EVALUATING EARLY YEARS EDUCATION FOR SUSTAINABILITY IN THE UK TO INFORM EDUCATION FOR SUSTAINABILITY IN GIBRALTAR

DEINAH ENRILE

A thesis submitted in partial fulfilment of the requirements of Liverpool John Moores

University for the degree of Doctor of Philosophy

December 2024

ABSTRACT

Drawing from literature, a **conceptual framework** is introduced at the start of the thesis to identify primary concepts and values related to sustainability which developed throughout the thesis. This informed the data analysis as a tool for understanding the essential interconnected nature of sustainability necessary for encouraging children to become agents of change. Hence, this study explores evidence of Early Childhood Education for Sustainability (ECEfS) across the UK and Gibraltar to inform early years policy and practice in Gibraltar. In light of the current socio-cultural and political context, and the global climate change, the focus in Early Childhood Education tends to be on narrow outcomes and high stakes testing which has resulted in didactic teaching. Previous research indicates that pedagogical approaches to early education which focus on life-long skills such as decision making, curiosity, critical thinking and compassion, offers the potential for empowering children as agents of change. To date, there has been no research conducted in the field of Early Childhood Education for Sustainability (ECEfS) in Gibraltar, and very little literature exists, highlighting the original contribution of this study. This study is informed by Social Critical Theory and participatory research methods including semistructured interviews and participant observations with educators, children, policy makers and researchers within the field of Early Childhood Education (ECE) who shared their understandings and experience relating to sustainability. The researcher also kept a reflective journal. Through carefully selected vignettes as part of the findings, from a range of early years settings across the UK, this study highlights the potential of children as confident agents of change for a **sustainable future**. The **vignettes** emphasise the importance of an interconnected understanding of EfS, with empathy as central alongside the need for reflexivity, so educators are positioned to question personal values and assumptions that underpin dominant discourses of education. The study concludes by recommending the vignettes as a potential basis for professional development regarding sustainability for Early Childhood Educator stakeholders in Gibraltar.

CONTENTS

Topic	Page
Abstract	2
Contents	3
Acknowledgements	11
Declaration	12
Chapter 1: Introduction	13
1.1: Background	13
1.2: Research Questions	15
1.3: Rationale for Research Focus	16
1.3.1: Exploration and	20
Relevance of the Countries	
Included in this Study	
1.4 The Contribution of this Study	23
1.5: The Importance of Reflexivity	24
1.6: Defining Education for	25
Sustainability (EfS)	
1.6.1 Examples of Each Pillar	27
in the Context of EfS	
1.7: Key Terminology Related to EfS	28
1.8: Introducing the Sustainable	30
Development Goals	
1.9: The Relationship Between EfS	33
and Quality Early Childhood	
Education	
1.10: Developing Conceptual	35
Framework	
1.11 An Overview of the Structure of	37
the Thesis	
Chapter 2: Literature Review	39
2.1: Introduction	39
2.2: Defining Colonialism	40
2.2.1: Decolonisation and	43
Education for Sustainability	
2.2.2 Colonialism in the	48
Context of the Countries	
Included in this Study	
2.3: The Climate Crisis and Children	54
as Agents of Change	
2.4: The History of Sustainable	58
Development and Education for	
Sustainability (EfS)	
2.5: Sustainable and Millennial Goals	61
for 2030	
2.6: Social Critical Theory	67

	T
2.7: Exploration of the Purpose of	70
Education in the Context of EfS	70
2.8: Perceptions of Children to	78
Enable Agency	00
2.9: ECE Pedagogies that Align with	83
EfS Sold The Balance Franch	04
2.9.1: The Role of Empathy	91
2.9.2: Mental Health and EfS	93
2.10: Post-Humanism as a Relational	94
Pedagogy of Hope for EfS	
2.11: Interpretations of ECEfS in the	98
Four Home Nations of the UK	
2.11.1 Sustainability in ECE in	98
England	
2.11.2: Sustainability in ECE in	104
Scotland	100
2.11.3: Sustainability in ECE in	108
Wales	
2.11.4: Sustainability in ECE in	110
Northern Ireland	
2.12: Developing Conceptual	112
Framework: Summary	
Chapter 3: Methodology	116
3.1: Introduction	116
3.2: Ontology	116
3.2.1: Insider Outsider Research	118
3.3: Theoretical Underpinning: Social	122
Critical Theory	
3.4: Qualitative Participatory	125
Research	
3.4.1: Relational Ethics	126
3.4.2: Confidentiality	127
3.4.3: Respecting Children as	128
Participants	
3.4.4: Debriefing	130
3.5: Sampling and Selection Process	131
3.5.1: Demographics	134
3.5.2: Background and Initial	134
Intentions	
3.6: Pilot Study	138
3.7: Semi-structured Interviews with	141
Adults and Children	
3.7.1: Conversations with Children	142
3.7.2: Interviews with Adult	145
Participants	170
3.8: Participant Observations	147
3.8.1: Participant Observations	148
with Adults	

	1
3.8.2: Participant Observations with Children	149
3.8.3: Observation Tools	150
3.9: The Use of Reflexive	151
Frameworks	152
3.10: Reflective Journaling	
3.11: The Relevance of Vignettes	154
3.12: Developing Conceptual	158
Framework: Summary	100
Chapter 4: Analysis Process and	160
Key Findings	160
4.1: Introduction	161
4.2: Thematic Analysis	
4.3: A Modified Version of Braun &	166
Clarke's Model of Analysis	100
4.4: 'Personal Questioning' as an	168
Ongoing Process	170
4.5: Phase 1: Familiarisation	170
4.6: Phase 2 & 3: Generating Initial	171
Codes & Themes	4
4.7: Phase 4: Reviewing Themes	175
with Participants	
4.7.1: Discussion of Emerging	177
Themes	101
4.8: Phase 5: Naming and Defining	181
the Themes	100
4.9: Phase 6: Producing the Findings	183
4.10: Summary of the Key Findings	184
4.10.1: Interpretations of	185
Sustainability	101
4.10.2: EfS Appreciation	191
4.10.3: Empowerment	194
4.10.4: Associated EfS Challenges	195
4.11: Developing Conceptual	201
Framework: Summary	200
Chapter 5: Discussion	206
5.1: Introduction	206
5.2: Rationale for the Gibraltar	208
Vignettes	000
5.2.1: Background Information on	208
Gibraltar Vignettes	242
5.3: Different Perspectives of	210
Sustainability in Gibraltar	240
5.3.1: Interpretations of	213
Sustainability	247
5.3.2: Identified Challenges	217
5.3.3: Empathy	219
5.3.4: Role of the Adult	220
5.3.5: Perceptions of Children	221

5.3.6: Birth to 5 Matters (Early Years Education, 2021)	225
	227
	228
Vignettes	223
-	229
the England Vignettes	
	229
England	
	234
Sustainability	
	240
	242
5.5.4: Perceptions of Children	243
•	245
Years Education, 2021)	
	246
5.5.7: Emerging Themes Clarified	248
5.6: Rationale for the Northern	249
Ireland Vignettes	
	249
the Northern Ireland Vignettes	
	250
	254
Sustainability	
	256
	257
	258
	260
	260
Years Education, 2021)	
The state of the s	262
5.8: Rationale for the Wales	263
Vignettes	
	264
the Wales Vignettes	
	264
	268
Sustainability	070
ordina di	270
1 2 2	270
	271
	272
5.9.6: Birth to 5 Matters (Early	273
Years Education, 2021)	
The state of the s	275
5.10: Rationale for the Scotland	275
Vignettes	

5.10.1: Background Information on the Scotland Vignettes	276
5.11: Hillside Montessori	277
5.11.1: Interpretations of Sustainability	280
5.11.2: Identified Challenges	281
5.11.3: Empathy	282
5.11.4: Role of the Adult	283
5.11.5: Perceptions of Children	285
5.11.6: Birth to 5 Matters (Early	286
Education, 2021)	
5.11.7: Emerging Themes Clarified	287
5.12: Critical Discussion of the	288
Vignettes	
5.12.1: Summary of the Themes	288
5.12.2: Power / Politics	290
5.12.3: Values, Relational Ethics	293
and Emotions	
5.12.4: Personal Questioning	294
5.12.5: Doing Things Differently	295
5.13: Final Conceptual Framework	297
Chapter 6: Conclusion	302
6.1: Introduction	302
6.2: Summary of Answers to the	302
Research Questions	
6.2.1 RQ1: How do early years	303
educators, children and policy	
makers understand sustainability in	
the early years in UK and Gibraltar?	
6.2.2 RQ2: How is sustainability in	304
the early years interpreted in	
practice?	
6.2.3 RQ3: What are the potential	306
barriers that hinder sustainability in	
the early years in the UK and in	
Gibraltar, and what are their	
implications?	
6.2.4: Relationship between findings	307
and the final conceptual framework	242
6.3: Recommendations	312
6.3.1: Policy Makers	313
6.3.2: Educators	314
6.3.3: Children	315
6.4: Limitations	315
6.4.1: Researcher's Subjectivity	316
6.4.2: Covid-19	316
6.5: Professional and Personal	317
Development	

6.6: Future Research	318
6.7: Concluding Thoughts	319
References	320
Appendices	343
Appendix I: Ethics Approval Covering Letter	343
Appendix II: Semi-Structured Interview Participant Information Sheet	345
Appendix III: Semi Structured Interview Participant Consent Form	349
Appendix IV: Parent/Guardian Information Sheet	352
Appendix V: Parent/Guardian Consent Form	356
Appendix VI: Child Information and Assent Form	359
Appendix VII: Semi Structured Interview Extract Example	360
Appendix VIII: Classroom Observation Extract Sample	361
Appendix IX: Example Reflective Journal Extract	362
Appendix X: Positionality Statement	363
Appendix XI: Three Examples of the Researcher's Engagement with Reflexivity	366
Appendix XII: Gibraltar Key Interview Transcripts (in connection with the Gibraltar vignettes)	370
Appendix XIII: More Examples of Data with Children across the 4 Home Nations & in Gibraltar	375
Appendix XIV: More Key Examples of Data with Educators across England and in Gibraltar	381

List of Tables

Table 3.1: Demographic Data from	134
Five Settings	
Table 4.1: Reflexivity within Braun	167
and Clarke's Model of Analysis	
Table 4.2: Key Findings	185
Table 4.3: Key Connections between	202
Themes and Concepts	
Table 5.1: Connections with	235
Sustainability	
Table 5.2: Neoliberalism: detrimental	292
effects on ECEfS	
Table 6.1: Conceptual Framework	308
and Final Themes	

List of Figures

Figure 1.1: Visual Representation of	26
the Three-Pillars (Purvis, Mao and	
Robinson, 2019)	
Figure 1.2: Developing Conceptual	36
Framework (Author's own work)	
Figure 2.1: Developing Conceptual	114
Framework: Literature Review	
(Author's own work)	
Figure 3.1: The Researcher's	121
Positionality (Author's own work)	
	139
Figure 3.2: Pilot Study Template	
Figure 3.3: McLeod's 9 R's of	152
Reflection (McLeod, 2019)	450
Figure 3.4: Developing Conceptual	158
Framework (Methodology) (Author's	
own work)	
Figure 4.1: Participatory Analysis	167
Process (Author's own work)	
Figure 4.2: Developing Conceptual	204
Framework (Analysis) (Author's own	
work)	
Figure 5.1: How Perceptions of	224
Children can enhance Sustainability	
in Reggio (according to Martalock,	
2012)	
Figure 5.2: Vulnerable Perceptions	225
of Children and Sustainability	
(according to Martalock, 2012)	
Figure 5.3: Extension of Figure 1.1	236
(Three-pillars in practice) (Adapted	
from Purvis, Mao and Robinson,	
2019)	
Figure 5.4: Final Themes	289
Figure 5.5: Conceptual Framework:	300
Vignettes (Author's own work)	000
Figure 6.1: Final Conceptual	310
Framework (Connections) (Author's	310
own work)	
Figure 6.2: Correlation between	317
	317
Themes and the Researcher's Initial	
Positioning (Author's own work)	040
Figure 6.3: Outcome of the	318
Researcher's Journey throughout the	
project (Author's own work)	

ACKNOWLEDGEMENTS

The completion of this thesis would not have been possible without the ongoing guidance and encouragement from my lead supervisor; Dr Naomi McLeod. Her expertise and motivation were extremely important for my progression with this research project. I am fortunate to have had such an understanding supervisor throughout these years. I would also like to thank Professor Michael Thomas for his continuous guidance and professionalism when aiding my work. Lastly, I would like to thank Dr Catherine Wilkinson for her time and support. Undergoing this PhD has been a life-changing experience and it did not come without challenges. To my PhD post-graduate community, I thank you for providing a safe space for communication and most of all, for your friendships. Lastly, my deep gratitude goes out to my family and friends for their patience and understanding during stressful times.

DECLARATION

No portion of the work that has been referred to in this thesis has been submitted in support of an application for another degree or qualification of this or any other university institutes of learning

Chapter 1: Introduction

This Chapter introduces the study and begins by outlining the background and rationale for the research and the current context of Early Childhood Education (ECE) in Gibraltar. More broadly, the dominant Anglo-American and Western European discourses of ECE are discussed as they are increasingly being replicated in many parts of the world. Such dominant discourses can distract from quality forms of education necessary within the context of the current global environmental crisis such as economic decline, social and political issues and climate change (Cameron and Moss, 2020; UNESCO, 2020).

The need to explore more sustainable practices within education is considered as part of the research questions presented. This thesis defines EfS by aligning with Rieckmann's (2017) framework, which emphasises three interconnected pillars. Following this, the relevant United Nations Sustainable Development Goals (SDGs) are introduced and the relationship between quality education and EfS is explored. A conceptual framework is then introduced outlining the main concepts explored in this Chapter, which will inform the Literature Review: Chapter 2. Finally a summary and overview of the thesis will conclude this Chapter.

1.1 Background

Within the realm of early childhood education in England, Cameron and Moss (2020, 2019) identify how ECE is facing a crisis due to the focus on dominant discourses associated with developmental deficit models of

education that centre on a narrowing curricula and outcome driven accountability. This pursuit of high returns is in direct contrast to research on the promotion of quality early childhood education based on positive dispositions to learning, that incorporate participatory approaches in which children are encouraged to think for themselves and make informed decisions (McLeod, 2019). Such methods are central to an ethical, socially just approach to learning and well-being as promoted in many international approaches to Early Childhood Education such as the Reggio Emilia approach in which a socio-cultural perspective of education is valued (Hall et al., 2014).

In this vein, Rieckmann (2017) highlights how Education for Sustainability (EfS) offers the potential to be a global driver for change which focuses on empowering learners to make choices and be confident agents who aim to create a just, economically viable society. In nurturing such a generation of environmentally, socially and economically respectful citizens, early years is especially important (Tawil and Locatelli, 2015; Elliott, Ärlemalm-Hagsér, and Davis, 2020).

