustainability. This is an

interesting outcome which could have implications for the sustainability agenda within HEIs, and beyond into the workplace, in terms of whether ethics and responsibility in their many guises are considered a subset of, separate from or the same as sustainability, thereby ultimately framing their reality. The finding is somewhat at odds with the hitherto unprecedented pressure for both organisations and HEIs to be more responsible; the well-established and widely accepted CSR model (Carroll & Buchholtz, 2015); and the attention to ethics currently confronting organisations in all fields (Crane & Matten, 2016). Indeed, sustainability, ethics and responsibility are frequently perceived as parallel and often overlapping issues, both within the organisation and within business education (Hahn & Reimsbach, 2014).

8.3.1.2 Intergenerational view:

The majority of participants included a temporal / intergenerational element in their sensemaking of sustainability.

As underpinned by both Brundtland and the UNCED principles, the future generational theme is a regular ingredient of sustainability models and frameworks. Perhaps it is to be expected therefore, to find reference to temporal / intergenerational elements within the participants' sensemaking of sustainability. Even so, this is a significant insight and an important contribution to the ongoing conversations as it implies that these future managers may indeed have a clear appreciation of the moral obligation and impact that today's generation has on the inherited world in which future generations will live. It suggests a direct challenge to the profit-maximisation short-termism "*disease"* (Rappaport, 2005:65), acknowledging the wider responsibility of organisations to all stakeholders, both now and in the future (e.g. Elkington, 1999; Dyllick & Hockerts, 2002; Hahn & Figge, 2011; Benn et al., 2014; NEF, 2014). The

ramifications of such a temporal-shift will doubtless impact on the historical roles assigned to business, in particular, the discourse which evolves around how the future role of business in society is defined, negotiated and managed. If business perspectives are indeed increased from short-medium term, to an intergenerational perspective, sustainability can be firmly and realistically established as a primary objective for business (e.g. Zink, 2014).

8.3.1.3 Multidimensionalism:

Participants tended to offer single-dimensional explanations over multi-dimensional explanations when conceptualising sustainability.

This deviates somewhat from the existing conversations surrounding multi-stakeholderism and those discussions which argue that true sustainability must consist of multiple dimensions – not least due to the futility of only tackling a portion of the sustainability concerns in an interconnected world (e.g. Barbier, 1987; Elkington, 1999; UN, 2005; Makower, 2014; Benn et al., 2014; UN, 2016a). To do otherwise, would miss several important criteria which organisations should satisfy if they want to become sustainable, falling short of capturing the full spectrum of sustainability and its implications (Dyllick & Hockerts, 2002; Oskarsson & von Malmborg, 2005; Lozano, 2010).

8.3.1.4 Sustainability Skew:

There is a disparity in the students' conceptualisations of sustainability, in favour of environmental explanations - indicating the presence of the sustainability skew.

Suggesting significant implications for HE policy and provision and future business practice, this conclusion reflects HEA findings that the majority of students continue to

interpret sustainability as being predominantly about the environment, with less recognition of the social and economic aspects (Drayson et al., 2014). It also resonates with conversations in the literature which identify an imbalance surrounding conceptualisations of sustainability, whereby environmental dimensions prevail significantly - at the expense of other dimensions (e.g. Dyllick & Hockerts, 2002; Dunphy, et al., 2003, 2006; Pfeffer, 2010; Donnelly & Proctor-Thomson, 2011; Jones, 2011; Clarke, 2011; Mariappanadar, 2012; Bostrom, 2012; Ehnert et al., 2014; Godemann et al., 2014; Makower, 2014; Alange, 2014; Laasch & Conaway, 2015).

8.3.2 Conclusion 2: Drivers

Education, particularly at HE level, is the main driver behind how future managers make sense of sustainability.

Somewhat contrary to the extant literature, which argues that the primary source of information and knowledge about sustainability is drawn from the media and the exponential increase in information availability (eg Anderson, 2011; Sood et al., 2011; Pfeffer, 2010), the respondents of this study convincingly indicated education as the main driver behind their conceptualisations of sustainability.

The findings strongly suggest that, even so early in their collective university careers, PU/PBS and its teachings were directly and most significantly influencing how the students made sense of sustainability. In particular, the discourse indicated that the students' previous perceptions were being broadened and challenged by the university, going some way towards balancing the sustainability skew, signalling a disruption to the reliability of their understanding, leading to the reconstruction of their sensemaking (Weick, 1995; Perey, 2015). This supports the literature which suggests that HE is a shaper of the values of society and one of the optimum moments

for engaging future managers with sustainability, not least because it offers a fertile ground for critical thinking and innovation (e.g. Parkes, 2012; Ryan & Tilbury, 2013; Muff et al., 2013; Hesselbarth & Schaltegger, 2014; Godemann et al, 2014; Adomssent et al., 2014; Bessant et al., 2015).

Some students also recognised the importance of sustainability education in forming a skill set and core competency for their future employment, adding to the literature which expounds on the urgent need to develop leaders with the necessary skills for the transition to sustainability for future economic, social and environmental well-being (e.g. HM Government, 2005; Cade, 2008; BITC, 2010; Sterling, 2012; Hesselbarth & Schaltegger, 2014). This insight is a particularly salient contribution from the participants given that, where HEIs were once perceived as public good, they are now open to scrutiny, having to prove that funds are wisely spent, and demonstrate value for students – often in terms of competency and skill sets (e.g. Winter & Cotton, 2012; Rayment & Smith, 2013; Siebert & Martin, 2013; Farkas, 2013). Accordingly, it seems the role that HE / PU plays in students' sensemaking of sustainability is significant and possibly far reaching – providing an important opportunity which should be embraced.

8.3.3 Conclusion 3: Sustainability Literacy

The sustainability literacy test broadens perspectives and increases understanding of sustainability without diminishing levels of interest.

The question of how universities can be sure that they are producing sustainability literate graduates (Carteron & Decampes, 2014), gave rise to the trial of the Sulite metric. Given the very early stages of the tool's development, there is scant literature and presently very limited discussion and analysis concerning its success (Carteron & Decamps, 2014). Having explored the reactions of 360 PBS participants who piloted

the test, this study provided valuable feedback to the test creators, and makes a significant contribution to the ongoing conversations concerning measuring sustainability literacy and the role that such a test plays in mitigating the sustainability skew, increasing interest and widening frames of reference.

Despite the researcher's reservations regarding a negative influence, the Sulite appears to have had a similar impact on student perceptions of sustainability as that of their first semester at university, through a process of interruption, disruption and reconstruction of sensemaking (Weick, 1995; Perey, 2015). All of the interviewees and focus group members who sat the test demonstrated through their repertoire that it widened their conceptualisation of what sustainability is, sparked interest, stimulated discussion, encouraged reflection and helped balance the sustainability skew. Similarly, the vast majority of the questionnaire responses, claimed that their interest in sustainability would either remain unchanged or would increase having taken the test. So it appears that this reservation has been largely assuaged and that participation in the test should be encouraged.

8.4 Contribution of the Research

Given the intangible nature of sensemaking and of enriching conversations, this research does not claim to contribute any 'what in particular' specifics to sustainability knowledge (Alvesson & Karreman, 2011; Jorgensen et al., 2012). Rather, this research hopes to contribute the basis upon which more conclusive research can be built. Therefore, to summarise that which was discussed in more detail elsewhere, this study claims to make important and timely contributions both theoretically and empirically to the recondite notions of sustainability by:

- Enriching the small body of literature which is beginning to consider sustainability through the sensemaking lens;
- Providing an original contribution to the emerging conversations which link the conceptualisations of sustainability to management practices, thereby further developing understanding so that a more integrated approach to sustainability can be realised;
- Offering new insights into the sustainability skew from the hitherto neglected perspective of tomorrow's managers;
- Adding to the conversations surrounding education for sustainability and the best way forward to effectively develop the next generation of managers in becoming change agents for sustainability, through embracing a deeper, questioning criticality to better cope with the polytonality of the field;
- Contributing to the knowledge and understanding of whether and in which ways the Sustainability Literacy Test influences how future managers perceive sustainability;
- Providing feedback to the UN surrounding the construction, content, usability and fit-for-purposefulness of the Sulite tool.

8.5 Implications for Theory and Practice

As argued by Dewey (1902), it is important to examine to what attention is being paid, with what, for what and by whom, to bring theory and practice together, thereby providing tremendous scope for further developing our knowledge and understanding of what lies at the heart of organisation and management. Indeed, the dominance of the physical environment and a long term/ intergenerational view, perhaps represent a *"dominant story",* a shared notion of sustainability, fixing the meaning so it is given

specific associative connotations (Naslund & Pemer, 2012:106). If these future managers demonstrate an obligation to the inherited world, acknowledging the wider responsibility of organisational practices over the long term, it suggests a direct challenge to short-term profit-maximisation approaches to business (e.g. Elkington, 1999; Dyllick & Hockerts, 2002; Hahn & Figge, 2011; Benn et al., 2014; NEF, 2014; Zink, 2014). And if, as indicated by the respondents, single dimensionism and the sustainability skew does exist, arguably such a reduction falls short of capturing the full spectrum of sustainability and its implications (e.g. Barbier, 1987; Elkington, 1999; Dyllick & Hockerts, 2002; Oskarsson & von Malmborg, 2005; Lozano, 2010; Makower, 2014). And if, as suggested here, sensemaking is the process whereby people give meaning to experience, this skew and the long term / intergenerational view could have significant implications for future management practice and the strategic organisational context, because how managers conceptualise sustainability – be that in environmental terms or not – will frame its enacted reality. Indeed, the literature argues that if the traditional purpose of a short-term wealth-generating economy is to be replaced with a long-term corporate role grounded in engendering a healthy planet and an equitable society, then socio-human aspects should receive as much attention as environmental aspects in terms of research attention, company initiatives and strategy (e.g. Gladwin et al., 1995; Filho, 2000; Marshall & Toffel, 2005; Gloet, 2006; Colbert & Kurucz, 2007; Pfeffer, 2010; Mariappanadar, 2012; Benn et al., 2014; Kramar, 2014; Pal & Jenkins, 2014). Furthermore, the tendency towards single dimensionism and the sustainability skew could have direct implications for the practice and provision of sustainability education within PBS, PU and possibly HE in wider terms, particularly as HE is considered a societal leader, a future shaper and exemplar of best practice, influencing local and national policy, and as such, having a

fundamental responsibility towards sustainability and the education of the next generation of managers (Bessent et al., 2015). In strategically challenging times, it is incumbent upon HE to find a sense of purpose and make some difficult choices in light of the multifaceted nature of, and clear necessity for sustainability (Ivory et al., 2006; Rayment & Smith, 2013).