Bower (2020) argues that there is a need for education to respect children rather than to focus solely on preparing learners for the workforce in line with a human-capital theory approach (Kopecký, 2011). Arlemalm-Hagser and Elliot (2017) note how early years education has a moral responsibility to care and act for sustainable futures for all, despite the troubling political landscapes that may hinder their efforts for global changes. The morals, ethics and values promoted by an education system will determine the

attitudes and actions taken in future generations to come (Arlemalm-Hagser and Elliot, 2017).

The importance of this is mirrored in Bower's (2020) above discourse on the purpose of education, with specific regard to the Rights-Based and Capabilities Models. Such models respect and value children's rights to learn about the world around them, encourage them to think for themselves, make positive changes and thus bring the goal of education and learning back to one focused on the process rather than the outcomes.

1.2 Research Questions

The purpose of this doctoral project is to evaluate how sustainability is perceived and understood in the early years across the UK (England, Scotland, Wales and Northern Ireland) and in Gibraltar. Having identified EfS in the early years as a priority by the Gibraltar government (discussed in depth in sections 1.3, 1.3.1 and 1.4), this research project focuses on the following questions:

- 1. How do early years educators, children and policy makers understand sustainability in the early years in the UK and Gibraltar?
- 2. How is sustainability in the early years interpreted in practice in the UK and in Gibraltar?
- 3. What are the potential barriers that hinder sustainability in the early years in the UK and in Gibraltar, and what are their implications?

1.3 Rationale for Research Focus

Firstly, in deciding the focus of the word 'evaluating' it is important to discuss how defining 'evaluation' in research has been nuanced and subject to interpretation for decades (Wanzer, 2021). As such, in understanding the most appropriate focus within this project it is crucial to understand the French origin of evaluation, namely, 'to access and praise what we value'. In this sense, the word 'evaluate' refers to ones underpinning values, such as what sustainability means to each individual and how it is interpreted and experienced.

Building on the origins of evaluation relating to 'value', Wanzer (2021) emphasises how although there are different interpretations, looking for the 'value' of something in particular is central within qualitative research. For this reason, the methods of this project aim to make sense of participants' understandings and experiences of sustainability in the context of ECE. Additionally, a crucial aspect of this research (e.g., the social pillar of sustainability), is exploring decolonisation in which Indigenous examples of EfS and ways of life are highlighted and defined (in sections 2.2, 2.2.1 and 2.2.2 of Chapter 2). In solidifying this (Kawakami et al., 2007 p. 329) state:

"There are now more calls for evaluation methods that reflect indigenous values"

Hence, it was important to explore 'evaluation' through the lens of Indigenous understandings, where it is viewed as a process of constant reflection, creating space for all involved to learn and work together to add 'value' (Kawakami et al, 2007). Indigenous evaluation prioritises relationships,

respect, storytelling and listening, emphasising a core element of this research - relational ethics (this is discussed in depth in Chapter 3, section 3.4.1). Thus, merging both the definition of the word evaluate with the Indigenous understandings referring to reflection, this project evaluates the current situation in relation to sustainability across the UK and Gibraltar. The aim is to learn about how participants understand and value sustainability, identify any barriers that may hinder sustainability and, ultimately, to explore possible ways educators and policymakers can move forwards with Education for Sustainability in the Early Years (ECEfS).

Expanding on the significance of this project within the 21st century, Borg and Gericke (2019) explain how in the early years, ECEfS relates to building on children's participation and viewing them as active agents and stakeholders in their own futures. Yet, they argue there are many adults within the education sector who do not fully acknowledge young children as active citizens who are capable of driving change related to EfS practices. In this endeavour, Boyd (2018) highlights the need to view young children as strong and capable citizens in the way that Montessori (Lewis, 2012) portrayed the child as the constructor of civilisation and Steiner (Edmunds, 2013) advocated for children to develop their sense of justice and responsibility in the world (discussed in section 2.6).

Davis and Elliot (2014) outline the importance of early years in the formation of identity and willingness to learn, stressing the vitality of teaching EfS concepts such as critical thinking skills to young children (Elliott, Ärlemalm-Hagsér, and Davis, 2020). Likewise, Gopnik, Griffths and Lucas (2015) argue

that young children's minds are intrinsically more flexible, exploratory, and open to listening and respecting other viewpoints than that of adults which highlights the importance of EfS beginning in the early years of education.

Integral to the socio-cultural and political contexts of the global crisis (UNESCO, 2020; Cameron and Moss, 2020), is the environmental crisis which requires urgent attention, relating to issues such as climate change and natural disasters (Food and Agriculture Organisation, 2019). As a result, Tawil and Locatelli (2015) suggest the need for an essential shift in how people think so there is respect for one another, the planet and a shared responsibility that facilitates change. Ultimately, there is a need to evaluate the purpose of education (explored in Chapter 2, section 2.7) and how children are viewed.

McLeod and Anderson (2020) suggest the need to take children's perspectives seriously, in line with Article 12 of the United Nations

Convention on the Rights of the Child (UNCRC), which acknowledges children's right to express their views on matters that affect them and for their views to be considered (UN General Assembly, 1989). This requires a listening approach and an understanding of how to share adult power so there is a reciprocal respect.

In Gibraltar, ECE (birth-5) has followed the statutory framework for the early years foundation stage in terms of setting the standards for learning, development and care for children from birth to five (DfE, 2021) (Gibraltar.Gov, 2020). In Gibraltar children from the ages of birth-three attend private nurseries and childminding services offered, and from the ages of

three to four, public nurseries are available. In the year of their fifth birthday, children move into 'reception year' in primary school (Gibraltar.Gov, 2020). The government of Gibraltar noted a commitment to quality play-based ECE by stating:

"We will continue to evolve our teaching and learning, incorporating aspects of the world-famous Finnish model in order to arrive at the best possible education system for Gibraltar" (GSLP Manifesto, 2019, p.94).

Bastos (2017) adds how the Finnish model is typically described as learner-centred, yet a political party named Together Gibraltar (2020) challenge this by arguing there is a lack of opportunities for children to engage in sustainability practices. The government identifies the significance of acting now and incorporating sustainability practices pertinent to the 21st century, stating how communities have been challenged by the United Nations to aid the toughest sustainability issues by 2030 (Gibraltar.Gov, 2020). The importance of more sustainable practices, particularly in education, are recognised through the government's awareness of the Sustainable Development Goals (Gibraltar.Gov, 2020) where they urge the need to 'scale-up' the adoption of sustainability across the educational system in Gibraltar (Gibraltar.Gov, 2020). An example of this within ECE is reflected in the 2020 launch of the Gibraltar Sustainability Awards that seek to extend the adoption of sustainability throughout Gibraltar Education and in general (Gibraltar.Gov, 2020).

In addition, the government's latest Manifesto highlights the need for teachers to be supported to ensure early years education includes the skills and characteristics necessary for future generations (GSLP Manifesto, 2023). With specific regard to the climate crisis, it stipulates:

"We will continue to promote environmental education, as is now required by law, including climate action change education throughout the school" (GSLP, Manifesto, 2023 p. 120).

Although other sections discuss sustainability in relation to Gibraltar's economy, this is the only mention of sustainability (ECEfS) within schools noted in the Manifesto. Having discussed the rationale behind the focus on Gibraltar, the following section will highlight the relevance of including the four home nations within the study.

1.3.1 Exploration and Relevance of the Countries Included in this Study

When exploring the purpose of evaluating ECEfS in the UK and in order to inform policy and practice in Gibraltar, it is important to be reminded that the school system in Gibraltar follows that of England – both in relation to the EYFS framework and the National Curriculum (Oton, 2020). This includes compulsory education that begins at age four and GCSEs and A-levels that follow the UK's National Curriculum (Oton, 2020).

In Gibraltar, the government has a system in place which sponsors higher education (HE) students studying across the UK. Thus, although Gibraltar launched their own teacher programme in 2019, the majority of teachers in Gibraltar are trained throughout UK universities where they are issued a registration number by the Department for Education (UK). This means that although the ECE framework followed in Gibraltar conforms to England's EYFS 2021 framework, there is some influence from all of the home nations

on Gibraltar's teachers, with regards to how they are trained as some students will complete their PGCE teacher training in either Wales, Northern Ireland or Scotland as well as in England.

It is important to add that Wales and Scotland have been influential in Europe for developing EfS, where Northern Ireland has contributed to the value of nature play throughout recent years (Boyd, Hirst and Siraj-Blatchford, 2017). Hence, there is some educational influence coming from all four nations, which creates space for Gibraltar educators to be inspired and positively influenced by how each nation identifies with sustainability.

Additionally, Gibraltar currently has no literature or research on ECEfS (which will be explored in more depth in the following section, 1.4). This reinforces the gap for educators to be inspired by what the four home nations are currently engaging with regarding ECEfS. While there are existing publications that look at sustainability in HE in Gibraltar and across Europe, there are no publications or research projects that explore ECEfS in Gibraltar that focus primarily on the early years sector. Further reasoning for evaluating all four nations in this study has been inspired by previous research (Nordén and Anderberg, 2012) who highlight the need for global inspiration, learning and dialogue between countries relating to EfS. For instance, they discuss what they call 'pooling knowledge' where students and educators in other countries can take inspiration from each other and raise their awareness of sustainability issues and teaching, particularly through prompting critical thinking and reflection (Nordén and Anderberg,

2012). Hence, Gibraltar already currently draws attention to and is influenced by the broader education system in the UK (Archer, 2013), thus creating space and potential for further inspiration to be drawn.

Furthermore, it is of value to add how across the UK, there are various methods in place to monitor progress. For example, the central way of monitoring progress in schools in England is conducted by 'The Office for Standards in Education,' (OFSTED) (Pratt, 2016). In contrast, in Gibraltar there are no OFSTED checks conducted in the schooling system, creating flexibility and more room to implement and merge different pedagogies into practice.

In this discussion it is essential to consider the political tensions throughout the UK regarding ECE. In documentation reporting progress with sustainability, although each country has unique legislation, the UK is often grouped together when looking at climate action. For example, the (DfE, 2023) claims that the UK government and developed governments (Northern Ireland, Scotland and Wales) are all committed to climate action and will work together. A second example is where UNESCO (2020) discusses the UK's progress towards the SDGs as one unit. Yet, there is evidence to suggest that there has been little progress towards attaining the SDGs, as will be discussed and highlighted in Chapter 2 (sections 2.4 and 2.5).

The apparent main reason for the lack of progress is due to the political tensions that exist surrounding neoliberalism; as Kopnina (2020) argues in this respect, there are nuances when it comes to striving for a more sustainable world in which neoliberalism is influential. She discusses that the

Western world labels students and children as failures against a specific set of 'standards' which ignore vital life skills, such as the teachings of EfS (Kopnina, 2020).

To address this complex context, this project will evaluate understandings and experiences of sustainability across the UK and Gibraltar in order to identify the needs of ECEfS in Gibraltar and how the UK could potentially inform practice in the early years in Gibraltar. A discussion of the four UK home nations' ECE frameworks will additionally be outlined in Chapter 2 (section 2.11).

1.4 The Original Contributions of the Knowledge of this Study

Expanding on section 1.3.1 and summarising the originality and relevance of this study, it has been noted that the Gibraltar government does emphasise some quality play-based learning which mirrors sustainability. Nonetheless, there is a recognition of the need for more opportunities for children to understand and participate in sustainability practices (Together Gibraltar, 2020) that enables them to make sense of the world around them, have a voice and act as agents of change (Barblett, 2010).

As mentioned in earlier sections, there has been no research conducted in the early years in relation to ECE or on EfS in Gibraltar. Thus, this study aims to generate useful guidance for educators on how to embed EfS starting with the early years, taken from carefully selected vignettes from across the four home nations in the UK that demonstrate the interconnected nature of EfS.

1.5 The Importance of Reflexivity

As an introduction to reflexivity in the context of my positionality, Fea (2013) highlights the importance of exploring the history of a country in order to gain an in-depth understanding of its socio-economic context and in doing so, recognise how interpretations of the past are central to cultural and political discussions in the present and future. Deep historical thinking has the potential to transform society as it allows educators and researchers to understand cultural and ontological differences, thereby cultivating humility (Fea, 2013). For instance, my exploration of the history of Gibraltar has highlighted personal biases I hold regarding political relations between Spain and Gibraltar which has revealed the importance of valuing alternative perspectives. To this end, my positionality statement is outlined in Appendix X which shares personal experiences that have informed my values, assumptions and biases.

Becoming aware of these through engaging in a process of questioning has been important in helping me to reflect on the validity and reliability of the research in this thesis. As Holmes (2020) highlights, it is important for researchers to be aware of their positionality as personal beliefs, assumptions and biases influence every aspect of the research process. Arising from this process, having examined a range of frameworks and procedures, I have drawn extensively on McLeod's reflexive framework (2019). As Chrost (2017) notes, being aware of the self is fundamental in unpicking values which underpin assumptions about everyday life as well as the research process. Likewise, Buckley (2016) adds how historical

perspectives are critical for the data analysis process and can improve the trustworthiness of research outcomes.

Elaborating, this awareness is important for me as a researcher to highlight my origins and identify potential biases, in order to adopt a reflexive position. In addition, Chapter 3 (section 3.2.1) takes a deeper look into how this engagement with reflexivity informed my position of 'inbetweenness' while collecting and analysing data from across the UK and Gibraltar.

1.6 Defining Education for Sustainability (EfS)

A definition is noted in the Brundtland Report (1987), which explains sustainable development as an awareness of and taking actions for the needs of the present without adversely affecting future generations (Burton, 1987). Purvis, Mao and Robinson (2019) highlight the interconnected nature of sustainability as a global concept, in which economic, socio-cultural and environmental considerations must always be regarded as belonging together, thus introducing the three-pillar conception of sustainability. In this endeavour, Rieckmann (2017) adds that EfS values a balanced and integrated approach to the economic, social and environmental dimensions of sustainable development, which is important in making a holistic, interconnected approach possible. This is vital in achieving EfS due to the fact that each separate pillar cannot truly flourish on its own; they all require equal attention (Rieckmann, 2017).

As a brief introduction to set the scene for this thesis, Education for Sustainability (EfS) in the context of ECE is about engaging children as agents

of change to take action in their personal lives, within their community and also at a global scale now and in the future (Rieckmann, 2017). In this respect, ECEfS has the potential to empower children from a young age to participate actively, (Rieckemann, 2017). Consequently, ECEfS can generate the necessary shifts in thinking, values and practice needed for such transitions by viewing children as capable citizens who are able to contribute to and create change (Elliot and Davis, 2014). Ultimately, ECEfS is essential to enable children to embed respectful and responsible actions for environmental integrity, economic viability, and social justice for current and future generations (Samuelsson, Li and Hu, 2019).



Figure 1.1: Visual Representation of the three pillars (Purvis, Mao and Robinson, 2019).

Figure 1.1 provides a visual representation of the equal weight of all three pillars (Purvis, Mao and Robinson, 2019) and shows how if one pillar of sustainability (for example, the social pillar) were to experience less prioritisation than the other pillars, this would lead to an unbalanced outcome

as a whole (Purvis, Mao and Robinson, 2019). Figure 1.1 additionally reinforces work by Rieckmann (2017) who strongly advocated for governments to re-consider how the pillars are viewed, as an awareness and value is placed on the interconnections that exist between society, the economy and the environment that can no longer be ignored if humans are to strive for a more sustainable future.