The methodological approaches and conceptual framework adopted by this study have developed a rich canvas of the current landscape and conceptualisations of sustainability. By focusing on tomorrow's managers, it has provided an original contribution, both theoretically and empirically to the growing body of work which considers: notions of sustainability in wider terms (e.g. Seghezzo, 2009; Waas et al., 2011; Jones, 2011); the sensemaking of sustainability (e.g. Roy et al., 2015; Owens & Legere, 2015; Stark & Park, 2016); the organisational and managerial perspective (e.g. Dunphy et al., 2006; Visser & Crane, 2010; Benn et al., 2014; Perey, 2015); the HEI and business school perspective (e.g. Tilbury et al., 2004; Starkey & Tempest, 2008; Wright, 2010; Rayment & Smith, 2013); the curriculum (e.g. Winter & Cotton, 2012; Sterling, 2012; Ryan & Tilbury, 2013; Eagle et al., 2015); and, sustainability literacy (e.g. Kokkarinen & Cotgrave, 2013; Hahn & Reimsbach, 2014; Carteron & Decamps, 2014). Given the researchers' postmodern/interpretive position and the fairly pragmatic approach to data collection and analysis – this study provides an uncommon application of the theoretical sensemaking framework. This is reflective of the changing landscape of social research which signals a more collaborative, fluid perspective, facilitating the blurring of boundaries and frameworks and welcoming messy, multi-voiced approaches (Denzin & Lincoln, 2011a, Flyvberg, 2013). This study, by offering an alternative approach to sensemaking, has in some modest way, pushed

the boundaries of sensemaking and enriched that small body of literature which is beginning to consider sustainability through the sensemaking lens.

8.6 Limitations and further research

Whilst the literature is not settled when it comes to the defining of sustainability, it is fairly unanimous in agreeing that extensive further research is required on how it is conceptualised so it can be translated into meaningful concept for the organisational context and thereby become a realistic prospect for the future (eg Colbert & Kurucz, 2007; Jones, 2011; Kramar, 2011; Ehnert et al., 2014). Recognising the limitations of this study, below are some specific recommendations for future research, which build on the conversations within.

8.6.1 Sensemaking Framework:

Sensemaking is an extracted cue upon which meaning is constructed (Weick, 1995). As a framework, it sits very comfortably with the researcher's postmodern / interpretivist perspective, and, in the spirit of explorative research, allows for an ongoing conversation surrounding the conceptualisation of sustainability by tomorrow's managers. However, as discussed elsewhere, there are limitations to employing such an approach. To briefly reiterate, these limitations tend to centre around: The still-evolving, under-researched, un-tested nature of sensemaking and the current lack of criticality for it; The propensity to favour an intellectualist approach – privileging cognition and language over body, perception and emotion; A tendency towards being too subjective and retrospective; And, the literature not being settled in terms of what is meant by 'sense' (Weick, 1995; Alvesson & Karreman, 2011; Whittle & Mueller, 2012; Maclean et al., 2012; Sandberg & Tsoukas, 2014). Other frameworks more commonly used within the field of sustainability may yield different data which would

add to the conversations here in any further research. Briefly for instance, an anthropological framework, whilst being less concerned with making sense from a current perspective, studies human culture from an historical and longitudinal perspective, and how and why they function as they do (Silverman, 2014). Similarly, social capital theory values relationships and interactions and is often used within CSR literature. It could add further depth in terms of constraints and process (Sen & Cowley, 2013). To which end, the sensemaking framework, whilst remaining valuable to this research, could be built on through the use of other theoretical approaches to derive further layers and complexity to the conversations surrounding the conceptualisation of sustainability.

8.6.2 Case Study Approach:

This study adopted a case study approach. It was focused on a single site within boundaries determined by the location and experiences of participants in that environment. Although participants were sought on a voluntary basis, it attempted to collect data from every member of the population being studied, recognising at the outset that this was probably unlikely (Jupp, 2006). As such, this could have presented a limitation as to whether non-respondents would have provided different data. However, the questionnaires achieved an exceptional 91.5% response rate. This may be indicative of the importance the students placed on sustainability, but it is suspected that the reactive effect and the impact of the context-bound hierarchically-positioned researcher presence may have had something to do with it.

Similarly, despite being at the beginning of their university careers, because participants were part of a HEI nationally and internationally recognised for its engagement with sustainability, the case study cohort may have embodied a stronger

sense of sustainability, possibly through the process of socialisation, than those from an HEI without a prominent sustainability agenda. Furthermore, participants were invited to take part in interview and focus groups specifically to discuss sustainability which may have invoked social desirability bias.

The restrictions of time and opportunity have also limited this case study. For pragmatic purposes, a cross-sectional episodic approach was taken. Such an approach is more likely to remain contextualised, a particularly significant aspect given the importance of the linkages which can reside in varying environments and the continuous process of construction and retrospective deliberation by socially embedded actors (e.g. Dreyfuss & Dreyfuss, 2005; Weick, 2011; Sandberg & Tsoukas, 2015). Nevertheless, there is a tension within the sensemaking literature with episodic approaches criticised for their lack of meaning, continuity and breadth (e.g. Dreyfuss & Dreyfuss, 2005; Weick, 2011; MacLean et al., 2012)

These limitations and context-bound vulnerabilities are acknowledged and add weight to Yin's (2014) advice which suggests that two-case and multiple-case studies are preferable over a single case such as this. The limitations add to the call to extend the research to other cohorts both elsewhere within the university and to within other institutions, thereby mitigating these limitations, deriving analytic benefits and augmenting this initial exploration. Similarly, they provide an opportunity for building on this research through future continuous longitudinal exploration – perhaps, for example, studying the managers of tomorrow as they progress through university and into the world of work.

8.6.3 Data collection:

Although data saturation appeared to have been reached, and notwithstanding time and access constraints, this research may have proved more insightful if further and more in-depth interviews had taken place. However, the discourse with each interviewee seemed to have reached a natural close and to extend these interviews further may have risked a contrived-laboured quality. Therefore, going forward, and further to the discussions surrounding the sensemaking framework in sections 8.5 and 8.6.1, it may be worth considering the approach recently taken by Perey (2015) who employed interview narrative to examine in detail how a single person made sense of sustainability. Perey claims that such an approach was particularly effective at contributing deeper understanding of the polyphonic world of sustainability and its enactment within the organisation. Alternatively, it could prove insightful to extend the line of reasoning through conducting further interviews adopting a more macro critical Discourse Analytic perspective, focusing on wider societal discourses (see, for example, Jorgensen et al., 2012). Both of these approaches could reasonably remain with the notion that *"situations, organisations, and environments are talked into existence"* (Weick et al., 2005:409), and that how future managers make sense of sustainability will ultimately frame its reality (e.g. Foucault, 1980; Weick, 1995; Alvesson & Karreman, 2011; Benn et al., 2014).

8.6.4 Notions of Ethics and Responsibility:

Even though only a very few participants referred directly to notions of ethics and responsibility, it does not necessarily follow that ethics and responsibility form part of the sensemaking for only those few. Indeed, through further exploration, ethics and responsibility may also be found in the unsaid - to be embedded and threaded

implicitly through the conceptualisations. Similarly, in accordance with the aim and research questions, this research is quite clearly couched in terms of sustainability, and so has failed to unpick the perceived relationship between ethics, responsibility and sustainability, and may well have unwittingly led the respondents to position ethics and responsibility *within* sustainability. Going forward it will be meaningful to consider this complex relationship further, and whether ethics and responsibility are considered a subset of, separate from, or the same as, sustainability by tomorrow's managers.

8.6.5 Drivers:

The episodic nature of this study offers an attractive avenue for future research - to investigate longitudinally the drivers behind conceptualisations of sustainability in more detail and how they develop over time.

In a similar vein, given the unanticipated contribution to the conversations regarding the importance that the respondents placed on the role of Geography GCSE and A-Level in influencing their conceptualisations, future research might build on this contribution, as, by extension, it suggests that school-level geography provision may be directly influencing how future managers are making sense of sustainability, thereby informing it's reality from an organisational perspective. Indeed, what lessons can be learnt from school-level geography provision to inform pedagogic practice elsewhere?

8.6.6 Widening the Net:

One of the limitations of this research is that the participating cohort came exclusively from a single faculty: PBS. It may prove revealing, therefore, to further explore whether PU has had a similar impact on student conceptualisations from within other

faculties, and whether these other students also recognise the importance of sustainability education as a competency for future employment. This could be extended beyond the university to compare with those future managers who's HEIs do not have sustainability embedded in their core strategy and enact sustainability as a peripheral activity.

8.6.7 Sustainability Literacy Testing:

The pilot offered a unique opportunity to explore whether such a metric would influence the cohort's perceptions of sustainability. Naturally, this opportunity also provided a constraint. Given the tight timeframes, not all the cohort could take part. And, crucially, it compelled an episodic approach which begs the question, would different interpretations have been derived if the entire cohort had contributed and a longitudinal approach taken?

8.6.8 Student Progression:

Through longitudinal research, it would be interesting to explore how the cohorts' perspective, knowledge and understanding of the field are developed as they progress through their university careers and even into the workplace. To which end, as a minimum, it would appear advantageous for PBS to consider employing the Sulite – or some similar tool, during the final year to gauge progression in sustainability literacy. Furthermore, it may prove revealing through extended research as to whether these positive outcomes experienced in this study are short-lived, as found in earlier studies which investigated the potential to change student attitudes towards sustainability before and after input (see, for example, Rickinson, 2001).

8.6.9 Policy and Provision at PU:

In-line with the Sustainability Strategy (PU, 2014), further research building on existing reviews (e.g. Ashby, 2012; Wyness & Sterling, 2015; Winter & Cotton, 2012), could investigate current PBS and PU policy and provision – in all its forms, to determine whether it demonstrates the sustainability skew, and if so, whether a hierarchal approach is indeed intentional. Similarly, to consider whether the provision at PBS and PU is indeed facilitating and encouraging the deeper, questioning criticality as espoused by the literature (e.g. UCAS, 2008; HEFCE, 2009; Parkes, 2012; Adomssent, 2014; PRME, 2014; Morelli, 2016), thereby enabling tomorrow's managers to better cope with the polytonality of the field.

8.7 The Journey:

"Either people start out to be decisive, engage in lots of trial and error, learn from the errors, and finally achieve an outcome, or they start with the outcome and reconstruct a history that summarises what they learned by stringing these learnings together in a single narrative. In retrospect, the history looks more focused, more efficient, and more insightful at every step than it does at the time it was lived." (Weick, 1995: 184)

Yes, perhaps allegorising the PhD as a 'journey' is an overused metaphor – a cliché. But maybe that's because it is meaningful. It is to me. The notion of the journey captures the sense of movement, distance, time, learning, personal growth and change. It is an eloquent way of articulating the ups and downs, and twists and turns, the retrospective learning and my whole doctoral experience. It resonates with my ontology, recognising the very personal nature of the multiple realities and diverse routes which could have been taken along the way. I could ruminate expansively and nostalgically about each stage of my own journey. But I don't want to. Somehow, to

do so would detract from the whole. It would particulate it. Reducing my learning into bite-size, quantifiable chucks which lose meaning. This thesis is the culmination of a personal journey spanning at least three years, if not many, many more. What is more, it is completely dependent on the work of others.