Chapter 2 (sections 2.3 and 2.5 explore this issue in more depth through relevant literature in the field). Examples of how each pillar is relevant in the context of ECEfS are discussed below.

1.6.1 Examples of Each Pillar in the Context of EfS

With regards to what EfS teaching would look like when focusing on each pillar of sustainability, Boyd (2020) outlines examples of what constitutes good practice in ECEfS. She argues that what children learn and experience in their education can heavily influence their futures. Moreover, Boyd (2020) emphasises that the world will continue to be challenged by various environmental, social and economic issues and thus, if children are to be empowered to make change, they must be offered opportunities to develop the skills, values and empathy to enable them to do so. This point solidifies the relevance of EfS teaching starting in the early years, where Boyd (2020) and Rieckmann (2017) stress the importance of inspiring both critical thinking and responsible attitudes in children, where there is more room for absorption and development.

In terms of the social pillar, opportunities to think critically about empathy, kindness and justice are prime examples of what areas educators should encourage when working with children (Boyd, 2020). When focusing on the economic pillar, Boyd (2020) shifts the focus to building children's understanding of the world through place-based learning, and opening up conversations about money, homelessness and equity. Lastly, when it comes to the environmental pillar a specific value is placed on children's outdoor play, and educators are encouraged to focus on promoting a love for nature and animals to enable children to act responsibility (Boyd, 2020).

Furthermore, according to Rieckmann (2017), opening up dialogue about the climate crisis can inspire children to take action and develop awareness about real-world issues, giving them a voice and agency to participate. In summary, Boyd's work (2020) has been pivotal in this project in highlighting how adults and children can work together to encourage an integrated understanding of the pillars where there is an emphasis on adults valuing children's voice and embracing participation (both of which are fundamental parts of sustainability). Further examples of the interconnected nature of sustainability (the three pillars) and what they may look like within ECE practice are explored throughout Chapter 2, specifically in the following sections: 2.9, (pedagogies that align with EfS), and 2.10 (Post-Humanism).

1.7 Key Terminology Related to EfS

This section outlines central areas of ECEfS and highlights their importance.

Such aspects will be elaborated on in Chapter 2 with regards to ECE frameworks across the UK. The following points will be explored below.

- Nature
- Participation / Agency
- Empowerment
- Children's rights
- Democratic practice
- Children's voices
- Critical thinking
- Reflection
- Social justice
- 3 Pillars (socio / cultural, environmental and economic / political)

According to Rieckmann (2017), learners should be able to demand the development of policies like EfS that encourage social justice. Bennett et al. (2019) argue that sustainability is unable to progress without considering social justice. They note how social justice through a sustainability lens targets social injustices such as lack of rights, unequal benefits for different groups, opportunity imbalances, power imbalances and race-based inequalities. Thus, in the context of sustainability social justice aims to fight for and value the rights and privileges of all humans equally, by taking accountability and action (Bennett et al., 2019).

Expanding on this, Kessler and Swadener (2019) argue how young children should experience an ECE that is rooted in social justice and the concept of fairness, especially now, in a time when a range of injustices are directly affecting children, communities and nations. Regarding nature, Leicht, Heiss and Byun (2018) outline the value of learners connecting to and feeling empathy for non-human life.

Through opportunities that promote participation, children can feel empowered and more inclined to make informed decisions (Leicht, Heiss and Byun, 2018). Similarly, children's rights to participate and express their

voices are considered crucial for inspiring a generation of democratic, respectful individuals (Correia et al., 2019). Regarding critical thinking and reflexivity, McLeod (2019) explains how these terms are vital within ECEfS given the current climate of the 21st century's top-down approach to ECE. They highlight how being open to engaging can facilitate an awareness of personal views that opens up new ways of seeing. This is particularly important for educators to take responsibility and question personal practice (McLeod, 2019). Lastly, the three pillars of sustainability; economic / political, social / cultural and environmental, as outlined above by Purvis, Mao and Robinson (2019) and Boyd (2020), are fundamental aspects of EfS as Rieckmann, (2017, p.49) explains:

"political and socio-cultural realities and specific environmental and ecological challenges make a contextual grounding of EfS essential".

Consequently, the United Nations has identified EfS as an urgent issue which is reflected in goal number 4 (Quality Education) of the 17 global Sustainable Development Goals that were set out by the United Nations in 2015 with the intentions of transforming the world (Samuelsson, Li and Hu, 2019). Below, the relevance of the SDGs will be introduced in the context of ECEfS. Further details about how the SDGs emerged will be discussed in Chapter 2 (section 2.4) and also below.

1.8 Introducing the Sustainable Development Goals

The Sustainable Development Goals (SDGs) were introduced in 2015 and are a set of 17 goals identified by the United Nations which governments globally have accepted (UNESCO, 2020). The goals are important for EfS to

flourish as they include targets to minimise inequality, improve standards of living and protect the planet. In particular, Sustainable Development Goal number 4, 'quality education', sets out various targets also expected to be achieved by 2030. Points 4.2, 4.4 and 4.7 focus on access to quality early childhood development, ensuring young people have relevant skills in technical and vocational areas in order to secure jobs and guaranteeing that all learners acquire the knowledge and skills needed to promote sustainable development (UNESCO, 2020).

Target 4.7 specifically highlights the need to teach through EfS about sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity (UNESCO, 2020). ECE in particular can positively influence the core values and attitudes needed to cultivate empathy for others and the planet, to empower and inspire them to act for change (UNESCO, 2020).

The SDGs set out approaches to sustainability that must be prioritised and tackled through education (UNESCO, 2020). All of the above goals relate to ECE as childhood development interventions, with the potential to enhance collaboration across sectors, aimed at health, social, and economic goals to bring together civil society and governmental partners (UNESCO, 2020).

Woodhead (2016) emphasises that ECE is a 21st century priority as childhood is a critical phase for implementing prevention and intervention strategies to address the causes and mitigate the effects of the SDGs.

In addition, it is argued there should be great attention placed on 'quality' in SDG target 4.2 (Education) as the strongest evidence demonstrating the potential of ECE comes from programmes that are respecting children's rights, needs, capacities, interests and ways of learning at each stage of their early lives given appropriate conditions (Woodhead, 2016).

Children are open-minded and curious about the world around them, so they are more receptive to information (Samuelsson, Li and Hu, 2019). Thus, EfS within ECE is a key enabler for achieving these goals as Samuelsson, Li and Hu (2019) add how ECE has influence on the possibilities that lead children into interest, knowledge and values that will aid a more sustainable life (Samuelsson, Li and Hu, 2019).

In order to effectively embed ECEfS into practice and work towards the SDGs, it is crucial for educators to value children and meaningful, democratic learning experiences. Gobena (2020) stresses how quality education cannot take place without participation.

As a result, the link between EfS and 'quality education' (SDG number 4) will be considered below. Section 2.7 in Chapter 2 will take a deeper look at the purpose of education in the context of philosophical underpinnings such as a 'democratic' 'practical' view of education and discuss this in comparison to the 'technical' view of education (Aristotle, 1969), which is heavily embedded in today's education systems.

1.9 The Relationship Between EfS and Quality Early Childhood Education

Jones et al. (2016) claim that debates surrounding quality education have been circulating for a considerable time and remain resolute about quality in association with children's engagement, decision-making and participation. A research project on sustainability and quality was conducted by the World Organisation for Early Childhood Education (OMEP) between 2009-2014 (Engdahl, 2015) noting how quality development is reflected within sustainability projects and require child participation and listening to children's voices. Within ECEfS, 'quality' then relates to a range of elements that focus on democracy and participation within the early years, including respectful relationships, taking responsibility and valuing children's capabilities (Engdahl, 2015).

In relation to the SDGs, as mentioned above the value of learning is reflected in goal number 4, 'Education', where quality relates to a fair and inclusive education (Darrah, 2019). In addition, Darrah (2019) makes a connection with 'quality' and empowerment where the process of motivating and inspiring children is deemed a good quality practice. Similarly, Sterling (2010) explains how quality education should be deeply engaging and aim to not only inspire but change levels of values and beliefs.

Grenier (2019) outlines how the statutory framework for the early years foundation stage (DfE, 2021) in England can be critiqued for not reflecting SDG number 4 (quality education). The framework according to professionals in the field mirrors a didactic approach to learning in which the

focal point is to measure children's attainment scores on a set of targets (Grenier, 2019) thus making respectful and inspiring practice difficult to enhance.

Cottle and Alexander (2012) state that educators' understandings of quality are shaped by governmental narratives and linked to the context of their setting, personal and professional practices. In this endeavour Jones et al. (2016) adds that normative understandings of quality are attached to achievement, evidence and fixed goals rather than actively contributing to practice. Responding to the above, Moss (2016) argues that educators must recognise quality as a choice rather than a necessity, as an individual responsibility to question professional practice. In this way, individuals evaluate what quality means to them rather than what the political system dictates quality to be (outcomes) (Moss, 2016).

Gobena (2020) suggests, an education which values social, ethical and respectful ideals must be realised by all concerned bodies including the government, parents, teachers, the community and wider society at large.

Yet, Moss (2016) stresses that educators can challenge dominant discourses (in this case relating to the meaning of quality education) by re-gaining power to think and question individual perceptions of their position.

The technical definition of quality which circulates many ECE settings shuts down the ability to think and explore alternatives. Thus, Moss (2016) recommends educators getting 'beyond the story of quality' to consider alternative stories as ones which are embedded in democracy and potentiality which are ultimately liberating.

Section 2.7 builds on this and analyses the purpose of early education specifically elaborating on wider neoliberal issues associated with the meaning of quality being perceived as 'achievements'.

1.10 Developing Conceptual Framework

As defined by Imenda (2014) a conceptual framework is the result of bringing together various related concepts to explain and provide a broader comprehension of the research topic (EfS). DeMarco (2020) adds that the conceptual framework can be used to align a theory as an underpinning theoretical framework, informing the methodology. In addition, Imenda (2014) explains that the researcher should be able to demonstrate relationships between the concepts in order to highlight both emerging ideas and issues about the phenomenon (such as EfS in this case).

Liehr and Smith (1999) consider conceptual frameworks as representing an integrated way of exploring inter-related issues that exist. Thus, for the purpose of this thesis, key concepts that emerge organically as part of the literature review, methodology and research process including the analysis will be used to identify cohesive connections and to inform justifications and critical discussions.

In the context of this thesis, inspiration has been drawn from Boyd et al.'s (2021) resource which explored the Sustainable Development Goals (UNESCO, 2020). In particular, the framework identifies 'children's agency', 'community' and 'childhood' as concepts, which aided an understanding of

how concepts can change and evolve overtime, influencing one another (UNESCO, 2020).

For example, the resource emphasises the inter-relations between concepts such as education, and family. Thus, in the context of introducing the position of sustainability in this thesis, the following concepts are dominant and inter-related.

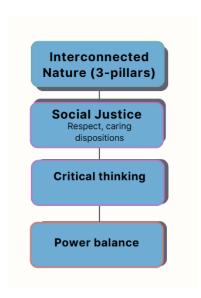


Figure 1.2: Developing Conceptual Framework (Author's own work).

Figure 1.2 highlights the key concepts emerging as part of the content of Chapter 1 as 'social justice' and the importance of respectful relations as central to ECEfS and the value of children developing a caring disposition towards others. This raises questions about current early childhood education and the broader political, social, and economic influences - particularly regarding sustainability and power dynamics which will inform the literature review.

Additionally, it merges and incorporates Figure 1.1 introduced at the start of this Chapter, to show the wider political influences relating to each pillar (environmental, social and economic).

Wider inter-related connections are identified as follows, which will inform the following Chapters:

- Children and educators as critical thinkers
- Respectful relationships
- Social justice
- The need for power balances
- Interconnected Pillars of Sustainability (Wider Influences)

Consequently, each Chapter will end with an outline of key concepts that emerge as underpinning as part of the discussion which will be used to inform the next Chapter.

1.11 An Overview of the Structure of the Thesis

Finally, in setting the scene for the rest of this thesis, Chapter 2 explores the research literature surrounding ECEfS where many of the elements introduced in this Chapter will be evaluated critically. Chapter 3 justifies and outlines Social Critical Theory (SCT) (Freire, 1970) as the most suited underpinning methodology for this study including ethics as an embedded approach in relation to the research methods.

Chapter 4 explains and demonstrates the thematic analysis process for this study followed by a critical discussion in Chapter 5 of the key findings depicted through carefully selected vignettes that demonstrate interconnected examples of sustainability in relation to the research

questions. Such examples of sustainability link directly with the conceptual framework and will be used to inform the analysis and discussion. The thesis concludes with Chapter 6 which outlines recommendations and training needs for key stakeholders within the field of ECE as a result of the study's findings, informed by the final underpinning conceptual framework (6.2.4).

Chapter 2: Literature Review

2.1 Introduction

This Chapter explores and analyses the literature surrounding Education for Sustainability (EfS) in the UK. In particular, having provided definitions of key features related to the study (EfS and quality education) and having explored Early Childhood Education for Sustainability (ECEfS) in Gibraltar in Chapter 1, it progresses by examining the lasting effects of colonisation on education, the climate crisis and the history of sustainable development and EfS. Next, the Sustainable and Millennium Development Goals (MDGs) are explored followed by an examination of Social Critical Theory as the underpinning theoretical framework.

The purpose of education and the relationship with perceptions of children are then discussed, where the concept of neoliberalism is introduced in the context of ECEfS. Next, examples of EfS in practice are outlined and connections are made with post-humanism and EfS. Lastly, ECE frameworks across the UK are identified and analysed in relation to EfS and neoliberal associated challenges regarding EfS teaching are considered throughout. It is important to note the literature discussed in this Chapter is provided in relation to the Early Childhood Education (ECE) context in Gibraltar which follows England's ECE frameworks (EYFS) (DfE, 2021) as explained in Chapter 1.

2.2 Defining Colonialism

This first section introduces colonialism and highlights the need to discuss it within the context of the study. It relates to the political, economic, social and cultural aspects of EfS and how it has been taken up within education sectors. A focus will be placed on Indigenous culture and the links with EfS, as well as the effects of colonialism on the countries outlined in this research, and the lasting impact on education today. The content discussed throughout also builds on sections 1.3 and 1.3.1 (Chapter 1) which outline Gibraltar's education system.

Bhambra and Holmwood (2021) explain that Western colonialism is a phenomenon that emerged from around the fifteenth century onwards, and involves taking over lands, settlement and the development of trade.

However, Collard et al. (2016) explain that there are deeper ongoing connotations surrounding the effects of colonialism on everyday life, particularly cultural damage and destroying and separating families which included the removal of children.

Bhambra and Holmwood (2021) continue by arguing that European social theory has been in denial in relation to the colonial past of Europe and its importance. It is noted there has been a significant absence of the discussion of European colonialism specifically when reflecting on the global, social, economic and political domains (Bhambra and Holmwood, 2021). Adding to this discussion, Reibold (2023) highlights the three mainland-related harms of colonialism: land-theft, a denial of collective determination, and lastly, the imposition of settlers.