We find ourselves in a critical situation, and there is no silver bullet. Rather, it is a complex jigsaw, a puzzle. As eloquently described by Dunphy, Griffiths and Benn., *"No individual or group has yet grasped the whole picture; not all the parts of the puzzle are in existence; but when we make an inventory of what this organisation is doing here and what another is doing there, the bigger picture emerges."* (2006:293). I want to be part of that jigsaw. To play some diminutive part in forming the critically-important bigger picture, trusting that many others are doing the same and the combined impact on future organisational practice will be meaningful.

I read something once, I can't remember where, or when, but it has stuck with me throughout by my PhD and sustainability journey. It's a story about a child, a beach and of countless starfish. It goes something like this. There was a storm and many thousands of starfish were washed ashore and faced death. A passer-by sees a girl picking up a starfish and putting it back in the sea. The passer-by points to the thousands of other stranded starfish and tells the child that she can't possibly make a difference – the task is too huge. The child picks up another starfish and returns it to the water saying, "I made a difference to that one".

8.8 Summary

The interpreted findings of this exploration contribute to the conversations surrounding sustainability by offering insights into how future managers conceptualise

sustainability. This single case study offers only a starting-point to this line of enquiry. It was not the intention of this research to present final and conclusive evidence, rather, to offer a better understanding of the field. By using exploratory research, it provides initial insights and a basis upon which more conclusive research can be built going forward. More inductive research is needed elsewhere to further examine to what attention is being paid, with what, for what and by whom, in order to articulate sensemaking, and to bring theory and practice together in the organisation, thereby providing tremendous scope for the development of the field and the furtherance of knowledge and understanding of that which lies at the heart of the unsettled and polytonal world of sustainability (e.g. Dewey, 1902; Colbert & Kurucz 2007, Jones, 2011, Kramar, 2011). This could have far reaching implications because, how tomorrow's managers make sense of sustainability will impact on organisational-level enactment of sustainability practices, thereby ultimately framing its reality (e.g. Foucault, 1980; Weick, 1995; Marshall & Toffel, 2005; Colbert & Kurucz, 2007; Wright, 2010; Alvesson & Karreman, 2011; Benn et al., 2014; Perey, 2015). Therefore, it was timely and appropriate to consider through this research how the next generation of managers make sense of, and give meaning to, the concept of sustainability so further progression towards sustainability can be achieved. This study makes an important and original contribution both theoretically and empirically, to the conversations centred on the contentious, complex and multifaceted notion that is sustainability, both in the wider sense and more particularly from the perspective of tomorrow's managers – the future generators of sustainable value for business and society at large.

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Appendix 1

Sustainability Education Café - Definition Poll.

Appendix 2

Values Elicitation Exercise undertaken by Miss Badger for CPHughes in relation to her research.

1. Family
2. Ethics and morality of the field
3. Teaching, pedagogy and practice
4. Interest / inquisitiveness
5. Worthwhile activity
6. Enthusiasm
7. Depth of understanding.

Appendix 3

Christine Parkin-Hughes
Faculty of Business

Ref: FoB/UPC/FREC/FREC1415.06/clc
Date: 7 November, 2014

Dear Christine

Ethical Approval Application No: FREC1415.06

The members of the Faculty Research Ethics Committee are of the opinion that the application addresses most of the key requirements, however, parts of the submission needs to be carefully presented.

It seems the application combines both staff and PhD research, however, the way this was presented could have been much better. We will suggest it is indicated this is a funded/unfunded research, and note somewhere (as was rightly done) that the outcomes of the data collection will also form part of a PhD thesis, that is, one of the research outputs. The submission will then cover both research activities and there would not be the need to indicate the name of the Director of Studies.

The contents of the Informed Consent Form and Section 10 of the application were also not carefully aligned. Section 10 in particular needs to be carefully done. Potential ethical issues relating to the involvement of students in the research should be carefully identified and critically discussed. Some of these appear in the Informed Consent Form but not in the body of the application. For example, the information in 10(f) on confidentiality seemed to be different from the section on confidentiality in the Informed Consent Form. There were also differences regarding statements on the right to withdraw. Moreover, the section on “Dissemination” in the Informed Consent Form should indicate that a PhD thesis will also be one of the study outcomes. In both the application and the Informed Consent Form, it needs to be very clear to students that participation in the research is voluntary and would have no bearing on their module assessments or other related activities.

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Approval is for the duration of the project. However, please resubmit your application to the committee if the information provided in the form alters or is likely to alter significantly.

We would like to wish you good luck with your research project.

Yours sincerely

(Sent as email attachment)

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Chair
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Appendix 4

Eleven Key Controversies and Questions Being Raised in Mixed Methods Research.

Controversies	*Questions Being Raised*
1. The changing and expanding definitions of mixed methods research	What is mixed methods research? How should it be defined? What shifts are being seen in its definition?
2. The questionable use of qualitative and quantitative descriptors	Are the terms "qualitative" and "quantitative" useful descriptors? What inferences are made when these terms are used? Is there a binary distinction being made that does not hold in practice?
3. Is mixed methods a "new" approach to research?	When did the conceptualization of mixed methods begin? Does mixed methods predate the period often associated with its beginning? What initiatives began prior to the late 1980s?
4. What drives the interest in mixed methods?	How has interest grown in mixed methods? What is the role of funding agencies in its development?
5. Is the paradigm debate still being discussed?	Can paradigms be mixed? What stances on paradigm use in mixed methods have developed? Should the paradigm for mixed methods be based on scholarly communities?
6. Does mixed methods privilege postpositivism?	In the privileging of postpositivism in mixed methods, does it marginalize qualitative, interpretive approaches and relegate them to secondary status?
7. Is there a fixed discourse in mixed methods?	Who controls the discourse about mixed methods? Is mixed methods nearing a "metanarrative?"
8. Should mixed methods adopt a bilingual language for its terms?	What is the language of mixed methods research? Should the language be bilingual or reflect quantitative and qualitative terms?
9. Are there too many confusing design possibilities for mixed methods procedures?	What designs should mixed methods researchers use? Are the present designs complex enough to reflect practice? Should entirely new ways of thinking about designs be adopted?
10. Is mixed methods research misappropriating designs and procedures from other approaches to research?	Are the claims of mixed methods overstated (because of misappropriation of other approaches to research)? Can mixed methods be seen as an approach lodged within a larger framework (e.g., ethnography)?
11. What value is added by mixed methods beyond the value gained through quantitative or qualitative research?	Does mixed methods provide a better understanding of a research problem than either quantitative or qualitative research alone? How can the value of mixed methods research be substantiated through scholarly inquiry?

Creswell (2013a:103-104)

Appendix 5

The interview and focus group question guide:

		Research Question
1	Do you consider yourself a future manager?	
2	What does 'sustainability' mean to you?	1
3	What has influenced this perspective?	2
4	Did you take part in the Sulite?	3
5	How did it make you feel?	3

Taking the point raised by various commentators (e.g. Webb et al., 1966; Dunsmuir & Williams, 2002; Denzin & Lincoln, 2013), an interview or focus group is inevitably a reactive research tool which itself can change reality and impact in the participants perspectives and conceptions of self. Therefore, the participants will be asked:

6	Do you feel that being involved in this research – our conversation – has affected your conceptualisations of sustainability in any way?	1,2

And, to allow for other pertinent insights from the participants, the following catch-all will be included:

7	Is there anything else you think I should be asking / talking about?	1,2,3

It is important to note that it is anticipated that this list will be added to as the research progresses.

Appendix 6: Plymouth City

The City of Plymouth is the second largest city on the south coast of England, situated in the south west corner of Devon at the gateway to Cornwall. It has a resident population of around 256,600 and a further 100,000 in its commuter area (PCC, 2015). Compared to a UK average of 20%, Plymouth has a relatively young population with 27% (around 69,500 individuals) aged between 15 and 29. Plymouth has a student population which equates to about 14% (36,260) of the resident population - the 8th highest of England's cities. The importance of 'the student' to the city is reflected in part by the undergraduate spend within Plymouth being £335m or 8.4% of Gross Value Added. Only Cambridge recorded a higher percentage (9.4%), with Plymouth ahead of other key university cities including Coventry (7.3%), Oxford (7.0%) and Hull (5.4%), (PCC, 2013). Interestingly, Plymouth was ranked by Experian at 46th out of 324 local authorities on the abundance of 'business champions' (defined as young, small but rapidly growing firms with directors that show entrepreneurial skill, appetite for business risk and real international outlook), (PCC, 2015).

The city's university has a 150 year history reflecting the naval heritage of Plymouth, beginning with the establishment of the Plymouth School of Navigation in 1862. Following various amalgamations, the resultant Polytechnic South West was granted university status in 1992, becoming the University of Plymouth. The Peninsula Medical School joined in 2000 and in 2011 the university underwent a rebranding exercise launching itself as Plymouth University. It now has an annual income of around £160 million with over 30,000 students and 3,000 staff. It is consistently ranked as one of the top three 'modern' universities (PU, 2014).

C: Right, there we go. So, this is our focus group for the day. Thank you again for turning up and being here and as I always say, just keep helping yourself to food. I've put it in the middle of the table this time though we don't mind if you're eating half way through, that is fine. Would anyone like a drink of water? Yeah? There you go. Right, we did all our introductions and everything off tape. Obviously this is anonymised, however, if you do use names that's not a problem, just when I come to transcribing it all I'll just keep the names out. So if you do refer to each-others' first names it really isn't a problem. So first of all I would like you to consider, and have a discussion about, whether you consider yourselves to be future managers, managers of the future.

R2: Personally I think I do. I consider myself a manager, because with my friends and my family I'm always the one organising things, I'm the one that never forgets anything. I'm the one to call when you're panicking. Oh, and managing people I think is you have to manage the right people cause you might be a good manager but the people that you're managing, if they don't respect you, if they don't understand you, then it will be tricky. So I think a right manager managing the right people, it's umm, yeah.

R3: Yeah I'd say I'm the complete opposite at the moment. I'm not the most organised but I like the idea of being able to become sort of a manager, have those personality trait's sort of develop…

R1: I think I have it as well, because for one of the consultancy projects thing we had to do, don't know if you're…

R2: Aspiring Futures - is that the one?

R1: Yeah, yeah. We worked for a company called Treluggan Adventures, who literally, they specialize in sort of team work and helping out small teams. And in every sort of……we were given a trial exercise, on everyone we did I came out, like I showed the leadership qualities…

R2: Wow were you the leader of the group?

R1: No, well we gave up with leadership roles, and said do you want to take over? I was like yeah, ok towards the end so am now, but I wasn't at the beginning

R4: umm you said something about managing the right people like

R2: yeah

R4: I don't think it's really about managing the right people, as to like just about sort of like, managing them in the right way, like say listening to them because different workers behave differently. Because I have worked for different companies, McDonalds, Oceana, what's it called a stock taking company and that. And workers behave differently like whether it's in terms of taking orders or like arriving at work or anything. So managers they just seem to sort of like need to pinpoint what is really like or their behaviour stuff and then just work towards that.

R2: My problem, I struggle to motivate people. I think I'm a good leader but not a good teacher because I'm always say I can't talk too much, I'd rather just do it myself. Tell me what you have

to I just do it my own myself. I think motivating people in a group is good if you want to be a manager you have to be able to have to, like you said, manage different people yeah you know, how to motivate and make them work and do what you want and to do. So definitely.

C: So, is it fair then to summarise that you all do consider yourselves to be future managers?

R2: To some extent, I think that we are yeah

R4: Yeah

R3: Yes.

C: Yes? Marvellous. So now I'm going to ask you what does sustainability mean to you? How do you conceptualise sustainability?

R1: umm it's known as several factors anyway isn't it, it's like the social aspects and then the environmental and then sort of like making sure everything like...I'm struggling to define it.

R2: basically everything is long term

R1: yeah long term.

R2: yeah everything is long term, I think like

R4: I just know that the environmental bit and stuff and keeping it like - but I don't wanna just use the word green cause always use it but obviously

R2: green yeah I think it's green

C: You can use green if you want to, if that what it means to you

R4: yeah, green or something, just looking after it for the future generations. Yes, put it that way -that's what I think it is.

R1: More like the way - if you actually do look it up on Google or something, there is like a Venn diagram, and it basically combines all the different aspects, so it's like education I think might be one of them, social, environment and all combined like it creates what's known as sustainability. So I assume social would be…

R2: …how it affects people?

R1: Yeah

R2: I'm guessing? Like how it affects people because I'm guessing green would be like the earth and recycling and…

R1: …Yeah and that's the one that most people think about when they talk about sustainability and you think like oh you've got the recycling you've got to make sure the world keeps safe

R2: and social as well. Could also mean maybe like with businesses that want to grow and they want people to remain, you know, maybe projects or charities. I didn't even know they had the education or social, I just knew they'd different types

R1: it's like improving, like potentially improving - let's say you have your own business, like improving who you have and like rather than just sort of hiring and firing every few months I would say. It's becoming more resourceful, I guess.

C: What I found interesting is that you said to other people its green its green things, those environmental things. Is that what it means to you too?

R1: Well normally when you think - mainly yeah. Because that is generally what everyone considers of sustainability. I mean there are other aspects, but I will admit, when I do think about sustainability I think like, you know, about co2 emissions, green, recycling, like all the general kind of like…

R2: recycling yeah the ice melting

R1: all the usual crew

R2: the pollution

R4: global warming and stuff

R2: global warming yeah global warming I think that's the green issue

R1: yeah

R2: But then sustainability when it is about social, I don't know about education – I never heard of that, but with social, it has to be with like people having like a history or having like a having a connection or something. The world is so globalised and digital someone can be millions of miles away but the impacts kind of like next to you or next to them kind of like continuously, actually so maybe people forcing people together and keeping them together, I'm guessing?

R4: Staying connected

R2: yeah we umm yeah

R3: yeah I agree on that

C: Do you think that there is a tendency towards green and environmental explanations?

R3: Yes

R1: Yeah

C: Definitely?

R4: Uh-huh.

R3: Yeah. I would say through media because we're constantly being reminded that global warming and things that and how we sort of have to save the world and not necessarily about social sides of it because that's more like within a closed sort of environment rather than like globally.

R1: Yeah it's really it's like all that people talk about now. Like, ever since the invention of the car, it's only in the last five/ ten years I think, everyone's made a really big deal about global warming. You probably can't spend a day without maybe hearing it somewhere or seeing it. They like introduce new cars: oh look, this now does 100 miles per gallon, this saves whatever percentage. The same they've uh – NASA's even produced new special types of wing?

R3: Did you say NASA?

R1: NASA yeah. The new wing stuff for aeroplanes, so what it means is it reduces umm, you know on the planes you've got the flaps at the end, that come down when you come in to land, and you see on the plane it sort of comes out and there's like dents in it not dents but gaps that the air flows through, and NASA have created this new technique where it pulls some strings so the metal just expands so there's no friction basically, and even that they said it's supposed to save 12%...

R2: that's still something

R1: …and considering air pollution like one of the biggest contributors

R2: yeah

R3: Yeah

R1: But yeah that's what I'm saying. Like there's stuff like that you see in the media when you think of sustainability that's everywhere.

R2: But then having said that, as well there's people that don't believe in that, you know, there's something/anything wrong with the world. There're people that don't even understand what sustainability is or what being green is and they just think that its propaganda, that's not true, like really or everything is fine. Even like I'm trying to think of politicians tackling is as much as they should. So I think like you say it's the media – it's in the media, but people that listen or people that look at it are only the people or I think are interested in it, because for example, my partner is not interested in it – he calls me a tree hugger. He's not trying recycling and listening to words. So even if it's in front of him, he's not listening. But because I'm interested in it, I want to know what the information is so sometimes I think that sustainability, people are not interested in it, they don't think it's necessary for them or for their life, they don't really take account of what's going on basically.

R3: They sort of think, right now we are fine, so

R2: Yeah, yeah. He does, you know, if he sees a program and is wow that's nice, I'm like do you know what pollution that caused?

R1: But at the same time you're still going to be driving cars and not recycling everything aren't you?

R2: Yeah, but sometimes if you can walk or if you can get better cars - it's just the little things that people can do can help. But because people don't believe in it they don't do those silly little things, you know. That's what I think. I think that if everyone did that little, little, little

R2: ahh it could be

R4: because that's what

R2: I think that education will really enlighten people

R3: sort of like spreading, want a world we're it's all about so everyone knows exactly what…

R2: are people aware yeah

R3: and what they need to do I don't know, but yeah and always I think companies just do it just because they don't wanna like

R2: look bad

R3: yeah

R2: yeah I agree

R3; but at the same time you are like a massive company and that obviously like the media they are going to look at you and their going to sort of like be on the news sort of like yeah this companies doing this and that and they are going to look after the world, obviously that is bad for business as well cause just like go against you but I know I'm sort of like buying this and that from this companies and stop using their services and stuff

R2: I would

R3: they're messing up the world so at the same time it's not really that they are interested but they just umm…

C: just taken on that point, if I may, taking on that point and the point also that you raised too when you were talking about NASA and companies might lose business if they are not showing that element. Do you think it's the green that people want to see or would those same pressures be on the organisation, for are they aware of the human elements within the organisation, human sustainability and how they treat their workers

R1; well from a business point well sustainability from a business point of view will be like based on the workers like but when you say sustainability the majority will just think about the green and recycling and so on, well like it depends what you mean by the workers, like making sure they are doing their job properly and building up their skills and make sure their business lasts for the long term is that what you mean by

C: that's whatever you

R2: I think this is my question as well, because when I think sustainability, I put CSR (corporate social responsibility) with sustainability because I think it's all part of being sustainable. It's about the planet, the people that work for you, people that bring your products in like fair trade and all of that. So yes, I do think that people are still a part of sustainability. Like for me, before I started my course, I never thought of looking at a company that was sustainable for employing me. But now, if a company, like what you say, it not just doing it for show, if a company's really sustainable it attracts me to want to work there. But if a company I really like has no way of being sustainable, of giving back, I will no matter how much I want to work for

them, even if the pay is fantastic I would not because I do not think that they are sustainably viable for me.

R4: so do you care more about the environmental sustainability or the like the workers sort of well being

R2: we did but what I think it would be hard for the company to care about the environment without its workers

R4: yeah

R2: that's, that's the I think a company that does want automatically does know that and it's all part of how they recruit as well cause companies like to recruit people that have the same values as them or people want to work for a company that have the same values as they share so for example if I'm green and I'm working for a company that has high green interest it's I dunno like 1 plus 1 equals me working there at the company because we both have the same interests it's going to come out in other aspects as well

C: yeah

R1: what about this factory in china where people are working like really hard for like a shocking amount of money but that company then gives I dunno 10% of its money to some sort of green funding whatever, something like that what would your thoughts be then?

R2: what treating them workers wrong

R1: not necessarily wrong it's…

R2: it's not fair basically if it's no conditions I would walk if I had that job in china it is not a condition that I would be prepared to work in if I was not working in my air conditioned office then I think it is unfair then I will not be happy with my umm…

R1: even if they are earning loads and loads of money

R2: yes especially if they are earning no especially if they are earning loads of money no skills nothing you know, do something bigger better if they can afford it if they have the capital because most companies are oh we don't have the capital not big enough to do this we are not big enough a company that is big enough to do this have no excuse I think the […….]

C: thank you that was quite interesting umm what has influenced your perspective on sustainability what's influenced how you view sustainability?

R1: Like I said, the green aspect is just everywhere in the media. I would assume more into the business side, that it's all come within the last year.

R2: Yeah in school

R4: Me too

R3: Same here. Because when I came here, well I have heard of in the media, but I didn't really like care about it, not care about it – just didn't really think about it. But obviously, when I

started the course that's when I started to think about it. Obviously we did this Nestle thing where they were cutting down trees

R2: Yes, Kit Kats. I've had to stop having Kit Kats because I didn't know before.

C: I did buy some and then didn't bring them out today because I had realised what I had done

R1: from your lecture, it was yours wasn't it?

C: No it wasn't mine no, no, no, not Kit Kat one

R2: the first lecturers we have had

R4: What's the Kit Kat?

R1: They are using some oil from a tree or something like that and then saying that they are killing one of the types of animals there really shocking advert where they're eating the finger from the animal.

R2: Really shocking I know, it thoroughly put me off. Yeah that's the advert.