Methot (2023) lists some examples of the historical trauma and intergenerational impacts of colonialism, which include: struggles with cultural identity, disconnect from the natural world, spiritual confusion, loss of control over daily lives and alienation.

In contrast, decolonisation is defined by Jansen, Osterhammel and Riemer (2017) as a technical term relating to the disappearance of empire as a political form, the end of racial hierarchy and control. Breaking this down, it also relates to the process of a state withdrawing from a former colony, thus leaving it independent. When exploring why this debate is relevant to the 21st century and EfS, Reibold (2023) presents a critical discussion in the context of climate change, such as colonialism and the need for an appreciation of others and the planet (Reibold, 2023).

Concurring with Bhambra and Holmwood (2021), Reibold (2023) recognises the dominance of unaddressed colonialism in Western educational frameworks. In the context of EfS, Reibold (2023) likewise notes the effects on climate change and the focus on ego rather than eco (an ethical, relational way of living), which is due to political and economic greed for profit, and the impact this has had on every aspect of life and power imbalances. In other words, climate change has become a hinderance for decolonisation efforts that attempt to amend colonial injustices as climate change can contribute further to the loss of profit and lands (Reibold, 2023).

In this endeavour, Recio and Hestad (2022, p. 2) claim that although there is no formal definition of Indigenous people in international law, a general definition is that:

"Indigenous people are those who lived on their lands before colonial powers claimed the land through problematic legal doctrines of conquest, occupation, or other means".

Contrary to the ego-centric 'ego over eco' mindset described by Somerville (2020), many Indigenous communities embrace a relational worldview characterised by reciprocal respect and interconnectedness between human and non-human beings. According to this view, as Reibold (2023) argues, land is not considered a resource or a value in regard to human labour.

To provide examples of this, Cormier (2017) explains how Indigenous people are traditional people who hold deep connections with land and specific ways of life – such as their unique way of viewing the world through an eco-lens, which involves a custodial and non-materialistic perspective towards natural resources as well as land.

Expanding on Reibold (2023), Recio and Hestad (2022) highlight significant links between Indigenous people and sustainability. Firstly, there are many lands inhabited by Indigenous communities (Torres Strait Islanders of Australia and the Māori of New Zealand as key examples) which contain 80% of the world's remaining biodiversity. Additionally, they argue that efforts to tackle climate change in the 21st century (such as tree farms, construction of dams and nuclear power plants) have detrimental effects on Indigenous communities, in particular by limiting access to their own land and natural resources.

This section has identified that both colonisation and sustainability (in the context of climate change) hold nuanced connections with Indigenous

communities that need to be addressed in today's world (Recio and Hestad, 2022; Reibold, 2023 and Bhambra and Holmwood, 2021). Solidifying this point, Aniere (2018) argues it is crucial to respect and promote the rights of Indigenous people not only to their lands and self-determination but in supporting their pivotal role as custodians of nature and agents of change (firstly outlined in Chapter 1) (Recio and Hestad, 2022).

Building upon the discussion of colonialism and the need for decolonisation, the following section further explores the key connections that exist between decolonisation and sustainability. In addition, a progressive and influential organisation (Millennium Kids) (Aniere, 2018) that has engaged Aboriginal communities in Western Australia will be discussed as an example of an educational approach to learning that supports both EfS and efforts to decolonise learning.

2.2.1 Decolonisation and Education for Sustainability

When exploring connections between decolonisation and sustainability, there are various key links to highlight; notably the need for respectful relationships, relational pedagogy, ethics, power balance, awareness of others and prioritising the environment (Brantmeier, 2013).

Offering a distinct perspective Faul and Welply, (2021) foreground how the process of decolonising education must involve a recognition and explanation of a historical set of colonial power imbalances and how such relations play out in education structures in the 21st century. In their

argument, they consider what decolonisation would look like with regard to pedagogy (which will be discussed later on in this section).

Educators questioning what they are leaving out and considering ways of being more inclusive is an important starting point, where Faul and Welply (2021) provide the example of encouraging open-ended practices that creates space for critical thinking to take place. Here, connections are made with Paolo Freire's 'critical thinking enquiry' which focuses on opening discussions on injustices that exist, (Freire, 1970) mirroring the social pillar of sustainability in the fight towards amplifying voices and discussions of real life issues.

In the context of social sustainability, Brantmeier (2013) argues that it encompasses the core of human relationships both with one another and with the land - highlighting their intrinsic connection to the resilience of natural ecosystems (environmental) and the socio-cultural dimension of sustainability. Thus, in relation to the socio-cultural, where EfS targets the reduction of racism and violence, Brantmeier (2013) argues that the strongest focus should be placed on those who are contributing the most damage; humans themselves. Hence, a focus on social sustainability within education can aid the need to value difference and diversity.

As a first example of this, Brantmeier (2013) proposes that within a peace inquiry project, children and educators could examine power dynamics through respect and listening. This could be done by discussing forms of racism in attempts at decolonisation by engaging in dialogue with communities about awareness in waste management facilities and landfills.

A second example of EfS within the context of decolonisation requires the need to engage in personal questioning; for instance, asking, "How do our choices make other people happy or sad, how do they affect other people?" (Brantmeier, 2013).

Expanding on Brantmeier (2013), Aniere, Wooltorton and Boyd (2022) discuss the progression of Indigenous learning in Western Australia, and make connections with sustainability. They note how in a transformative international policy era, viewing the world through an Indigenous lens can infuse strong sustainability knowledge (Aniere, Wooltorton and Boyd, 2022). They go onto highlight the 'Belonging, Being and Becoming: Early Years Framework for Australia' that was formulated by the Council of Australian Governments and provides specific links to EfS; children having a powerful sense of self, connected to and contributing to their world (Aniere, Wooltorton and Boyd, 2022).

Of most importance, they stress that the notion of children 'belonging' amplifies the interconnectedness of all relationships with others through an appreciation of valuing difference. This reflects a connection with decolonisation, where children can begin to value empathy for all humans (as with sustainability). For instance, when children can begin to feel empathy for humans, they are more likely to consider perspectives that are in line with EfS, such as caring for the environment and climate change (Reibold, 2023).

A final pivotal example of a thriving project that is built on respecting children and decolonising curricula is the 'Millennium Kids' non-profit environmental

organisation (Aniere, 2018). The aim is to empower children and young people by working with them to gain a 'skills for life' approach which focuses on becoming agents of change and tackling the big issues, such as climate change (Aniere, 2018). The organisation has engaged Aboriginal communities in Western Australia and strongly advocates for their rights to participate and encourages all involved to embrace their capabilities. As part of the project, a specialised team works alongside Indigenous communities in a co-constructive way to learn from each other and work on issues relating to the environment as well as lifestyle and everyday real-life issues they may be currently dealing with, or could face in the future (Aniere, 2018).

Elements of EfS are mirrored throughout projects based on reciprocal respect, democracy and following the interests of the child. Specific links with decolonisation are noted in their ethos as follows, taken from their Aboriginal framework:

- Story sharing where learners are encouraged to share stories, or express their words through poems.
- Land links (discussions of different connections with land).
- Community links (encouraging all community members to interact with each other).

The Millennium Kids project is grounded in Education for Sustainability (EfS) principles - embracing participatory, democratic, and respectful values that align with Social Critical Theory (Freire, 1970) and transformative education. Additionally, it emphasises children's rights as outlined in the UNCRC (1989) and advocates for the fundamental human rights of Indigenous communities and children.

In contrast, the statutory EYFS framework in England (DfE, 2023) does not recognise the same values as the Millennium Kids Organisation, as the framework's earlier versions were critiqued for portraying a very westernised approach – focusing more on regulations and structure rather than sustainability, democracy and participation (Brogaard Clausen, 2015). For context, the 2023 version of the EYFS framework holds the same focus as the previous versions (which is outlined and discussed in section 2.11.1). Most crucially, Wooltorton et al. (2020) highlight how despite previous attempts to decolonise education (for example, following Tuhiwai Smith's 1999 work) there continues to be a set of imposed programs and curricula fuelled by neoliberal agendas and values.

In this discussion it is important to clearly define 'neoliberalism' in the context of education which Peck (2023) describes as a political and economic movement that has controlled education since the 1980s. In simpler terms, neoliberalism refers to a set of economic and political goals that take priority over everything else (Peck, 2023). Wooltorton et al. (2020) continue by explaining how any possible attempts at decolonising curricula must recognise Indigenous rights, including their rights to land, which is not being acknowledged by governments. Similarly, Yunkaporta et al. (2014) outline the backlash that has been received by Indigenous scholars for trying to decolonise curricula:

"As Indigenous academics, whenever we seek to address imbalances in our representation, particularly in challenging the subjective colonial narratives and qualitive 'commonsense' rhetoric that drives the most draconian Indigenous policies, we are accused of being unbalanced, subjective, lacking empirical evidence – this is how the invisible

machinery of racism and neo-colonialism protects itself". (Yunkaporta, 2014, p.81 as cited in Yunkaporta et al., 2014)

Hence, the above quote challenges the idea that decolonising curricula, in particular within ECE policy and framework is an easy and smooth process. The quote emphasises the dominant focus on neoliberal pressures, which ignore the realities of Indigenous people and their values and beliefs that focus on sustainability perspectives (Wooltorton et al., 2020). Consequently, this reinforces Arlemalm-Hagser and Davis (2017) who highlight how the ECE framework in England priorities more traditional learning such as rote structures.

The final part of this section explores colonialism in the context of the countries included in this study (Gibraltar and the UK) where the effects of colonialism on education systems in the early years are examined in more detail.

2.2.2 Colonialism in the Context of the Countries Included in this Study (England, Scotland, Northern Ireland, Wales & Gibraltar)

When exploring Gibraltar's colonial history, Dittmer (2021) and Archer (2013) discuss the overseas British Territory's historical emergence where the British took an interest in Gibraltar regarding its strategic location. In 711 AD, an Arab military commander named Tariq ibn Ziyad was sent North to test the Visigoth defences (Germanic groups that settled within the Roman Empire). He landed in the Bay of Gibraltar founding a castle on the rock. Overtime, it become known as 'Gibraltar' where an Arab invasion into Iberia was initiated (Archer, 2013).

Following this, Gibraltar was placed under the Spanish crown for roughly two hundred years before the first interest in Gibraltar as a strategic priority came about by the English in 1625 (Dittmer, 2021). In 1704, the British took over and 'captured' Gibraltar during the war of Spanish succession (1701-1714), and Gibraltar has subsequently remained a British sovereign territory since 1704. Although Gibraltar held referenda in 1962 and 2002, the citizens unanimously voted to remain British in both instances (1967 by 99.64% and in 2002 by 98.7%) (Dittmer, 2021).

With regards to educational models in Gibraltar, according to Archer (2013) there is an 'unopposed assumption' that British educational models must be followed in the British Overseas Territory. In exploring the control of language, religion and influence of culture that colonialism has had on Gibraltar, Archer (2013) explains how there have been British influences that have played a significant part and continue to remain dominant in Gibraltar. Yet, it is important to highlight how there is also some Spanish influence predominantly when looking at culture and religion. For instance, although the population of Gibraltar (roughly 32,000) consists of mixed ethnic communities and different religions (Jewish community, Moroccan community and Christianity), the dominant religion is Roman Catholicism. In Spain, a large majority of Spaniards are Catholic, reflecting the influence on Gibraltar during the years Gibraltar was under Spanish crown.

Building on this, in more recent research, Santiago (2021) expanded on Archer (2013) by highlighting how Gibraltar's sense of identity is nuanced and cannot be easily defined due to a range of post-colonial features: cultural

hybridity in terms of language (both English and Spanish speaking) and religion (dominance of Catholic Church). Hence, the British effects of power on Gibraltar is recognised where the British have consistently tried to 'shape' the kind of society they wanted (Archer, 2013).

In terms of how this is translated into education practice, Dei (2019) sheds light on the colonial agenda that is valued in today's world, which includes the push of rote-learning, where learners are put through a system in order to produce results. In addition, Dei (2019) argues that education can help to promote social liberation, as learners can begin to question and fight for a better world (mirroring EfS).

Yet, as discussed in the previous section the curricula pushed forwards in our post-colonial world makes it increasingly difficult for critical educators to decolonise curricula (Dei, 2019).

With regards to the agenda behind the British capture of Gibraltar, the territory still remains a pivotal location geographically. This is due to it being one of the narrowest points in the Mediterranean (near Morocco in North Africa) which positions Gibraltar as a strategic location for ships to control trade through the straits. In addition, when Britain took over Gibraltar it became possible to split both the French Atlantic and Mediterranean fleets as well as the Spanish Atlantic and Mediterranean fleets; once more, stressing the benefits of the strategic geographical naval base (Dittmer, 2021).

As Gibraltar is considered to be influenced by the UK, and broadly follows England's education system, the effects of colonisation on education are not only of value to explore from the perspective of Gibraltar as a colonised territory, but also from the perspective of Britain. For example, Britain is the largest coloniser in history, having taken over a significant percentage of the Earth's land (Little, 2023).

In this discussion it is important to consider that although there is some Spanish influence on religion and culture in Gibraltar, Flores Pérez (2015) sheds light on the differences between Spanish and British early years curricula (which Gibraltar follows – EYFS framework). Interestingly, Flores Pérez (2015) claims the Spanish education system has a more centralised approach where a stronger emphasis is placed on rote learning and examinations. Additionally, areas such as the Arts and Mathematics do not exist in ECE learning in the Spanish curricula, highlighting some core differences.

Focusing now on the on-going tensions between England and the other three nations, Little (2023) explains how England is often in control and holds the dominant political power, including in territorial wars. Consequently, Little (2023) expands by highlighting how after World War 2, there was a significant rise of nationalism in Wales, Scotland and Northern Ireland which involved various forms of activism, conflict and violence all of which stressed their desire to remain independent from the UK.

Continuing, Regmi (2022) states decolonisation can also be understood as colonisers' attempt to understand their own history of colonisation. For

instance, beginning to consider through a reflexive approach why it is important to value equality, justice and racism. Sharing a similar perspective,

Moncrieffe et al. (2020) examined the need for England to 'decolonise' the curriculum to promote awareness and encourage conversations about racism (Gallagher, 2019), referring to societal privileges and advantages tied to racial identity. In their argument, they claim that decolonising the curriculum is about seeing and valuing the world by respecting the views and voices of marginalised groups (Moncrieffe et al., 2020).

Most crucially, Moncrieffe et al. (2020) urge that this responsibility for confronting racism should not lie with minority students and lecturers but rather should be everyone's responsibility to reflect on. Essentially, the invisibility of colonialism and decolonisation within education frameworks sends out the message that it is acceptable for people to continue to not think about minority groups, reinforcing the attitude that they are 'less than' (Moncrieffe et al., 2020). Hence, it is pivotal for education systems to foreground historical representations and discussions around valuing and respecting all people, providing voice to all (Moncrieffe et al., 2020).

In this endeavour, Regmi (2022) draws attention to the need for educational leaders to value the decolonial processes of reflection and respect for others if society is to resist the dominant distribution of Western knowledge (which currently ignores the realities of colonisation).

Based on the discussion above, several connections have been made so far with decolonisation and EfS:

- Social Pillar (racism, equality, respect and valuing difference).
- Environmental Pillar (the taking of land, resources, and the need to respect others).
- Economic Pillar (a focus on political strategic control for power rather than the need for more empathy).

Next, connections are made with the Early Years Foundation Stage framework in England (DfE, 2021) which Gibraltar follows (first discussed in sections 1.3 and 1.3.1 of Chapter 1). Although the statutory EYFS framework (DfE, 2021) briefly mentions the importance of children being aware of other cultures and religions and the similarities and differences that exist, it is argued that the topics of racism in particular are not being discussed enough in the early years (Ferguson, 2022) and often the reason provided is because early years children are too young to recognise race.

Key to this conversation, Grenier and Vollans (2022) highlight how in today's society, racism exists and it is important that ECE addresses this so children can become aware of racial harms. Through respectful and open dialogue, just as (Brantmeier, 2013) suggested in earlier sections (2.2.1), children can begin to engage with reflection when they are taught to question and value other views (Grenier and Vollans, 2022).

In moving forwards with decolonising curriculums, it is essential for the early years (and all education systems in general) to consider pedagogies that focus on (self) awareness of others, human and non-human and respectful relations so that difference and respect for others is valued (Reibold, 2023: UNESCO, 2020).

The focal points discussed in this section have been colonialism and decolonisation in the context of EfS (with connections made to Indigenous communities) and the countries included in this study.

Following this, the value of decolonisation attempts within education systems in England (which Gibraltar follows) were discussed. It was noted that key areas of the social element of EfS such as racism and diversity are not being effectively considered and are currently missing from curriculums. The following section delves into the pivotal role of climate change as an urgent and current issue in further exploring the role of ECE in striving for a more sustainable world.

2.3 The Climate Crisis & Children as Agents of Change

Climate change is defined by Holmberg and Alvinius (2020) as an issue of extreme urgency that causes changes in weather patterns and temperatures. They point out that because action is required for the survival of future generations, this places children as the most affected (Holmberg and Alvinius, 2020). Solidifying this, UNICEF (2023) stresses the urgency of the climate crisis and the connections this has with children. In the report, it argues that climate change is increasingly causing issues such as pollution, extreme weather changes and deadly pollution (UNICEF, 2023). Crucially, it highlights how climate change does not only affect the planet, but can also affect children and childhood experiences. For example, as children develop, their brains, lungs and immune systems are affected by their environments (UNICEF, 2023).

Additionally and central to the wider conversation are the key reminders of why children's role as agents of change is so important. Such reasons are pointed out and emphasised by the United Nations (2015): Firstly, it mentions how poverty is still prevalent in many countries despite efforts to tackle this, as well as inequalities within and among countries. Secondly, they emphasise how gender inequality remains unresolved and unaddressed. In terms of global health, they believe evidence suggests threats are on the rise and more frequent and intense natural disasters are expected. Lastly, the United Nations stress how environmental degradation continues to occur, where natural resource depletion is at an all-time high directly affecting climate change and the rise of global temperatures (United Nations, 2015; Crisostomo and Reinersten, 2021).

Hence, it is crucial to discuss the importance of children's resistance in connection to climate change and the issues outlined above, where Holmberg and Alvinius (2020) argue that children are capable of understanding, contributing to and creating change.

Rousell and Cutter-Mackenzie-Knowles (2020) further support the role of children in combating climate change by stressing that there is room for adults to inspire children's values and impact their belief system through engaging them in dialogue and creative and interactive ways of learning. Thus, when children are given the opportunities to participate and engage with real-world issues (as outlined above by United Nations 2015) they are more likely to share their interests both in conversations and environments. This means, children will begin to recognise their voices and actions are

valued, enabling a caring disposition towards sustainability to unfold (Rieckmann, 2017).

When children feel heard and included in conversations about their views and concerns in relation to the climate crisis, they can feel a sense of control and agency in their ability to have influence. However, it is important to note, understandings of climate justice can be subjective, where different interpretations may exist around what climate change means and what fighting for climate justice looks like (Wolf and Moser, 2011). Hence, they suggest that individuals may prioritise their values differently based on various cultural, social or political factors (Wolf and Moser, 2011). Nonetheless, there is a prominent push focused on narrow subjects over child-centred and participatory teaching happening today in the Western world (Rousell and Cutter-Mackenzie-Knowles, 2020).

Elaborating, Roberts-Holmes and Moss (2021) emphasise how neoliberalism has shifted the focus from ECE being a purposeful experience to focusing primarily on what ECE can produce (results). They highlight how politics of childhood is essentially tied to the politics of society as the top-down governance that exists in today's world, which influences everything including what type of education children experience during childhood. As such, they argue that the world is undoubtedly regulated by politics in the sense that marketisation only values and prioritises profit (neoliberalism) at the expense of meaningful experiences (sustainability) (Roberts-Holmes and Moss, 2021).

In accordance with Wolf and Moser (2011) in their argument highlighted earlier in this section, the way individuals value sustainability and climate change is reflected in actions. Thus, this suggests that governments and policy makers are not valuing nor prioritising sustainability due to the prioritisation of neoliberal outcomes (Moss, 2017; Rieckmann, 2017).

In summary, because neoliberalism is in opposition to sustainability especially in the context of the global crisis of climate change, children are often not given opportunities to think for themselves and take responsibility towards shaping a more sustainable world.

In exploring how this could be done and what it would look like in practice, according to Kaufman, Kaufman and Nelson (2015) children learn best when meaningful relationships are able to develop, which they describe as attachments between the child and their educators, caregivers and surrounding community which are emotionally significant. Such relationships are able to flourish in educational environments when educators encourage children to share their reflections on their developing comprehension of their own unique place in the world (Kaufman, Kaufman and Nelson, 2015).

In linking the above with EfS, neuroscientific evidence supports the notion that children who develop reflective relationships with their peers and educators are less likely to engage in criminal behaviour and more likely to be respectful of diversity and willing to participate responsibly in society. Solidifying the points above made by Kaufman, Kaufman and Nelson (2015), Moss (2017) explains how the politics of childhood filters through to education. This is because the experiences and relationships educators

model to children play a significant role in how children develop, and which attitudes and values they carry with them through to adulthood.

In the example provided by Kaufman, Kaufman and Nelson (2015), they emphasise central elements of sustainability (respecting diversity, taking responsibility towards the climate crisis and reflecting). Expanding, they stress how such central elements are more likely to be displayed by individuals who experienced a childhood and education where relationship dynamics with their educators were based on respect where important conversations about sense of self and reflection were prioritised.

As two crucial and current elements of sustainability have been outlined (colonialism and climate change), the following section will now explore the background and basis of sustainable development. This will enable discussion and criticisms to unfold, challenging why more has not been achieved to date.

2.4 The History of Sustainable Development and Education for Sustainability (EfS)

In exploring historical definitions of EfS, I will provide this overview of events to date relating to efforts taken to promote sustainability issues (e.g., the Stockholm 1972 conference; the 1987 Brundtland Report; and the United Nations 2012 conference in Rio de Janeiro). Critical perspectives in particular are introduced on why little has been done to establish global principles in this area.

The first response to promoting EfS as a global interconnected issue was taken by the UN conference on human environment in Stockholm in 1972, which stressed the need to defend and improve the environment (UN General Assembly, 1972). Despite efforts to promote international environmental law, Handl (2012) argues that the UN conference in Sweden 1972 was focused on policy goals rather than normative positions.

Accordingly, Geiger and Swim (2021) highlight the need for the interconnected nature of the three pillars (economic / political, environmental, and social / cultural) to be valued equally if progress is to be made. They explain that the three pillar model must be balanced. As such, the Stockholm conference has been criticised for focusing more on policy goals (the economic / political pillar) rather than prioritising all three pillars.

Following this, the United Nations institutionalised the term 'sustainable development' in the 1987 Brundtland Report and defined it as the process of meeting the needs of the present without compromising the ability of future generations to meet their own needs (Burton, 1987; Brundtland, 1987).

According to the report, economic growth must be robust while also being socially and environmentally friendly (Burton, 1987). When evaluating the importance of the Brundtland Report, Sneddon, Howarth and Norgaard (2006) claim that its publication marked a vital historical starting point for wider debates about sustainability. They argued that their definition reflected the attempt to balance the needs of future generations with the unmet needs of a large amount of the world's population. This tends to be a starting point for researchers and scholars in the field of sustainability or environmentalism

and the Brundtland Report is commonly regarded as the first document to highlight the interconnection between the environment and governance. As Sneddon, Howarth and Norgaard (2006, p. 255) suggest:

"Brundtland signals the emergence of the environment as a critically important facet of international governance"

Despite this, there was still very little action taken. When exploring complexities in the report a sense of competitiveness between countries globally becomes apparent in the following statement:

"In addition to the interrelated problems of poverty, injustice and environmental stress, competition for non-renewable raw materials, land or energy can create tension" (Brundtland, 1987, p. 199).

During the 1970s, conflicts in the Middle East were common in part because of the international interest in oil (Burton, 1987), this is an example of neoliberal influence where the focus on profit, wealth and materialism creates conflict. Purvis, Mao and Robinson (2019) mention how Grober introduced a more recent definition of sustainability which stressed the realisation that the planet we live on has to be sustained and preserved for future generations.

Linner and Selin (2013) outline how the United Conference on Sustainable
Development (UNCSD) was held in Rio de Janeiro in 2012 and focused on
international frameworks and the green economy as well as eradicating
poverty. Their critique of the conference, as well as previous conventions
(Stockholm and the 1992 UNCED Earth Summit), is that they have been too

concerned with resources used to plan, host and produce only broad political statements rather than taking action. They argue that UN conferences have solidified the political system rather than encouraged change (Linner and Selin, 2013).

Ultimately, the United Nations' efforts have not generated adequate progress. As a result, more dynamic efforts to tackle sustainability as actions were later developed, in particular the 2000 Millennial Goals followed by the 2015 Sustainable Development Goals.

Both sets of goals are explored below where links are made to EfS practice throughout.

2.5 Sustainable and Millennial Goals for 2030

The United Nations Millennial Development Goals (MDGs) were developed in response to a global effort in 2000 to tackle the reality that there was no action in relation to the indignity of poverty and the lack of progress that had been made despite previous goals / outcomes (WHO, 2020). This was particularly important given the high increases in poverty, hunger and deadly diseases worldwide (WHO, 2020).

Following this, 191 United Nation members agreed to achieve eight specific goals between 2000–2015 (WHO). The MDGs reflect ECEfS as they were proposed to tackle 1) hunger and poverty, 2) universal primary education, 3) gender equality / women's empowerment, 4) child mortality, 5) maternal health, 6) HIV / AIDS and other diseases, 7) environmental sustainability, and 8) global partnerships (WHO, 2020). UNICEF (2023) note how six of the

eight MDGs advocate for children's rights to health, education and protection and could only be sustained if the rights of the child are realised.

The United Nations Convention on the Rights of the Child (UNCRC) 1989 outlines the political, economic, cultural, and social rights of children (UN General Assembly, 1989), emphasising their right to be respected and heard. It consists of fifty-four articles and specifically targets how adults and children should work together respectfully to make sure that all children can enjoy and embrace their rights. Such rights are essential to EfS practice as they provide the legal foundation needed to ensure children both outside and inside of the education system are given the respect they are entitled to and the agency needed for change (UNICEF UK, 2020).

Conversely, Theobald (2019) argues that while there has been some progression in the recognition and awareness of children's rights, there have been various neoliberal associated challenges which in turn have impacted on ECE policy, practice and the way children are viewed regarding their capabilities (Theobald, 2019).

When further exploring these rights, connections can be made with examples of democratic practices such as education which enables children to fulfil their potential and exercise their right to express opinions, to be heard and act as agents of change (Moss, 2019, 2020; UNICEF UK, 2020).

Following the MDGs, the Sustainable Development Goals (SDGs)

(UNESCO, 2020) were introduced in 2015, which are a set of seventeen global goals set out by the United Nations that governments globally have

accepted. The goals include targets to minimise inequality, improve standards of living and protect the planet. Sustainable Development Goal number 4, 'quality education', sets out various targets aimed to be achieved by 2030. However, many of these elements, in particular children's rights and citizenship, are not currently part of ECE policy and practice in England (Pascal, Bertram and Rousse, 2019).

Expanding on Chapter 1, according to the Global Sustainable Development Goals (UNESCO, 2020; The Global Goals, 2020), 'quality education' goal number 4, relates to a democratic, compassionate view of education. Thus, goal (4) enables upward socio-economic mobility that helps reduce inequalities and is fundamental to fostering tolerance and more peaceful, sustainable societies, hence, mirroring elements of EfS.

When considering the characteristics of EfS, it teaches children about the importance of being tolerant, the importance of being fair and the value of equality. Britto (2015) highlights how ECE needs to be the foundation for sustainability and this notion of quality education. In this way children are recognised as agents of change, and hold the potential to create a better world. Britto (2015) elaborates on this by explaining that what children learn early lasts a lifetime and learning should generate a revolution in how children think and act. Here a connection is made with how the brain needs multiple inputs such as protection, care, health, and enrichment, and by incorporating these inputs into ECE, children can maximise possibilities. In concurrence, Samuelsson, Li and Hu (2019) point out how listening to

children and offering opportunities for creative engagement will empower them to become agents of change for EfS.

However while Ssossé, Wagner and Hopper (2021) recognise that EfS is a type of education that can create sustainable citizens, it is a constant struggle to scale up new practice in this field due to global neoliberal economic emphasis on profit. Ssossé, Wagner and Hopper (2021) question if there will ever be a truly democratic EfS given the education system is dominated by neoliberal economic perspectives. This is discussed further in section 2.7 when discussing the impact of neoliberalism.

An example of how SDG 4 can enhance equality in practice was explored by Merida-Serrano et al. (2020) and the program INFACIENCIA, meaning: 'from the girls of today to the women scientists of tomorrow'. The program's aim is to help young children to gain a holistic, inclusive view of science which includes empowering female talent. This reflects SDG 4 (quality education) with regards to promising an inclusive education providing equal learning opportunities for all. More importantly, Merida-Serrano et al. (2020) emphasise how SDG number 5 is focused on empowering women and achieving gender equality for a fairer world. They explain how the two goals are interwoven as they have the same purpose in mind: to create a fair and inspiring education system.

Educators must first value the purpose of education by examining underpinning values in order to appreciate the need for the SDGs (McLeod, 2019). However, Swain (2018) outlines inconsistencies with the SDGs in terms of; higher prioritisation of economic growth over social and

environmental growth. Interestingly, empirical evidence by Swain, (2018) suggests that it would be of benefit for developed countries to focus more on social and development policies while developing countries focus on economic and social policies (Swain, 2018).

Adding to this discussion, Ye (2018) critiques the SDGs by identifying various challenges encountered during implementation such as slower economic growth, and a lack of authentic poverty data which makes it difficult for countries to design and implement relevant policies. For example, Nigeria is among other African countries that are deprived of accurate information. While it is regarded as the largest economy in the continent according to gross domestic product, decades of policymaking have been based on outdated data (Ye, 2018).