R1: I'm still I'm still of the actual

R2: I think it was the advert was just so vivid, well personally for me what made me green as well basically for me one of the things about corporate and social responsibility when I was younger I remember thinking this companies should be more responsible because I am from Africa but I grew up here so every time we went back to Africa I would see things that big companies were doing like Shell and Nestle I'm thinking well this thing if we were in London I don't see shell acting like this so why are they acting like this back in Africa so whenever they act Christians first of all it has to do with corruption that's why the government isn't really doing anything in Africa cause if this company can be can do things legal here there is no reason why they should not do things legal round the world wherever they are oh the law of this country we can there are gaps and crap so we can do it and get away with it so let us do it but they know if they did it in the west they would never get away with it so they never even attempt it

R1: no that's cause we got media here is really strong

R2: true, true exposure

R1: TV's everywhere

R2: true but now this is why I'm talking about corporate social responsibility a company should not wait to be exposed to do the right think people are dying like I say this and the country where I am from in west Africa I think they are the fourth no they are one of the biggest oil crude oil producing companies so there are loads of oil producing companies there are loads of expert trades but then they have like spillages and the countryside and you see all the fishes and the farmers cant farm and the fisherman cant fish because there is just oil everywhere well it cannot happen even a bus leaks oil on the street then what, you know, it has to be cleaned up, the communities are wrecked because of companies not taking responsibility I swear that's endangering the environment and it's just simple stuff , this oil it will take years

and years for it to be cleaned up and it's not as though it's being cleaned up it's just you go there and you see loads of tons of oil like people are walking and you are knee deep in crude oil seriously in crude oil I dunno you can only imagine what it's doing to the landscape

R3: no cause it does affect the ecosystems

R2: this is what I mean from yeah

R3: animals and let say the land and then it affects like animals and it affects animals

R2: it affects everything like I said

R1: no it's the bigger ones that have the impact cause let's say the smaller animals they will then get whatever damage it is and then 0the other animals that eat them

R3: yeah

R1: eat more of them then the animals eat more of them let's say whatever it is let's say there's what's first lighter or some sort of dodgy chemical let's say some bug would eat that and then a bird would eat like 30 of those and then whatever eats birds will eat three of those so it all builds up so you don't quite realise the impact until you look at what are they called the little diagram that show

R3: where the foods coming

R1: yeah I think the food, you know what I mean, the who eats who

R3: yeah, yeah

R1: cycle yeah

C: so this is quite interesting then so we have had two broad perspectives there that media has influenced how you think of sustainability oh three sorry the media has influenced how you think of sustainability, your own personal experiences from being on the ground have influenced what you think of all of this and also your education and having come into higher education that has had a big influence on your perceptions of sustainability where else are these influences coming from

R2: for me as well I think friends and people you are associated with because I have this friend ok, she is a…. she is the sweetest lady you will ever see you know, you know she is kind of green, you know how green she was cause she told me she was arrested cause she went to a demonstration. So it depends on the friends you have and the discussions you have cause they influence you cause sometimes they tell you things you don't know. Things like fracking, I really don't know details of fracking, but she is media and games fracking so she knows that and all the things it's about yeah if you're not interested in it, it's like if I was not interested, it would probably go in one ear and come out the other ear or I wouldn't ask questions, but because it is the kind of thing I'm interested in when she tells me things I'm wanna know more I'm like wow I can't believe it, so yeah I think…

C: anyone else find their social groups influence their perceptions

R4: generally in our societies like there would be recycling so you sort of conform to what's there but if there was one regular bin I wouldn't take my recycling away and go and find

R1: don't have the time and can't be bothered

R4: yeah if it's there

R1: even if it's outside

R2: this is what I don't understand is the same thing you said if there was one you wouldn't put out but I sort of get a carrier bag and just chuck it in a recycling bin ok this carrier bag is for my recycling it's not a big deal

R4: in terms of

R1: but then you have got to implement that then you have to have this bag there

R2: now you see this is where it differs because you know it's part of me it's part of what I do I have my paper basket I have my […] basket I have to wash all my but then I always tell people it's so easy I will freak out if someone throws rubbish into my recycling do you know it's so easy and like what you said they can't be bothered like everyone wants things to be made you know already made for them already made easy but it won't take any time if there's only one bin or if there's no one to put my recycling I'll just get another bag for my recycling as well

C: so that was an interesting point there, so yes we are influenced by, your influenced by the people around you but you raise an interesting point about conformity, that if people are there and are recycling then you're more likely…

R4: absolutely yeah

C: to recycle if other people are there where as if you're by yourself and there's only one bin then…

R1: yeah

C: you don't feel you need to conform as much

R1: that's also why obviously why the UK has picked up on sustainability more than I dunno other countries like you were saying some countries aren't where as in the UK they are in a way though everyone is still quite lazy

R2: the media help a lot

R1: yeah

R2: You know there's the press here so powerful, you know so the press you can't hide anything. Everything's a big deal like I see something in the news and my Dad's like ah this is nothing and I'm like yeah it is something, but here it's so big that it's nothing you know really the things been done like information, the information acts even those things that were 10-20 years ago people are still you know, people are still going to dig it up, so the media helps here like I say people confirming so if the media came everybody has to do this and then you see all the people doing it most people will most likely do it as well because they are seeing other

people doing what they are seeing on the media and on social networking website oh have you done this we have done this have you heard this it's so easy for things to go viral or what not

R1: but there's also just implementing policies as well that force people to do certain things as well that is probably the main thing that's got the UK being green I know sustainability but for me green aspect like, umm, what was, it the government will give you money if you buy a smart car or like one of those

R2; yeah no congestion charge

R1: yeah

R2: that's a very good that green car picking up about is a very good idea because as you said you get like yeah you get some things for having a green car you don't get congestion charge you don't pay road tax or something there are a lot of incentives for having um

R1: just to point out road tax is about CO^2, as a cyclist and some people moan at me get off the road you don't pay road tax they're idiots they don't know, it's literally about it's not the right to use the road it's about the emissions of your car

R2: yeah

C: yes

R3: But, you see these cars here, I think the reason why people don't get them is just they don't look good like

R2: But they do! Have you seen the new one? They do though.

R1: Have you seen the new Tesla?

R3: Yeah, I think I've seen that one. But how much is it like I dunno?

R1: It's about £80,000.

R3: As they get better people will buy them. Like if you look at the new BMW the electric one. It's half electric, half…

R1: Did you see that on top gear on Top Gear?

R3: Yeah I saw it on Top Gear.

R1: That's not actually that good. Didn't they find out like it's only 27 mpg or 20 mpg?

R3: It's not really that good as well and you have to charge it like probably like every 5 hours

R1: It just looks crap.

R3: Yes. Bus as I say, as they get better, as they start to look better, people can probably say, 'you know what, that's something that I can drive', but if you look at these little ones I mean it's not really something that I can drive, not cool.

C: So fashion. Is it fashion, image, what word would you use to describe that influence on how you perceive sustainability?

R2: Yeah, fashion, people, yeah, looking nice is better.

R4: Trends

R1: Yeah, trends,

R3: Yeah I probably go with that like

R1: Yeah the only reason you would buy like one of those electric cars or some sort of hybrid or whatever they are, is simply because you want to do it for the environment.

R2: You are not doing it for looks.

R1: But if anyone actually knows cars you realise, that's a car but not actually that good. I'd would much rather buy a second hand BMW which is half the cost and three times better as a car, but that's just from a person that knows cars. You don't, the only reason you would actually buy - no actually it was the hybrid cars the new one the Toyota.

C: So does this influence how people perceive sustainability do you think? Is this a driver behind people's perceptions of sustainability?

R1: I think it helps understand why we might not be moving as quickly as we should.

C: Right okay. Can you explain that a bit more?

R1: Well like we were saying, it's about conformity isn't it. So you are going to conform if other people do it. But it's getting that trend, started. I that's what I think we're missing. I mean it's begun, like to do with sustainability especially at Plymouth Uni. Like, you've even got it like printed on the grass. Like, but it's just getting the trend just getting more people to talk about it and getting it all

R2: Yeah, awareness.

C: So to summarise that point then. Am I interpreting you correctly that trend and fashion and conformity - that influences how you perceive sustainability - whether it's a cool thing to do or not.

R1: yeah

R2: not me

C: no, not you, ok.

R1: I'm not saying without that it's not a good thing, but that is generally where everyone gets their ideas from. Like if no one is going to conform, if there's no trend or anything, you are not going to care about chucking away glass into the right bin.

C: So it's an important part to get people engaged

R1: Like most people you got to conform

R2: Says who? No are you talking about people in a particular age range that don't have any time most people that's a lot of people I think it's about what peoples values are what peoples interests are even somebody wants to do, where people come from you can be the only one in your whole village that is doing recycling if it's what you want to do it's not about trend even if the neighbours are not doing it you are not going to say none of my neighbours have their recycling bin out I'm going to take my one back in, do you know I feel it's an individual value sustainability of being green

C: do you think it could be an influence for other people

R2: yes, I think that's where he comes in

C: yeah

R2: especially for young people if they see a lot more trendy, if they see a lot more people doing it, then they might do it. But for people who are really interested in it, I think that they really believe in it, I don't think it's about trend. I think for more people, for it to be bigger, they need to make it – give it a bit more umph.

C: yeah, yeah. Ok so we have there then the things that influence your perception of sustainability come from education, you touched on politics also from conformity and fashion and those elements we mentioned media, where else, what else influences you

R1: uhh friends as well

C: oh yes we mentioned friends yeah anything else you would like to add to that

R2: making the world a better place is that not a good one

C: right so your morals

R2: yeah thinking of why

C: yeah

R2: I think of my children I guess some places you go to are just so beautiful or whatever when they are showing this documentary I was like when they were showing the before and after you know and how things were greener you just think oh my god I can't believe we have done this in how many years and then you think oh what will it be like in the next 20 years what will we be like in the next 20 years but we have to start doing things now, I don't know I think people just think everything is going to stay forever if we continue the way we are for me I think people need to realise the sooner we are changing our way of life and becoming a bit more sustainable whether we need to make it more fashionable so that more people can do it whether we need to put it into our modules whatever it is that we need to, do you know cause more awareness cause people whether they like it or not just notice that it's a serious topic and I think it should be done

C: so if we go back to that with that point that you made at the beginning of there then that it's down to your own morals as it were can we explore that point a bit further does do your own morals

R2: you ride a bicycle why do you ride a bicycle cause of the emissions you said

R1: no

R2: no

R1: no I just started cycling with a club and I just got quite fit from it and came to Uni alcohols quite calorific and then I also hate the hills so I sort of stopped I used to live in London so I used to cycle to Windsor and back every Sunday

R2; oh ok

R1: which was about 70 miles with my club

R2; that's quite a way

R1: yeah I loved it yeah I was tired at the end it was a good like 5/6 hours bike ride but it was what I did on a Sunday and I got quite fit from it and then and that's got nothing to do with CO^2 emissions I just generally enjoyed it because it was healthy but at the same time looking at the distance I travelled that was just my own body right and I was getting fit from it and then look at someone in a car that person would just be sitting down doing nothing and then obviously it's kind of shocking to think how good cycling is especially round London when it's like…

C: so if we get back to our things, interesting though it is, and was your club a rugby club was it or rowing

R1: cycling

C: cycling right I see, so that whole moral aspect then as to how it might influence how you perceive sustainability has that, does that resonate with anyone is that one of the things which influences your perception of sustainability

R3: yeah I think so cause if you go on like social media like Twitter and Facebook and that I bet if you scroll down the list for a minute or two you would see something about like someone about making the world greener and that…

R1: it makes you think

R3: see something about it and everyone will see these things but we don't really…

R2: pay attention

R3: yeah we don't really care about it because it's not affecting us yet so we don't really care about it

C: are these the environmental aspects we are talking about

R3: yeah obviously global warming and that we have other ways of getting around that stuff people just use because of that they don't really care cause obviously we are not really looking at the dangers of it right now I was looking at this other thing on Facebook they do this solar thing where all the worlds football grounds are just going to be solar panels and I dunno if you

saw that in Amsterdam it's already there, it's like a wall which is about 300 meters, it's just solar panels and they can light up about 2/3 houses for like a week or something I can't really remember but it's something pretty cool they are saying they trying to sort of like, obviously it will cost a lot of money, were talking about trillions and stuff, now if people did care about it they would start spreading the word and donating money and like I know there is a lot of rich people that can sort of like…

R1: but there also the laziness though isn't it

R3: Yeah like her she does it because she needs to do it for all the right reasons whereas for me I just do it cause

R1: it means change, can't be bothered to change your lifestyle

R3: no not even that it's just the like maybe I should be like inspired or something else which I'm not yet

C: right ok

R3: yeah that's what I would like, pop up put my heart

C: so you're going to be more influenced by sustainability if you find it inspiring

R3: yeah I think it's a good thing but I'm just not working like putting…..