Comparably, the United Nations Secretary-General (2019) progress report on the SDGs states how advancements have been slow on various goals and the most vulnerable countries continue to suffer the most, suggesting the global response has not been ambitious enough. The report goes on to highlight how an estimated 303,000 women around the world died due to complications of pregnancy and childbirth in 2015. Almost all of these deaths occurred in low-and middle-income countries (LMIC) and almost two-thirds in sub-Saharan Africa. The United Nations Secretary-General (2019) argue this could have been preventable with appropriate management and care.

Concurring and expanding on the United Nations Secretary-General (2019), ESCAP (2019) notes how the Pacific SDG Progress Report claims that Asia and the Pacific will not achieve any of the 17 SDGs by 2030 due to lack of

commitment. They stress quick progress is required on all fronts, and although steps have been taken towards ending poverty (goal 1), ensuring all have access to quality education and lifelong learning (goal 4) and to delivering affordable and clean energy (goal 7), success can only be achieved by 2030 if action in practice is enhanced (ESCAP, 2019).

Additionally, a more recent 'Conference of the Parties to the United Nations
Framework Convention on Climate Change' (COP27) which took place in
Sharm el Sheik in Egypt found that wealthy countries are not taking
responsibility towards climate change and it was recommended governments
should strengthen their current plans (Dooks, 2022). Ultimately, despite all of
these goals (SDGs), (MDGs), UNESCO and conventions on climate change,
not much progress has been made.

In this discourse, Urban et al. (2019) highlight how ECE is included within the SDGs (SDGs 4 and 4.2) however there has been little attention to questions of the purpose that ECE plays within the context of sustainability. They argue that policy frameworks should address ECE from a holistic perspective and reclaiming ECE must recognise the role that governments play with regards to EfS (Urban et al., 2019).

Thus, Samuelsson, Li and Hu (2019) stress how ECE should value the importance of ECEfS as an enabler for the SDGs. They highlight how ECE can offer opportunities for learning which leads children as potential agents of change to appreciate and question values that will encourage a more sustainable world.

To value education as a democratic process, where children can engage as agents of change, there is a need for educators to be morally aware of and question personal values that underpin the purpose of education (McLeod, 2019). In promoting a reflexive approach, next Social Critical Theory (Freire, 1970) is explored.

2.6 Social Critical Theory

Social Critical Theory (SCT) (Freire, 1970) is defined as a means that aims to challenge and change society by prompting underlying assumptions and discussions that prohibit people from understanding the world and their role within it (Darder, 2017). Brazilian philosopher Paulo Freire grew up during the 1930s depression in Brazil where his family and community suffered great poverty, and where he developed his ideas during his early and later years in education studying philosophy (Darder, 2017).

His ideas, shaped by his own experiences, focused on oppression and the need for change through education. He defined education as an act of oppression when it fails to recognise others as persons and advocated for practising freedom within the education systems (Freire, 1992).

Freire believed in a dialogic environment that encourages learners to discover for themselves creatively and understand their social problems (Freire, 1992). He emphasised how in education teachers should be encouraging conversations around societal and political pedagogy (Freire, 1970).

Consequently, Freire used the term 'banking model' to explain his view of education based on children as curious thinkers rather than empty vessels ready to be filled by the teacher (Freire, 1970). Here Freire was critical of the socio-economic and political relationship between the oppressor and oppressed, where the oppressor is in control (the teacher) and holds the power over the oppressed (the child) who is told what, when and how to think.

This represents the teacher and child relationship in education today in many Western (or Anglo-sized) contexts (Torres, 2019). For example, the Early Years curriculum in England (DfE, 2021) focuses on measured outcomes for a very narrow selection of areas of learning and in doing so promotes a didactic approach to teaching focusing on children's attainment scores. There is no mention of sustainability (DfE, 2021). This mirrors Freire's concerns about education when he highlights how the traditional curriculum is 'disconnected' from life and lacks criticality (Freire, 1970).

Instead, Freire highlights how a democratic respectful, dialogic relationship was important (Freire, 1992), involving learning from one another that he referred to as 'conscientization': a critical consciousness which promotes the ability to respond and exercise freedom (praxis) (Freire, 1998; Torres, 2019).

Praxis relates to reflection and action, which enables adults to assess their biases with children and become ready to see alternative ways of seeing and being such as valuing children's voices and their opinions. In turn, children will then feel free and able to converse with adults, offering opportunities for balance of power (Freire, 1998; Darder, 2017).

Freire highlighted how the above process is often reliant on adults, their perceptions of the child and their willingness to learn reciprocally (Freire, 1970). Consequently, when children are respected by adults in the context of education, society and made aware of their potential which requires self-awareness by adults, they will be more inclined to participate, speak out and give their opinions on issues that are important to them and their surrounding environment (Freire, 1970). SCT highlights the importance of democratic educators ensuring that children understand their mode of self-expression is just as valuable as that of adults, and that they have an equal right to expression (Freire, 1970).

Additionally, Freire's theory underlines the importance of the educator being reflexive, self-aware of personal views which inform actions and questioning. Freire pointed out that to be able to understand others you must create in yourself a certain virtue of tolerance, meaning to discover the possibilities of hearing different opinions and views with different people (Freire, 1970). Willingness to be open and listen to behaviour that one does not agree with was extremely important according to Freire who referred to this as an ethical duty to be tolerant.

McLeod (2019) discusses how Freire's ideas of reflexivity are necessary when it comes to educators questioning what kind of teacher they want to be and what they value about learning. This will then shape their perspective of children and essentially influence the learning approaches adopted. SCT, in this way can act as a tool to empower early years educators by engaging in a

process of questioning to ensure ethical and meaningful practice, which will in turn empower children (McLeod, 2019).

Sanders (2020) critiques Freire's stance on praxis by arguing the recognition of embodiment is missing. It is questioned whether or not the body has been ignored by Freire as part of human experience, as being connected to the mind. Johnson (2007, as cited in Sanders, 2020) suggests the notion of body-mind interaction with the environment and others is fundamental and leads to thought, words, language and action. In addition, Sanders (2020) draws attention to Freire's tendency to focus on the "collective" rather than on individuals and how this can take away from individual uniqueness.

Rather than excluding individual uniqueness, Freire wanted to integrate people through communication, to share knowledge and arrive at mutual views of the world and tackle important issues together (Freire, 1992).

Ultimately, Freire's theory prioritised respectful dialogue, which is explored further in Chapter 3 of this thesis as the underpinning theoretical methodology of this project and how this translates into research as a process / action. The following section will explore the purpose of education, in the context of EfS where Greek teachings and philosophical underpinnings support Freire's views of education.

2.7 Exploration of The Purpose of Education in the Context of EfS

Craft (1984) explained that the word 'education' derives from two related

Latin terms: 'educare' and 'educere'. Educere relates to inner knowledge,

creativity and values personal interests where the purpose of education is to

develop a passion for learning. Educare on the other hand focuses on training / moulding learners into 'good workers' and values the use of repetitive information (Bass and Good, 2004).

At the centre of democratic learning are the Greek teachings of education (Burnet, 2017). Aristotle's approach to education not only advocates for democratic practices but emphasises the importance of experience and reflection (Burnet, 2017). Price (2011) highlights how Aristotle believed thinking and practice as educators should be instilled with a clear philosophy of life and a serious concern for the ethical and political. In addition, he strongly supported teaching a balanced development where play, music as well as science all have their place in the framing of the body, mind and soul (Price, 2011).

In addition, Bass and Good (2004) evaluate both terms and link 'control' and 'power' to educare and 'liberation' with educere. Hammond (2019) sheds light on this by stating that 'educare' is economically motivated and underpinned by political interests associated with marketisation and neoliberalism. As a result, the technical view of education has dominated the education system today (Hammond, 2019) and will be explored below in relation to England (DfE, 2021) and the wider neoliberal and marketisation influences.

An example of this is highlighted by Pratt (2016) who discussed the marketisation of primary settings' assessment in England. There is a focus solely on 'raising standards' through testing children which can create relationship tensions between educators and pupils. For instance, since

educators must follow curricula, they are 'forcing' children to undertake work in specific ways (Pratt, 2016), once more reflecting the power imbalance (explored in more depth in section 2.8: Perceptions of Children to Enable Agency).

One of the principal ways of monitoring progress in England is conducted by 'The Office for Standards in Education,' (OFSTED) which inspects schools / settings across England (Pratt, 2016). OFSTED ultimately has control over what they deem as 'quality learning' (Pratt, 2016).

Adding to this discussion and building on Peck's (2023) definition of neoliberalism outlined in section 2.2.1 of this Chapter , Hastings (2019) explains how neoliberalism and the focus on outcomes and results creates competition between schools. For example, as they become increasingly standardised to measure accountability this is done through testing and measuring progress of a few narrow subjects. Due to this, educators are placed under excessive pressure to comply to the curriculum frameworks in order to achieve test scores rather than focus on innovative, democratic learning / philosophical processes that value the children's participation, rights, and critical thinking such as that of EfS (Smith, Fitzallen, Watson and Wright, 2019).

In exploring further the effects of Neoliberalism on ECE, Bauml (2016) demonstrates the complexities that educators face when attempting to incorporate EfS elements. Bauml (2016) explains how educators felt pressured to encourage tested subjects. Likewise, Okeke and Mtyuda (2017), note how educators play a key role in societal transformation

agendas such as the works of EfS, and because of this, raises concerns regarding the load of assessment tasks which occupies much of their time (Okeke and Mtyuda, 2017). If educators are to play a fundamental role in transformative practices such as prompting EfS, but are not motivated themselves, in turn the children will not be motivated to participate (Okeke and Mtyuda, 2017).

In contrast, there is a counter-argument which suggests perhaps the idea that the world will suddenly change once a large enough percentage of individuals adopt 'sustainable practices' or begin to value sustainability is not realistic. For instance, McDonnell, Abelvik-Lawson and Short (2020) highlight how unconventional energy production methods may be much less efficient and more carbon intensive. This means the alternative methods may actually prove to be more environmentally damaging and thus, unsustainable.

In this discourse, Dernbach and Cheever (2015) points out how efforts to save the world and tackle sustainability should have started many years ago (1970's) suggesting it may be too late. They argue the state of the economy globally is not in any position to begin improvements in the field of sustainability, that current and future conditions make it increasingly difficult to make sustainability possible.

In this endeavour, Bowman (2017) defends the 'neoliberal' era as rising international trade coincided with improvements in people's well-being both in Britain and in the world's poorest countries. This means, such arguments and perspectives may fuel neoliberal agendas, believing there is not a need for sustainable practices within ECE and instead, advocating for the technical

view of education, valuing standardisation and data-centred and outcome driven processes (Jarke and Breiter, 2019).

In addition, Sims (2017) emphasises the negative impact neoliberalism has on education, highlighting the emphasis on standardisation and the portrayal of children as investments for future economic productivity. Contributing to this discussion, Ball (2012) questions whether this is why schools do not particularly focus on encouraging thinking critically, EfS or alternative practices. According to Ball (2012), creativity, imagination and flexibility in frameworks are supressed in order to generate outcomes, increase and contribute to the market by human capital and ultimately to increase global competition. As a result, practices like EfS which are based on creativity and critical thinking are unable to thrive.

More recently, Ball (2017) highlights education policy and its complex nature by insisting that ensuring economic productivity / competitiveness is prioritised above all. He argues policy makers are looking in the wrong places due to a political mismatch between talk and outcomes – a phenomenon he calls 'non-performative' policy making. When policies are non-performative, it may appear as if action is being taken, but in reality, nothing much is actually being done, which Ball (2017) suggests is due to the increased and continuous interest of vocational subjects in education. Such subjects hold priority over any other creative, democratic or truly informing subjects relating to the realities of life, just like EfS.

On the other hand, the practical / philosophical stance values democracy, respect, reflexivity and participation (Kangas, 2016). Following on from the

above, educators who adopt this view of education place children at the centre of learning, thus encouraging participation (Kangas, 2016). Whichever approach educators adopt, influences the practice offered to children and correlates with how they view children (Phillips, 2014).

However, there is evidence reflecting how the neoliberal system is supported by some parents. Vincent (2017), for example, explored parental views and concerns of their children obtaining a 'good' education. Findings suggest parents' responses varied regarding what a good education meant but was an uncertain process for most. Some parents managed the risk that their child's potential may not be fully realised by monitoring and interventions while others just 'hoped for the best' (Vincent, 2017). Thus, parents have expressed concern for the potential of their children to be met, forcing some to consider private education to ensure access to networks and a high chance of returns (Vincent, 2017), in this case prioritising outcomes and enabling the neoliberal system.

Supporting the practical (more philosophical) value of education, Fielding and Moss (2012) stress how education should promote democracy which is about giving children a voice to participate and express themselves. Mitchel (2018) agrees and expands on Fielding and Moss' (2012) view of democratic education as teaching that values meaningful participation and equality, aiming to create a just society that focuses on the learning process which view children as active co-creators of their own learning experiences rather than products of the education system (Mitchel, 2018).

Eriksen (2018) adds how democratic teaching helps children learn about themselves and the world around them, discovering opportunities to positively contribute to society. More so, embedding this approach to pedagogy by educators creatively engaging and actively involving children in the process, including choices enables children to lead as well as collaborate respectfully (Mitchel, 2018; Eriksen, 2018).

Nevertheless, Wood and Hedges (2016) concur with Pratt (2016) and critique the ECE system in England by stating that increasing levels of coherence and control are being continuously promoted through top-down methods where ECE must fulfil specific goals. This is reflected in the technical view of education which is outlined by Jarke and Breiter (2019) above as one which is damaging to ECE as learning is focused on outcomes rather than processes.

To explore neoliberalism further, Bolea (2020) states that ECE can be viewed as a means of increasing control through performance data. Both Bolea (2020) and Jarke and Breiter (2019) argue rather than improving quality they are undermining the foundations for children's personal development and learning. Their discussion applies Foucault's ideologies to the early years sector in England, suggesting early years teaching pedagogy is narrowing to ensure that children succeed within specific assessment regimes. They outline Foucault's main concerns relating to governance and self-governance and how they can be applied to the modern education system, where schools and education have become techniques of governing (Bolea, 2020).

Similarly, Ang (2014) highlights how the fast-evolving early years sector such as that of England strongly connects education to politics. She explains, given the emphasis on school readiness and testing, tensions remain about the role of education, what it entails and how it is viewed. Ang (2014) insists that those who have responsibilities for children indirectly or directly should rethink their own practice, values, and advocate for what they truly believe to be the role of early years education.

Challenging the neoliberal and capitalist agenda in education, Callanan et al. (2017) identified features of quality ECE practice, with assessment being integral. They argue that assessment was considered an essential feature of quality early years practice (Callanan et al., 2017). Agreeing and elaborating, Lambert (2020) argues that assessments can provide valid information that helps educators focus on what is important for each individual child, even if the process places the educator in a challenging or stressful situation (Lambert, 2020). Thus, both Callanan et al. (2017) and Lambert (2020) note the importance of assessment as encouraging learning.

Interestingly, when exploring a much earlier paper by Alexander (1994) it is argued that capitalism can have benefits when relating to maintaining economic stability and keeping countries up and running. Nonetheless, Alexander (1994) continued to question whether the role capitalism plays within education can be beneficial, or whether economic outputs would outweigh the learning process. Thus, when the focus of high stakes assessment is associated with testing, this can be to the detriment of

engagement and understanding as identified in neoliberalism / marketisation, which hinders learning.

This argument is mirrored by Skinner, Leavey and Rothi (2018) who propose that educators' commitment is being undermined by the impact of bureaucratic changes such as reaching performance targets, heavy workloads, and increased accountability (Skinner, Leavey and Rothi, 2018).

Following this, Glazzard and Rose (2019) found that primary school educators' stress levels were triggered by assessment periods and teaching to the test; what is more alarming is the correlation they discovered where children were in fact attuned to their educators' moods and could detect when they were stressed, ultimately affecting their own motivation levels (Glazzard and Rose, 2019). Thus, indicating that due to such assessment pressures educators are becoming stressed in their profession, highlighting another barrier to EfS implementation / practical education. Following the exploration of the purpose of education, how children are viewed plays an essential role in what kind of learning children experience.

This discourse will be explored in detail in the following section where it is argued that positive perceptions of children are necessary for EfS.

2.8 Perceptions of Children to Enable Agency

People's perceptions of children are shaped by their experiences, beliefs and assumptions regarding children's roles in education and society (Martalock, 2012). This encompasses people's views on children's abilities, growth, motivations, purpose, and agency, all of which are influenced by social,

cultural, historical, political and economic factors. These perceptions can positively or negatively impact children's learning experiences.

When children are seen as capable individuals, educators are more inclined to value their opinions and contributions. This view reflects Bower's (2020) outline of the rights-based model view of education in which learning is participatory and the focus is on children's rights to quality education, and additionally mirrors article 12 of the UNCRC; (respect for the views of the child) and article 13; (freedom of expression) (UNICEF UK, 2020). Both of these articles are consistently mirrored in EfS where a reciprocal relationship between adult and child is encouraged and valued, where the child is free to express their views and ideas and the educator listens and respects them.

Adding to the importance of educators acknowledging their beliefs within ECE, Meehan (2011) suggests this as a feature of good early years practice globally for adults working with children as this impacts on their teaching practices and the opportunities offered to children (Meehan, 2011).

Therefore, in order to successfully practice EfS, it is essential educators respect children and believe in or recognise their potential to make and act for change. It is additionally vital for adults to become aware of the link between their image of the child and the rights of the child, it is not possible to consider or adhere to the UNCRC (UN General Assembly, 1989) while not respecting or valuing children's abilities.

It is important to consider that the Reggio Emilia pedagogical approach emerged in Italy as a means of empowering children as part of a democratic

community (Martalock, 2012). Italy does not have OFSTED, suggesting that although marketisation is influencing Reggio as a democratic approach, the settings in Italy are not under the same pressure as the Reggio settings in England (who experience OFSTED checks regularly). Thus, Moss (2017) warns against adopting Reggio as a pedagogical blueprint approach in England, stressing the different socio-cultural and political values that exist. Nevertheless, Moss (2017) does argue it is of value to draw inspiration from pedagogies rooted in sustainability (like Reggio) to help aid personal questioning and help educators reflect on personal practice.

Agreeing with Martalock (2012), Moss (2016) argues how the image of the child is a guiding principle of the educational project of Reggio Emilia in which children are viewed as curious individuals, full of knowledge and potential, and interested in connecting to the world around them. Loris Malaguzzi, the creator of the Reggio Emilia approach, spoke of children having 'a hundred languages' to learn and express themselves (Rinaldi, 2006).

In practice, the adult listens to and respects the child's opinion, considering their views as equal to their own, meaning children would be able to make their own informed decisions (Moss, 2016). Educators who hold a respectful image of the child can construct the environment as the 'third teacher' who is responsive to the needs of both the child and teacher to create learning together (Moss, 2016).

However, Moss (2017) explains how the current central discourse in ECE has gained influence through a strong association of power relations (when

an individual, group or organisation holds social power over another individual, group or organisation). This relates to the educator holding power over the children and the state and governments holding power over educators. This power imbalance has negative effects as it positions learners as inferior to educators, ultimately affecting learner voice and participation, as it restricts their freedom of expression (Ladkin, 2017). Consequently, core aspects of Education for Sustainability (EfS), such as respect, reciprocal relationships and Reggio Emilia pedagogy, face challenges in being applied in ECE in England.

Kopecký (2011) highlights Foucault's concept of 'governmentality - the study of power and the ways governments choose to exercise authority. Foucault argued that the relationship between knowledge and power is essential, a concept that is particularly relevant in education. This dynamic influences not only the relationship between governments and education but also between educators and students (Kopecký, 2011).

It is important to add that Foucault stressed that power relations are changeable, and this is dependent on how individuals engage with 'thinking processes' and how they choose to act as consequence (Kopecký, 2011). In addition, Kopecký suggests the purpose of education is fundamentally a political process:

"The prevailing political concept of learning also means that various forms of economic and social problems and individual difficulties are seen not as problems of the system, but as the results of individual failures". (Kopecký, 2011, p.255).

The significance of the above quote highlights how economic and social problems are not viewed as problems that should be tackled within education. Elaborating on educators' views, Ladkin (2017) points out that although schools and educators' intentions may be positive, it appears that the nature of education within the Anglo- centric world is affecting learners' abilities to openly discuss their feelings. This is because so much time is spent on teaching to high stakes assessments there is little room for meaningful conversations (Ladkin, 2017).

Lastly, he highlights how organisations such as UNESCO, the OECD and NGOs have normalised power relations, meaning they are accustomed to holding, managing and allocating control which thus, reaffirms how education is a 'closed' system where contributions only matter if they come from higher powers.

Ultimately such power imbalances are problematic within the education system, where ECE policies are solely market / outcome-oriented (Moss, 2017). This makes it difficult for educators to reflect positive, respectful perceptions of children in practice. Furthermore, Martalock (2012) argues that although a curriculum built upon the Reggio Emilia approach / image of the child promotes unlimited possibilities, planned yet flexible teaching based on children's responses and interaction, the traditional model of education fails to reflect this. She explains the traditional curriculum is based on predetermined themes and tends to perceive the child as passively receiving knowledge, only interested in simple ideas and activities, and the child is not

respected or valued. This suggests there is a link between how the child is perceived and how opportunities are offered to children.

Political / economic pressures are once more important considerations to be aware of, as Martalock (2012) suggests, if the education system is to be deconstructed. In this endeavour, Biesta (2015) makes a connection between negative perceptions of children and why curricula are built in a devaluing manner. He starts by emphasising the diminished focus on educator professionalism and the necessity to re-evaluate conversations on education and its focus on outputs (tests, productivity) rather than focus on the values of education which leave little or no room for transformative practices, such as that of Reggio and EfS which respect and value the child.

Moss (2019) concurs with Biesta (2015) by introducing the dominant 'story' of education today in the England and Anglo-centric societies in particular as one which is grounded in neoliberalism and politics, which focuses on economic and educational outcomes.

It is argued, this story of high returns lacks self-criticism and awareness by educators of other alternative 'stories' as Moss (2019) calls them.

Consequently, alternative stories would need to be grounded in different values and practices which prioritise democracy and ethics, such as that of EfS; hence, examples of such practices are explored below.

2.9 ECE Pedagogies that Align with EfS

According to Jarvis, Swiniarski and Holland (2016), 'pioneers' are individuals recognised for their exceptional knowledge, determination and resilience,

inspiring and motivating other stakeholders in education. In addition, they emphasise the significance of revisiting the principles of these pioneers, discussed further below, who prioritised children and integrated them into the core of the learning process, akin to EfS practices (Jarvis, Swiniarski and Holland, 2016; Rieckmann, 2017).

As first mentioned in Chapter 1, the three pillars of sustainability should be incorporated in all EfS teachings, where Siraj-Blatchford, Smith and Samuelsson (2010) look at each of the three pillars and how they relate to the early years. They suggest that environmentally, educators can facilitate outdoor / nature activities where children learn to value and respect the environment. Socially, embedding an ethos of listening skills and compassion can help to eradicate inequalities and promote empathy and respect in children. Economically, educators can prompt conversations relating to the value of money or poverty to help them grow an awareness on the economic / political systems of inequalities and help develop attributes of economical fairness.

Thus, the following pioneers each prioritise values of democratic teaching in environments that support ECEfS and enable conversations and opportunities relating to society and real-life issues to unfold.

The Reggio Emilia approach, as identified above, was founded by Loris Malaguzzi and reflects fundamental values of EfS by encouraging children who are curious about the world and have the powerful potential to learn from all that surrounds them (Hall et al., 2014). In addition, the Reggio Emilia approach highlights the importance of the educator to learn alongside the

children, promoting the democratic relationship between educator and child, who are constantly learning from each other (Hall et al., 2014).

In terms of assessment, the Reggio Emilia approach looks for evidence of learning through observations, conversations and documentation of the children's projects while emphasising that 'assessment' is also the child's responsibility (Malaguzzi, 1990; Hall et al., 2014). Instead of testing or progress reports, a collection of images of the children at work and documented projects are displayed to capture their learning journeys and prompt self-reflection (Malaguzzi, 1990; Hall et al., 2014).

Furthermore, Feliu-Torruella, Fernandez-Santin and Atenas (2021) investigated the recent trend of integrating Reggio Emilia pedagogy with partnerships between schools and museums, fostering additional avenues for children to explore, experiment with and question the socio-educational dimensions of heritage and history.

The Reggio Emilia approach highlights that learning requires listening to viewpoints different from our own, as they help shape and inform our understanding (Feliu-Torruella, Fernandez-Santin and Atenas, 2021). Thus, the experiential learning facilitated by museums can stimulate dialogues among children, encouraging them to scrutinise and reflect on their observations and auditory experiences, fostering growth and development (Feliu-Torruella, Fernandez-Santin and Atenas, 2021). Further links to sustainability are noted in this example: sociocultural learning, exploration and critical thinking through asking questions.

Isaacs (2018) highlights how Maria Montessori is one of the core pioneers of ECE today, having made a significant contribution to the understanding of the fundamentals of early years practice. Boyd (2018) explains how Montessori advocated for social justice and equality where the child is perceived as the 'constructer of civilisation', meaning, strong, capable and independent.

The Montessori method values democratic learning as specifically mirrored in a core aim of the philosophy 'following the child' (Montessori and Livingston, 1917). Here, children are guided by the educator, not led, making learning non-directive; instead, their interests are followed (Isaacs, 2018). It is through such processes that children's potential can unfold (Boyd, 2018) as Montessori stresses the importance of educators facilitating learning by preparing an environment where children can thrive (Montessori and Livingston, 1917; Isaacs, 2018). Lewis (2012) highlights the links between Montessori education and sustainability by emphasising the connections in life and encouraging children to see the world through an ecological perspective. However, it is important to note that none of the pedagogies mentioned in this section have had to face OFSTED checks.

In contrast, Watts (2022) explains that human activity greatly influences the planet's conditions and consequences. This highlights the need for understanding that can lead to positive actions, supported by a specific learning process. Thus, Froebelian teachings are key when exploring multidisciplinary ways to encourage connections specifically with nature and

learning outdoors in early years education (Froebel and Jarvis, 1899; Watts, 2022).

As such, Tovey (2016) affirms that when analysing Froebel's ideas which circulated on children's unique capabilities, three core play criteria are identified which form the basis of play-based learning:

- Learning happens when children are actively participating.
- Meaningful activities that stem from children's interests / motivation.
- Learning must include creative activity.

The three criteria listed above are central aspects of EfS. When looking at the second point on meaningful activities, Tovey (2016) stresses the importance of children being motivated in order to learn. This point was previously investigated by Theodotou (2014), in which intrinsic and extrinsic motivation are identified. Intrinsic relates to an individual's inner drive to participate actively, whereas extrinsic is defined by working or wanting to 'learn' for the potential rewards or outcomes (Theodotou, 2014). It is argued that early years' settings should be enhancing intrinsic motivation (Theodotou, 2014) where children are inspired, and the purpose of learning runs deeper than just the end result.

Giardiello (2013) states that the core women pioneers of ECE were Montessori and the McMillan sisters. The McMillan sisters were in fact influenced by Froebel's thinking and were active socialists in British politics, who advocated for a better education system, particularly in regards to ECE. This relates to EfS as they believed children learn best through exploration

and when engaged in their learning (McMillan, 1919; Giardiello, 2013). Like Montessori, the McMillans encouraged the following elements: learning through play, observing the child, planning from and for the children's interests (McMillan, 1919; Giardiello, 2013).

Liebovich (2019) highlights how the McMillans' ethos and their ideas for young children's education continues to be encouraged throughout provisions in England by resisting top down policy pressure and prioritising their values. The sisters viewed childhood as being part of life rather than a period of time meant for preparation of adulthood. This view emphasised that young children should be present in their early years and not spend their education 'training' for their futures (Liebovich, 2019).

More so, one of their central beliefs was that the 'whole' child is important; this places value on their emotions, thinking, physicality and spirituality equally. Liebovich (2019) additionally points out how the McMillans' emphasised a system of education that promoted respect for others and a 'caring society' in which children engage with outdoor environments.

A further form of pedagogy that aligns with EfS is Rudolf Steiner's approach to education as it also takes into account the needs of the whole child: the academic, emotional and spiritual aspects (Edmunds, 2013). Like EfS, Steiner education ensures children have a sense of justice and responsibility (Steiner; 1996; Boyd, 2018). For example, Edmunds (2013) also explains how the central aim of Steiner education was to be a preparation for life, but one which aids children to become competent. Such an experience of ECE will encourage children to become agents of change by taking responsibility

for their actions and being courageous enough to take action. Once more, there is a connection with EfS in the encouragement of children becoming change makers for the world.

Steiner's focus on 'competence' becomes 'spiritual competence' throughout ECE, where children develop the ability to understand what constitutes 'good' actions and how to partake in them (Steiner, 1996; Edmunds, 2013). This is what Steiner called 'ethical individualism.'

However, Boland (2015) highlights how some critics of Steiner Education believe the teachings ignore wider and external issues, such as diversity and culture. This suggests the delivery of the pedagogy and how it is received by children can be a reflection of their individual culture, who they live with, where you live and the time you live in (Boland, 2015).

Nonetheless, Steiner's teachings do value the development of imagination and creativity and involve work in nature where children are encouraged to explore and discover the world (Steiner, 1996; Edmunds, 2013). Accordingly, John Dewey advocated for social learning involving the school as a social environment (Mooney, 2013) where the educator encourages experimentation and independent thought through 'practical learning' (Mooney, 2013).

Concurring with Mooney (2013), Tarrant and Thiele (2016) claim that

Dewey's philosophy offers moral and practical justification for EfS. They

argue that a central focus of Dewey's writings promotes educating for

democracy; mirrored as a central aim of EfS as open dialogue and debate

are encouraged, and the journey of learning is prioritised over the destination (Dewey, 1916; Tarrant and Thiele, 2016). For example, Dewey advocated for the child's surrounding environment and the ways in which it can influence the child to think and act responsibly (Dewey, 1916).