R2: you need to be committed

R3: yeah, yeah

C: so if we look at the morals behind it then does faith come into that does faith help inform how you perceive sustainability

R2: what kind of faith

R1: no as in like the idea that what you're doing actually helps, is that or….

C: faith as in religious faith

R1; oh right

C: or it could be that faith as well

R2: that's good

C: right

R2: I'm a Christian as well I can see how it will come into it but for me I don't think my religion has anything to do with

C: yes cause another, another participant we had in another focus group mentioned that the earth is a gift and the fact it's a gift we should look after it…..

R2: take care of it I agree

C: take care of this gift

R1: Judaism it says leave as when you came into it something like that that's one of their

R2: that's a good one

C: but for you, you personally your faith if you have a faith isn't necessarily influencing your perception, it's not one of the factors for you guys

R2: no, no, no

C: ok that's fine were there any other influences on your sense making of sustainability

R1: you know what inspiration I reckon you get fired if you get like a few big companies to actually have like corporate responsibility if that is more out there you get a snowball effect one person does it then someone else and it sort of that's sort of it is happening we are at the beginning part we just need more big brand names to do something and you don't want like you get issues like Primark like everyone says like child labour and so on and at the same time this hood is actually from Primark because it's cheap and it's just down the road it's…

R2: you see with me I won't go to Primark or I think this is where, it's not that I won't go to Primark but if there's products or if there's anything unethical or anything bad I hear or if there's a.... not all just Primark anywhere I specifically go to shops where all my friends say you have a lot of money it's not because I have a lot of money even if a pound of my money is going into sustainability because I know they do that thing sustainability something so for me I feel like I'm supporting a bigger cause

C: yeah

R2: not just Marks and Spencers

R1: I just say H&M and Primark they've been accused of child labour and stuff and having really poor conditions what are those kids going to do without that job

R2: yes I agree but they are ways they can they can make it safer or make it more fair

R1: start investing money back into the….

R2: yeah and of course kids got to feed their families at the end of the day what are their parents going to do but if those kids have to work then they should make after school, I mean everyone needs education, they should make it more sustainable so it's not that they are exploiting the kids that's what I think, wow those are spicy!

C: how many did you need before you notice?

C: we touched briefly on education umm and how your time already at the business school has influenced what you think of sustainability, you mentioned earlier on that when you came into the university you had mostly green perceptions of sustainability but since coming to the business school that's broadened, have any other aspects of your education influenced how you perceive sustainability. If I give you an example one of our respondent's has mentioned that when they did their A level sociology that opened up the sustainability of the family and economic sustainability of the family and so on we have had other students mention their

geography A level or their GCSE A level and how that had a big influence on how they perceive sustainability and I was just wondering if there was anything like that which influenced you, because I am interested in exploring that in a little bit more detail

R1: cause did economics at A level and obviously we had we are mid-way through a module now which is essentially just A level stuff again

R2: are you doing economics yeah boy well it's hard

R1; so there's several like there's several aspects like in the economy we know there's like a every 10 years or so I think is theoretically it should stabilise over time that's the general idea in terms of growth and stuff we are going up at a steady rate but obviously during that rate it does that up and down business and that can't handle certain things….

R2: true like small businesses

R1: no, definitely and then it's just understanding how to survive long term I think

C: ok so long, the longevity, had you considered the longevity to do with sustainability before that module before that A level

R1; I never really associated it with sustainability more with a general like this is what happens…

C; yes

R1: but obviously like at Plymouth Uni sustainability is brought upon quite a lot, you see it in several aspects

C: yeah, yeah that's interesting thank you, any other big insights as to how education has influenced

R2: yeah I agree with him as well before I just thought sustainability was being green but yeah we class and everything I am seeing the long term goals of a company as well shows how sustainable a company how they treat their employees as well so before I thought of green issues but now I'm seeing how can even with the green issues and with fair trade I'm seeing how the normal person on this street definitely I can see a connection now a link between planet and corporations those two different things

C: that's it's bought them together ok thank you

R4: me to, I did sociology A level and sort of bought in more of the family aspect of sustainability and that the relationships and sort of classes and how it affects our sustainability within the family and that, finances and stuff

C: ok so the more social element yeah

R4: yeah

C: ok thank you I know perhaps not all of you took part in the sustainability literacy test, did anyone take part in it. You did it

R3: I did, I got quite high

C: yay! Did you do it, you did it

R2: It wasn't the first time I didn't go on the second day

C: that was when you when the U.N system crashed

R2: Can you imagine U.N failing why am I not surprised

C: but you turned up and then because there was a system failure you didn't bother coming back again that's understandable ok so how did you feel taking part in the sustainability literacy test

R1: umm, I thought there was a lot of, it was quite easy to pick up on what they wanted you to choose like demand characteristics

C: ah ok, interesting

R1: they will say something like, I can't remember some of the questions, but they will say something shocking which will like how many this how many nappies are thrown away or something really weird, I forget what it was like something you would think, oh maybe it's like and they give you like the option 50 thousand, 100 thousand, 2 million, something like that and the idea was you would want to pick say the middle one 500 thousand and then it's like turns out it's 2 million and I knew it was going to be 2 million but I wasn't sure that was the actual number as in

C: yeah

R1: I knew they wanted it to be shocking and I knew it was going to be high and personally if someone asked me roughly how many it would be I would have chosen the other number

R2: the higher number

R1: no the lower number just off my head but because I had the option there I knew what they wanted me to pick

C: yeah

R1: if that makes sense

C: so you felt they led you a bit

R1: yeah well that's just I could tell they were trying to be a little bit shocking with the numbers

C: ok that's interesting

R1: so I would pick higher than, so let's say if someone said do you know what I mean it's sort of

C: I do

R1: so if someone's trying to say to you how many do you think is and you would pick a number when actually if that numbers in there and there's a higher number I would probably pick the higher number in a multiple choice test

C: yeah

R1: so if I know that's they are trying to like shock you

C; yeah, yeah

R2: it's surprising you say about nappies it got to a point with my son I said you know what I'm not going to buy any more nappies…..but that didn't work for very long

R1: why was the question about nappies in that for some reason?

C: they were randomly donated questions I think

R1: yeah, yeah

C: so I'm not sure if everyone got the same the same question, how did you find the test how did it make you feel?

R3: there were a few things I didn't know in there, I actually got a high mark, but I think they were just like general questions like they saying the answers are there and obviously once you look at the answers you just know like what the right answer is just get a feeling that this is the right answer but

R1: apart from the acronyms and stuff like that

R3: yeah, yeah, but a lot of stuff I didn't know about but I did get a hang on it

C: and the fact that you didn't know lots about it how did that make you feel, can you remember?

R3: I would say probably like….

R2: Did it make you curious did you wanna know or do you just like oh it's gone now

R3: it just made me feel like I didn't know anything

R2: so it didn't make you want to know

R3: if I said I didn't want to know I would be lying

R1: during the test I was like oh that's interesting and I wanted to search something

R2: so it made you curious then

R1: that's how I normally like operate, I'm on Facebook and like that's interesting I'll open up a new tab and also it was timed and also once you had done the questions you were like I'm finished and I don't really care anymore it's just right there and then it sparks your interest but you not going to go back to it

C: so it sparked your interest

R1: mmm at the time

C: yep ok yep did it put you off sustainability at all

R1: the fact that it was morning and there was a test a little bit but that's not…

R2: no one likes tests

R1: but at the same time cause I got higher than most I think it was 65% I think and the average was 54% in the UK I think

C: very good

R1: so I was quite pleased by that but at the same time there was also demand characteristic area

C: so it didn't put you off

R1: no

C; did it put you off at all?

R3: no

C: Good. Because what we don't want to do is turn the students off sustainability. We want to spark their interest and make them inquisitive. What do you think the role of the business school is with regards to sustainability?

R1: Well, they want you to go to corporations or start your own business, and sort of make sure you understand it, make sure you've got social responsibility and just generally think in the long term.

R2: I think if they're preparing us – if we're the leaders of tomorrow, they have to prepare us, and sustainability is a big issue right now and it's only going to get bigger and humongouser. Basically Plymouth University have to prepare us, or we are not getting our money's worth.

C: Right. So Plymouth University has a very important role, they are there to prepare us or you are not getting your money's worth.

R2: That's how I see it.

C: Interesting. I might quote that somewhere!

R1: Why isn't it brought up in A-levels and GCSE though?

R4: I think it's bought up but not in a very effective way.

R2: Also I think people of that age are not really interested, but when you are at university you are kind of more adultish

R1: You're learning more about life rather than being forced to do something that…

R4: You become more independent

R2: Yes! Yes that's what I mean. But at university I think people are more adult and you can I don't know it's like…

R3: mature

R2: Yes. More mature to understand that actually what sustainability is. Like I said, at A-level they give you ideas but at university it's higher learning, they are not scared of giving you, making you think, and you know, ponder on what sustainability or how does it affect me, or how it's going to affect the company or the company staff or you know.

C: What do you think is the role of the business school?

R3: I dunno. I think it's a new thing sustainability like I totally just started a few years ago I dunno. I remember in one of the lectures I don't know whether it was yours or another one but they were talking about in the 80's or something when computers just started firstly the business school all they did was teach people about technology and stuff to get that generation into like

R1: giving them the skills

R3: teaching them how about obviously for in the workplace, which is what technology is about so they were given that knowledge about technology and computers and stuff. So now we are already there, so they're focusing on saving the planet now so that's why they are teaching us about all this green stuff.

C: green stuff?

R3: Yeah cause obviously, it's all about now like looking after the next generation and stuff like that.

C: So teaching the skills necessary for the future?

R3: Yeah, yeah, and like saving the planet and give it a bit more time, before we mess it up

C: Okay, thank you.

C: What do you think the role of the business school is?

R4: I think they've sort of like helped us to realise how sustainability affects things within a business sort of environment as opposed to like green

C: So from the business perspective?

R4: sort of like yeah, finance and also like the workers.

R1: and the corporate responsibility

R3: Yeah. That word I have never heard that word before, but now I'm so obsessed with corporate social responsibility and that. All the big companies they have to sit up!

C: What do you think the role of the business school is with regards to sustainability?

R1: I think just to make sure that the people being taught here all go out knowing more about sustainability and then hopefully implementing it.

C: Do you all think that or do you think that university has an important role to play or the business school sorry has an important role to play

R2: yeah, I was going to say not just the school the university not just the business school but the whole at the end of the day we are leaders of tomorrow we are the ones that are going to be out there so everyone is here to learn should have the opportunity to learn about sustainability

C: so that's a yes, it has an important role to play, what about yourself

R1: yep

R4: yep, definitely

R3: yep, definitely

C: brilliant ok thank you is there anything else I should be asking, bear in mind this research is about how our future managers conceptualise sustainability, is there anything else we need to be looking at in this research, anything else we should be asking

R2: there is something to be said about making sustainability trendy making it more fashionable making young people want to do it I think that would help making it more attractive to young people to want to do it

C: so following that conversation earlier on that's made you think of something different

C: say that again sorry

R2: incentives yeah, give them something

C: go viral

R3: yeah cause, it's like what's that challenge where everyone was, It's the celebrities and stuff that interested everyone and made everyone want to do it so I'm pretty sure like people would influence would sort of like do something about it, I don't know anything like

C: thank you

R3: people would be interested in that

R2: even show incentives as well if you give them rewards or little fringe benefit's

R1: like the no congestion zone stuff, like do the same with businesses give them a percentage of business rate tax off for doing something

R2: but I heard some companies would just put an energy efficient box and there oh look at us we are being sustainable

R1: but then at the same time but then I want to lose, they don't wanna spend more money on that

R2: but why if they can afford it don't there are a lot of small companies that struggle but if there are big companies think that the way to be sustainable as well because energy efficient bulbs that covers sustainability but that's not enough

R1: but think about the price involved for that, they can't be bothered there's just loosing like they've got shareholders…

R2: but this should be part of their business plan part of their goals and wanting we are not talking about little companies we are talking about Tesco's like Coca Cola like shareholders capital should not should be worried about they should be more worried about things

R1: getting tax breaks get them worried…

R2: I know, they are worried

C; well you could have answered the next question how do you think being involved in this research the conversation we have had just now has affected your conceptualisation of sustainability has it affected it in any way you have just mentioned a couple of things that you hadn't thought of before but you it this research this conversation in particular has it influenced the way you conceptualise sustainability in anyway

R2: for me it's about I have just realised that it's been more attractive if we make it more trendy maybe young people will be more interested in it

C: ok

R2: that confirming more that confirming more to it if we make it

C: so it has influenced that perception

R2: so for me looking at it for me it's just oh there is no way young people are going to be interested in this kind of thing because they don't have time for it, it has to be people that believe in it and the if you look at it and make it more attractive for them and make it something that they can have benefit's from or something they have some reward from like then before you know it before you know it becomes normal for people to do it there has to be a starter push and I don't think young people will be pushed if there's nothing in it for them

C: did you say snowball

R1: yeah snowball effect

C: ok yeah thank you any other way that this conversation or research has influenced your perceptions of sustainability

R3: yeah I would say so cause well now I'm feeling like not just going home and just look it up and get to know a bit more

C: oh good

R3: something like that

C: ok so it is influencing your perceptions of sustainability just the research itself

R4: Yeah

C: right ok anything anyone would like to add, right well I'll turn this off, thank you so much for that that was a really really…….

C: Right, there I think we're on, ok hello XXXX

R: Hello.

C: and as always help yourself to food and drink and anything else which is there, and welcome to an informal interview about what sustainability means to you.

R: Ok.

C: Thank you for turning up. First of all do you consider yourself to be a future manager?

R: Yes.

C: Yes, and whys that?

R: A future manager of like a company?

C: Yes, or however you anticipate that…

R: Well ideally I would like to own my own business one day. So a bit more than a manager, but realistically I'll probably end up being a manager somewhere. But yes, well, because I do business studies that's probably why I want to be a manager.

C: So you anticipate having managerial roles at some point in your future?

R: Definitely yes

C: You'd class yourself as a future generation of managers?

R: Yes

C: Right marvellous, ok, what does sustainability mean to you?

R: It means using sustainable resources more often, just basically being more greener, recycling, helping people, well it's just helping people out really, and that's just thinking about others, other than yourself. And yes using renewable energy is probably the top one.

C: Yes, so just to recap here, so being greener...

R: yes

C: recycling…

R: yes

C: helping people out…

R: yes

C: and what was that last one sorry?

R: uhh, renewable energy.

C: Renewable energy.

R: Yep.

C: Does it have any other meanings to you, any other connotations when you think sustainability?

R: I usually, it usually brings up lies to be honest because like every political party always say, before elections is the prime time actually, always says 'yes we can be more sustainable yes, yes', and then they don't. They just get in or don't get in and then they still don't.

C: Right so that's an interesting so when you hear the word sustainability to you…

R: I just think you're lying

C: right so has negative…

R: everyone says it but no one does it, it's easy to say.

C: right that's a good point thank you.

R: Not to do yes it's easy to say something and then not do it, anyone can do that.

C: Anyone can do that

R: yep

C: So you think it's a misused term in a lot of places

R: yes definitely especially in terms of when someone in the political format uses it.

C: yes

R: really because they just don't, I mean I think they do try, I don't, I don't really know like, it just doesn't, it just never seems to get better. It doesn't get worse, but it doesn't get better, whatever political party gets in

C: yes

R: but yes

C: Thank you, what has influenced your perspective of what sustainability is?

R: Education

C: Education? Could you expand on that?

R: Well, when you go through primary, secondary and sixth form college, sixth form, they put a lot of emphasis on sustainability and here in university they put, we've had to do sustainability test and there'll be modules not modules like within a module they'll like talk about sustainability even in accounting they will talking about sustainability, which I was surprised about. So education plays a big part in what I think about sustainability. Because we grow up

with it, sort of, you grow up with people telling what you should and shouldn't do. So you grow up with fossil fuels are bad, renewable energy is good, you should recycle you should err.

C: so education has played a big part of forming your perception of sustainability.

R: Yes, the media as well.

C: Media? Ok in what way?

R: Well you see, you see the news as usual, on the news, or on TV programmes and the news will only promote the good things that happen they never, never that's partly where the lies come from because they, they'll say, they only mention what's good on the news…

C: what do you mean by what's good on the news?

R: Well they'll only, they'll only say something that - if they've achieved something, like they've reduced there, if a company says or big companies reduce their carbon footprint by like I don't know 10% or whatever, the news will be all over that and they'll promote it heavily, they'll be like look what the government "due to this government incentive this companies done blah blah". But they never actually say any of the bad, like they'll the news never promote what's bad, basically it's just biased news…

C: Right, what's the sort of negative things which are promoted in the news, give me some examples

R: The negative, err, well like I say people not following through on what they, what they promised really…

C: yep

R: umm things like just, yes it's just renewable energy. I think we should use it more than we do and I think that people aren't, people say they are trying to use it but I don't think they're trying as hard as they could…

C: yes

R: whether that's because oil companies get millions and billions of pounds from the industry that they work in or whether it's because as its, yes pretty apathetic towards it cause, so no, I like, don't know, I my view it's what human race will look at a problem that is happening now and they'll think oh shit we gotta do it, we gotta do it now but when a human race is presented with a problem that happens, well let's say this is going to happen, we think ah well we've got years…

C: yes

R: or we've got time, and then it never actually happens…

C: yes

R: pretty much.

C: So, so the media then, ok those points that you just made, you mentioned telly…

R: yes

C: TV mostly, in what other ways is the media influencing how you perceive sustainability? What sustainability means to you?

R: Umm, well it sort of they sort of promote what sustainability should be…

C: who's they?

R: just uh, the BBC are quite good at it, any news, any news channel really as soon as they sort of start talking about sustainability it seems that everyone has a different like idea of what sustainability actually means because everyone promotes it differently. Some people think oh renewable energy, but no one, but no one, but I don't think very few people actually know the definition of sustainability, when you say like you said earlier to me what's your idea of sustainability, my idea of sustainability isn't the definition…

C: no, that's fine that's what we are interested in and what it means to you individually.

R: Yeah. It's weird because it's, sort of, everyone has their own version of what sustainability is and I don't think there is a version of the word sustainability where everyone can agree.

C: I think you might be right….

R: yes, it's, it's really weird, it's sort of like it might as well be a made up word that people have their own ideas on…

C: yes

R: it's an, it's an odd thing it is an odd thing cause people never like….

C: so you mentioned that the BBC for instance encourage the view that sustainability is about, did you say green energy

R: yes, renewable

C: renewable energy

R: Absolutely. Yes, that's heavily promoted, probably, probably because it's so, well I imagine there is going to be a point where there's going to be everyone's going to have to convert from using oil and fossil fuels to the point, well we will get to a point eventually where either well keep using it until its dry and then we'll move onto renewable energy or we'll keep using it and then something bad is probably going to happen that's my guess. I mean like, like the weather everywhere always changing. I mean yes it's, it's weird because you, you look around the world and the amount of natural disasters and that have happened recentlyin the last like 30, 40 years is exponentially more than what was happening say 100 years ago. When we weren't sort of, I guess it's more industrialisation. If you think, we weren't using oil that much before 1900 and then, well we didn't invent oil but we found how to use oil, we found combustion engines and stuff, and then since that point 2015 so say 120 years, 115 years, we've pretty much ran the fossil fuel supply dry in a 100 years, it's not sustainable at all is it really, unless we find a way to make artificial fossil fuels but then I guess that's sustainable energy.

C: Yes, so the media then in your view are promoting the idea, it seems to be coming forward, promoting the ideas to you of the, the fossil fuels, the renewable energy

R: yes

C: the climate change

R; yes

C: that it's influencing your perspective of sustainability

R: yes definitely

C: regards, to those sorts of things

R: yes

C: What other things influence your perception of sustainability? So we've mentioned the media we've mentioned education

R: yep, those are the big two. I mean what I see around me every day is probably a big one as well. Because when you see people like it's, an ideal example is like university halls. Like I said about ten times, and apparently people have said last year, and the year before – so much waste from halls. No there's so much like bottles and cans and, well bottles and cans from drinking beer too much admittedly, but there's so much things that could be recycled, like in these halls. I mean, I don't know if it's just a Plymouth thing that we don't have recycling in Plymouth halls, or whether its nationwide in halls, or whether it's even further than nationwide. People just seem to waste so much and they don't even realise they are doing it, that's the sad thing about it. I mean that influences my perception of sustainability a lot. And companies I guess do it as well, because you look at companies and you think some of them, you think 'you shit'. And then others you think you're helping out because, but some companies are really bad for it, like yes.

C: Give me some examples of what you mean, about companies which are good and then companies which are really bad for it.

R: Yeah the companies that are good for it, they're sort of, like the Co-op is really good example of a good company because they recycle, they use everything fair trade. I mean, if every supermarket used that philosophy it would be a lot greener place. I mean I know supermarkets do recycle and they do, but it seems the Cooperative are more sort of they're trying harder to do it rather than companies that are having a negative effect. Companies probably like Nestle is one.

C: In what way?

R: I mean, in the way - did you see that thing on the news they wanted to patent a flower? This flower, wherever they are based, and this flower has these healing properties it had some sort of property and they wanted to patent it. Put a patent on a flower! And see things like that. Like Nestle have said they want to privatise water, water isn't a right. Things like that. It's just its quotes like that. Then there's so much things like the Kit Kat advert, the orangutan fingers. So that's more company and media affecting my view on sustainability.

C: Right that's quite interesting because the two companies you discussed there, which influence your perception of sustainability, they seem to be green issues? Would that be fair to say?

R: Yes. Yeah.

C: that you mentioned fair trade…

R: yes

C: for the Co-op I think it was…

R: yes, yes

C: How in your mind, how is fair trade a thing towards sustainability, how's that…

R: well that's more of a like humanitarian sustainability….

C: right

R: I would say, that's moving away from the energy and recycling, well I guess recycling and energy probably fall under the same bracket but, its more sort of humanitarian sustainability I would say. Because not everyone is in as good a position as we are in the west, or some countries even in the east, so I think yes, it's more sustainable for humans, if that makes sense.

C: yes

R: yes

C: Ok thank you, so we've said the media, we've said your education and things you've seen yourself and organisations…

R: yes

C: is there anything else which has altered your perception?

R: ummm I guess, uhhh I guess my parents

C: Parents, ok

R: That's more, I guess they have more of a negative effect on me for sustainability. Because like, like their generation, I don't know if it's your generation, but some people aren't, I don't know, some people in their generation like the last generation, like I guess it's like two three generations old, but they, they didn't really know about much of this do you know much of these things. It was more a sort of whisper than what it is now. And I think that they just, I don't think that they like, you see people driving 4x4's and you see people driving these massive cars like they just don't need. I mean you see, I see like a 30 year old woman driving like a black massive black Range Rover, you can't even park that, let alone - why are you driving that? It's just things like that are crazy but they just don't like, the older generations don't really seem to think. They do, I mean they do like some of them do its just it seems like more people are interested in that do. Then the people that weren't interested in it don't…

C: Yes, so how in particular do your parents influence your perception? Are there any examples you can give?

R: Not really, I mean I guess it's just the way, not the way we were bought up, the ideas that were bought up with obviously your parents affect that a lot. Because you see, like I'll see my dad think something and I think oh yes I think that too, and then you think was that because he thought it and I'm just there like, it's easier to agree than disagree. But yes I think they influence you because they are there from an early age really, well sometimes, yes there we go….

C: ok thank you, anything else which has influenced your perception of sustainability?

R: ummmm no

C: no

R: I think that's about it

C: that's about it

R: yep

C: Would you say there is a tendency towards environmental and green explanations?

R: Yeah, yeah. What so what do you mean by tendencies?

C: That when people talk about sustainability it generally means to them green

R: Yeah, green things – issues?

C: It's interpreted as a green

R: Yeah, yeah. I'd definitely agree with that because what people often forget - like the humanitarian side of sustainability, because I guess you get, in other ways, it gets promoted to you as the way sustainability is, well in fact like I said I think the meaning of sustainability is lost somewhere. No one knows where it's gone.

C: Yes, and do you find you have that tendency too?

R: Definitely yeah, definitely yeah. I think everyone's really guilty for it. Because as soon as your hear the word sustainability, like I guess there are quite a few different people, some people think that, hippies or loopy-left, some people think, icebergs are melting, some people think renewable energy, some people think oh, the animals are in danger and some people think that people are poor. I don't know what it actually means but I guess it means, I guess sustainability is sort of a mix of all of them, that sort of thing.

C: But for your mind, for you, you definitely tend towards a green explanation

R: yes

C: you personally

R: yes

C: Yes thank you, umm did you take part…. because you've already spoken to me about your formal education haven't you

R: yes

C: and the influence that that played. Was there any particular aspect of your formal education, any particular subjects which influenced your perception of sustainability more than others?

R: Probably the humanities, such as geography and history. Definitely geography because you do a whole - like that's pretty much what your GSCE is about.

C: Yes.

R: So definitely geography

C: And do you think that the influence geography GCSE had, are you going to take it with you to your future role as a manager?

R: Yes. I mean, I would like to think that when I am a manager or owner, (I might just be stuck in a call centre somewhere) that, yeah well, hopefully if I get where I want to be, then I hope that I'm going to stay green. Well, not stay green but I'm not really that green at the minute, but I mean, I hope that I would take some of these ideas onto where I'm going hopefully. But you never know, I mean like I say I guess as you get older you have bosses don't you and you do what they say, so sometimes it's not up to you is it but…

C: no

C: did you take part in the sustainability literacy test?

R: I did, yes.

C: you did, didn't you?

R: yes

C: right, now, how did it make you feel doing that test?

R: ummm, a mixture, part of me thought that it was a waste of time to be honest….

C: right

R: because well I'm not, some of me thought it was a waste of time which made me angry because I don't like wasting my time. Some of me, because who it was for, it was who it was for that's what made me angry…

C: right expand on that

R: it was for, I think it was for the UN or like a company….

C: yes

R: they, like I say, its monkey see, monkey do and then there not fulfilling that part of that really

C: so you felt it was, you were angry because it wasted your time because it was for the UN

R: yes, because they don't, they don't really, I mean like they say like I said before they, they talk the talk, but they never walk they never do it. They never, they never actually do what they say. In every objective they've had for sustainability they failed on, pretty much, every single time.

C: Yes, so you felt angry because it was, it was, in part it was to do with the UN

R: Yes, because yes, they don't do what they are supposed to do I guess you could say

C: and you said it made you feel two ways. The first was angry, what was, how else did it make you feel?

R: I guess, thoughtful I guess. Because I mean, because it does make you think because you go along in your everyday life and you don't really think about it do you really…I mean obviously you like and recycle, you try and do things like that but you never think oh I'm being good and recycling you just fling it in the recycler…

C: yes

R: but yes, I yes, I guess thoughtful because, I don't know, it's a chance to think about it really.

C: Think about what in particular, what did it make you think about?

R: Well sustainability as a whole, because you don't really, as I say you don't really think about it in your everyday life. Especially as, not really, as I don't know, like for me as a student I never really think about it. And obviously when we are doing things like this and when the university's promoting 'be green with Plymouth', with things like that, it does make me think. But often you'll be like, you'll be doing your work, you'll be watching a film, you'll be doing this that and the other and you never really think you know, you don't stop and think about it.

C: so it made you angry about it's a waste of time because it's the UN and the UN aren't very good at acting on things….

R: no

C: but it also made you feel thoughtful….

R: yes

C: because it made your reconsider things and consider for the first time.

R: yes

C: anything else about doing that test?

R: uhh, yes I guess like some people I wouldn't have made it, I would have made it, was it optional?

C: it was optional

R: yes, I was going to say, yes

C: but you were encouraged to go

R: yes, yes I think it was, yes I think not really much else about the test that I can say…

C: yes

R: that's about it

C: ok thank you, umm, did you find, did it put you off sustainability that test do you think?

R: no definitely not….

C: definitely not

R: no, cause as I say it does make you think, so it sort of promotes it more. It made me more angry I guess towards things like the UN and companies that say they are going to do stuff and then they don't. Because I mean, why should I take time out of my day to do something for them when they are doing nothing for me, like, we are so, I don't know it's hard to explain, I guess when you're doing, when you're doing a sustainability test for people like the UN, we, I never, I don't benefit from the UN, it's not like I've ever benefited from anything the UN has done, I mean obviously I probably have, but I, it's not like the UN do anything in particular for me or, you don't get to see what the UN do for you. So you think why should I take time out of my day and help you….

C: yes

R: I mean why, why, why aren't you doing this? Why have you just sent it to a university? Why have you yes.

C: Okay, thank you, interesting point. What do you think the role of the business school is then in sustainability?

R: I think the business school might have the biggest role to play really. Because like you say hopefully we're the next generation of management, middle management, supervisors and all the rest of the bull-shit terms that you want to call 'boss'. Yeah, I do think it's important because we've got to have sustainable ideas because otherwise we will just be a replica of companies now. And I think it's important that we, as a generation, do something because slowly we're running out of time. It's sort of like a big clock and its slowly ticking down and it will be interesting to see when it does hit zero what happens, but I guess yes no. I definitely think business has got to have a big part to play.

C: so they've got a big part to play because we don't want to…

R: …because, we'll be the boss of someone else and then that will be our chance for us to put our views across to them, or lead the company or try and lead the company in a different way. Like I said earlier, you might have all these great ideas about sustainability but if you're management and you'll/I'll probably have a boss and if he says do this, you do it. You jump to. You don't, you don't sit there and argue so in I guess in a way a lot of it depends on where you

get your next job after university. But yes, I would definitely say the business school has a part to play in sustainability.

C: Thank you, do you think there is anything else you think we should be asking?

R: No, I think you've covered quite a lot of the points. I think it would be interest yes, you did say earlier what's your idea of sustainability, I think it would be interesting to focus a lot on that because like I said everyone seems to have a different thing on what sustainability is. I mean no two people have the same idea

C: no, as we are finding out!

R: yes

C: Do you feel that being involved in this research, our conversation now for instance, has it affected your conceptualisations of sustainability in anyway?

R: Not really, because I already, I already had my ideas about sustainability, I mean It makes you think about it more, I mean I wouldn't say it changes it and I wouldn't say for me personally it doesn't change cause it's not like, you're, you're asking me questions and I'm giving you my view it's not like your teaching me sustainability. I think if you wanna change someone's view you've gotta teach them like the university have taught me, but I mean I don't think I don't think this would change someone's view cause its more I'm telling you what I think you're not telling me what you think, but yes…

C: ok thank you, is there anything else you want to add?

R: no

C: no, that's me done Chris thanks

R: no, no, there's not no.

C: ok thank you, I'll turn this off now….