One of the core themes explored by Luff (2018) is the importance of an educational environment which values democracy and participation.

Educators must collaborate with children and their interests to create connections with the world (Luff, 2018). Two examples of how this can be done within EfS are through project-based methods and place-based education:

- Project-Based Methods experimental, gardening or cooking activities which aim to foster an understanding of the moral / ethical roles and responsibilities towards each other and the world. Such learning offers shared experiences vital for social interactions, empathy and listening skills (Luff, 2018).
- Place-Based Education an interconnected learning approach which connects place, curriculum and learning in nature (Lloyd, Truong and Gray, 2018). The primary benefit of such a learning tool is the connection children can make with particular contexts relevant to their everyday lives (Lloyd, Truong and Gray, 2018). Here, children learn to understand and care for culture as part of the environment. It offers opportunities to explore, connect and value where they live. This aids a sense of care for others and the environment (Luff, 2018).

Another example of a project that focuses on Dewey's theory of experiential learning and children's engagement was explored by Boyd (2018) through an action-based case-study. The aim was to see how children can develop an EfS mindset / perspective through play-based experiences and was conducted over the period of one year. Forest School philosophy was

reflected, and settings ranged from farms, beaches, zoos and gardens (Boyd, 2018).

Findings showed how children in the majority of settings demonstrated a growing awareness and love for the environment they were in as well as caring for themselves and others, elements pertinent to EfS. More so, Boyd (2018) highlights 'political activism' as the process of reflecting on issues and offering solutions to which the children demonstrated in numerous ways such as asking for more bins at the beach for litter and using both sides of paper to conserve trees.

Ultimately the case-study is a prime example of how the combination of a stimulating environment and educators who value children's active engagement can influence children positively to act respectfully, sustainably, and most importantly, to develop a love for learning. Furthermore, the case-study solidifies Rieckmann (2017) in the importance of encouraging caring attitudes in children through education. Thus, as central examples of ECEfS have been outlined, the following section will take a focal point on empathy and emotions within EfS.

2.9.1 The Role of Empathy

Font, Garay and Jones et al. (2016) define 'sustainability empathy' as the following:

"Sustainability empathy is defined as one's ability to establish an emotional connection with the surrounding people and their environment". (p.1)

This suggests that individuals who emotionally connect with sustainability are inclined to engage in various sustainable practices (Font, Garay and Jones et al., 2016). Additionally, it is argued that empathy significantly influences human-environment interactions, as a lack of empathy towards nature and fellow humans can hinder efforts to promote sustainable behaviours (Brown et al., 2019).

In ECE, opportunities for friendships to develop are provided that are important for children's development, primarily regarding social skills, academic skills and motivation to learn (Taylor and Townsend, 2016). With regards to empathy, children learn how to act intentionally towards one another; they learn how to reciprocate a relationship, and perhaps most crucially, they experience companionship that encourages them to share their feelings (Taylor and Townsend, 2016).

Hence, the social aspect of EfS prioritises empathy and compassion, with Leon-Jimenez et al. (2020) suggesting that fostering friendships and empathy is essential for realising the goals outlined in SDG 4 (Quality Education, see section 2.5).

They concur with and expand on Taylor and Townsend (2016) and explain that as SDG 4 encourages a culture of peace, non-violence and appreciation of difference / culture, which all contribute to sustainable futures, education plays a pivotal role in promoting supportive environments in which children are able to develop empathy. Within these safe and supportive spaces, children are able to foster emotions of joy, where they feel heard, and dialogue is reciprocated with their peers. They learn the importance of adults

listening which in turn, positively impacts their social sustainability (Leon-Jimenez et al., 2020).

Another central element of social sustainability is being able to understand others and solve issues through dialogue (Leon-Jimenez et al., 2020). Through meaningful friendships children have opportunities to see each other's hardships and consider how to offer help, consequently reflecting kindness. In this discussion both Taylor and Townsend (2016) and Leon-Jimenez et al. (2020) stress the importance of friendships in enhancing learning, motivation and empathy. Nevertheless, it is the educator's role to actively support the development of friendships by creating learning environments that foster positive social interactions (Taylor and Townsend, 2016).

Focusing on the deeper connections between EfS and ECE in facilitating children's meaningful participation, it is crucial to acknowledge the mental state and well-being of children. For instance, since Covid-19, there has been an increase in children experiencing mental health issues which correlates with their ability to focus, be motivated and confident in learning environments (Costa et al., 2022). Thus, the next section will discuss the importance of children's mental health and the connections with ECEfS.

2.9.2 Mental Health and EfS

A fundamental part of the social pillar is individual well-being and mental health (Dybdahl and Lien, 2017). Without a healthy state of mind, one cannot thrive for a better world. It is argued that mental ill health prevents countries

from achieving the SDGs (Dybdahl and Lien, 2017). Expanding, they argue that any effort made to eradicate poverty, conflicts and disasters will not be successful if mental health is not valued and prioritised (ibid), it is specified in SDG 3.4 that 'health and well-being' should be promoted.

Within ECE, young children suffering from mental health issues can be vulnerable to poor developmental outcomes including social exclusion, poor physical health problems, discrimination and what is perhaps worse, is they often go unrecognised (Penney et al., 2019). This makes it pivotal for educators to become aware of the early warning signs that consist of but are not excusive to the following (ibid):

- Peer rejection
- Disturbed sleeping or eating patterns
- Aggression
- Irritability
- Acting out / hurtful behaviours towards peers / others

Evidence shows that, beyond the family, a high-quality early childhood education experience is essential for children's happiness. Through learning, children can develop socially and emotionally, with opportunities for building lasting friendships (Penney et al., 2019). Thus, there is a need for a deeper understanding of relationships by looking at an ethics of care and post-humanism.

2.10 Post- Humanism as a Relational Pedagogy of Hope for EfS

Within EfS, children are positioned as agentic social actors to allow for learning opportunities which are underpinned by post-humanistic theory. As Barrett et al. (2017, p. 132) suggest:

"Recognition of engagement with the more-than human as agential and communicative beings is at the core of a transformative sustainability learning".

Post-humanism is defined by Horsthemke (2020) as the critique of humans being positioned as 'central' of all things. When post-humanism is integrated into EfS, it prompts a transformation in children's perspectives. Similarly by adopting a reflexive approach within EfS, educators and children alike can cultivate new ways of seeing and understanding the world (Chrost, 2017).

Walsh, Bohme and Wamsler (2020) introduce the concepts of relational thinking and post-humanism, which emphasise the need for understanding and respecting human and non-human relations as equal. They argue that relational thinking is reshaping academic perceptions of nature-cultures, a concept directly tied to sustainability. Both terms emphasise the importance of valuing nature and biological beings equally. More so, they advocate for EfS to enhance an agenda that promotes post-humanism through teaching and learning practices (Walsh, Bohme and Wamsler, 2020). Comparably, Somerville (2020) outlines the relevance of post-humanism within ECEfS by claiming that ECE led the field of education in the progression of post-humanist theory.

In this endeavour, Malone (2016) recognises the importance of children's encounters with nature by stressing that children should experience nature-based education to allow them to consider relations beyond the human world. Additionally, Malone (2016) reflects on how her own perspective changed and she began to see differently by shifting away from the view that

the child is in nature as the only valuable and powerful body, to alternatively focusing on the child bodies and the bodies of other nonhuman entities as relational. It is argued there is a narrow view of children and nature in education, advocating for a shift in how educators / adults think (Malone, 2016).

In considering the interactions between children, play, systems of management and nature, Spiegal et al. (2014) explain how through play and outdoor environments children gain their first exposures to risk. It is through these experiences of risky play that a child can learn how to cope with it, enhancing resilience. Through risky and outdoor play there are opportunities for children to endure the realities of the world. As Spiegal et al. (2014) argue, the world we live in is not free from risk. Without building resilience in children, they will not be prepared for their futures or the uncertainties they may encounter.

In the context of EfS, children must be socially prepared to engage in interactions and dialogue, understanding that misunderstandings may occur. However, without participating in these conversations or having the courage to speak out on issues that impact them, positive change becomes difficult.

Life is constantly changing and as humans we must learn to adapt, but this requires characteristics of courage by both children and educators and a strong awareness that 'failure' should provide learning experiences and opportunities to try again. This happens from being immersed in the world, where children can participate actively so that resilience and social

relationships are able to develop and thrive as Spiegal et al. (2014, p. 5) indicate:

"Being in this world enables them to learn how to deal with uncertainty and is in fact the only practical way in which they can learn many coping mechanisms. Consequently, attempting to engineer a risk-free world pushes children (and parents) into a Disneyesque situation in which uncertainty is supposed not to occur".

Similarly, Somerville (2020) provides examples of one of the most fundamental movements of post-humanism in ECE: animal-child relations and their focus on valuing all living and non-living beings, things, animals and plants as part of the same world. Somerville (2020) explores a text by Miriam Giugni which focuses on ECE and provides an example of animal-child relations in practice.

The story of chickens (chooks) and children interacting in an early childhood setting is outlined where Giugni observed how this new relationship unfolded and advocated for a 'companion species curriculum' in response, which values an ethics and politics of animals' rights through empathy. These interactions between children and animals exemplified a shared responsibility between humans and animals. Correspondingly, EfS promotes inclusive engagement where multiple perspectives are considered in the adoption of a value-systems approach (learning to act and engage in new ways of involving and respecting all life forms on the planet) (Armon, Armon and Scoffham, 2019).

As explained in Chapter 1, the government of Gibraltar has demonstrated an interest in ECEfS (Gibraltar Government, 2020). However, 'Together

Gibraltar' (2020) has identified a deficiency in opportunities for children to engage in sustainability practices. Therefore, in exploring ECEfS in frameworks across the UK, areas of EfS practice can be identified and looked at with regards to what Gibraltar's ECE could potentially take from this. As a result, the ECE frameworks across the UK are explored below, and key terms associated with EfS that were identified in Chapter 1 will be looked at in relation to the corresponding frameworks.

2.11 Interpretations of ECEfS in the Four Home Nations of the UK 2.11.1 Sustainability in ECE in England

In England, the statutory Early Years Foundation Stage (EYFS) (DfE, 2023) framework sets the standards for learning, development and care of children from birth to five which is mandatory for all early year's providers. Crawford (2021) points out how the 2021 version was not really revised much from the 2017 version with the exception of the 'Early Learning Goals' being more closely aligned to distinct subjects. This means, although there are four years between each version, the bulk of the content remained the same.

Regarding the most recent version and update (2023) implemented in January 2024, notable changes were made, including adjustments to child-to-adult-ratios. Yet, no changes in relation to sustainability, children's agency or children's rights were made. It is important to note that although the newest version included minor changes, the majority of the content remains the same, with most sections unedited. Therefore, the general criticisms of the EYFS framework within the literature are currently focused on the 2017 and 2021 versions which are still reflective of the 2023 version.

Boyd, Hirst, and Siraj-Blatchford (2017) point out that although the term sustainability is visibly absent from the 2017 version, there are some elements of EfS mentioned in the framework. When it comes to the other aspects of EfS such as socio-cultural elements, there is a brief recognition of the significance of democratic principles like respecting others and the environment, along with the importance of reflection for the children to form their own thoughts and establish connections (DfE, 2021).

However, there is a lack of mention in EfS discourse regarding economic awareness, nature appreciation, children's rights, social justice, child participation, empowerment, reflexivity, democratic practice, or amplifying children's voices. This is in direct contrast to the 'fundamental British values' that are encouraged by the Department of Education England which promotes the spiritual, moral, cultural, mental and physical development of learners (DfE, 2014).

According to the DfE (2014) such values should be incorporated in school settings where children can develop self-confidence, accept responsibility for behaviour and understand how they can contribute positively to the world. Yet, a complimentary document: the 'Sustainability and Climate Change Draft Strategy' for the education and children services systems (DfE, 2021) was set out by the Department of Education and claims the government is committed to climate action. There are a series of short, medium and long-term goals set out as a strategy to tackle climate change by 2030 (DfE, 2021). What is interesting is the document stipulates that through education,

children can have opportunities to engage with and develop a value for climate action and sustainability, respectively.

The DfE's (2021) overall focus is on safeguarding and health and safety strengthening literacy, numeracy, language and vocabulary with no mention of sustainability, EfS or anything slightly related to it. For instance, what may arguably be the most important aspect of children's lives according to Freeman (2018), their rights to participation are entirely absent from the 2017 version and the updated versions. This validates Moss and Cameron (2020) on their critique of the early year's framework in England, claiming there is a dominant focus on specific subjects such as literacy and numeracy where thus, the frameworks do not take the holistic needs of the children into consideration.

More so, Grenier (2019) highlights how one of the authors of Development Matters has vocalised how the guidance is often used as a tick-list for what each child has to achieve, which limits children's learning as well as educators' professional / personal awareness.

Furthermore, relating to the environmental sustainability pillar, some respondents' views expressed concern regarding the specific area 'Understanding the World.' They argued there is too much focus on books and not enough on the children's own experiences (DfE, 2020).

Consequently, the statutory EYFS 2017 version did not change in response to the above concerns, reflecting how the process of consultation is flawed as suggested by the Coalition of Early Years Sector Organisations (2020) who express their disappointment with the EYFS reforms and guidance. As a

result, Gaunt (2020) points out how a petition was launched by the Green Early Years Choices Champions Organisation (GECCO) calling for sustainability to be included in the government's plan to revise the statutory EYFS. The petition argues that the reforms do not include any reference to sustainability whatsoever, stressing the importance of teaching young children about the world they inhabit (Gaunt, 2020). Thus, Gaunt (2020) emphasises how people are demanding change.

Building on this discourse, a pivotal part of the statutory EYFS 2023 is the 'Early Learning Goals' (ELGs) which are stipulated in the document as the level of normal development children should be expected to attain by the age of five, therefore emphasising the deficit model. It adds that educators should use the ELGs to make holistic judgements about a child's progress. The 17 ELGs are as follows:

- Listening, Attention and Understanding
- Speaking
- Self-Regulation
- Managing Self
- Building Relationships
- Gross Motor Skills
- Fine Motor Skills
- Comprehension
- Word Reading
- Writing
- Number
- Numerical Patterns
- Past and Present
- People, Culture and Communities
- The Natural World
- Creating with Materials
- Being Imaginative and Expressive (DfE, 2021)

The statutory EYFS clarifies that the ELGs must be achieved and are essential to the assessment requirements (DfE, 2021). Wood (2020) argues

that the language used in the EYFS (ELGs) shifts from 'persuasion' to 'coercion'. He highlights a tension between the EYFS's focus on recognising the 'unique child' and the introduction of standard ELGs, which are used for testing a few specific subjects at ages 48 to 60 months.

This means the children are expected to attain specific testing and development scores by the age of five years old. Wood (2020) critiques this process and claims the shift from developmental learning to assessment are driven by a political rationale, thus strengthening Moss and Cameron (2020) on their analysis of the statutory EYFS 2017 version in England.

In contrast, the supporting document 'Birth to 5 Matters' (non-statutory) was written by the Early Years Coalition (EYE, 2021). Support for this document is provided by Henty (2021) who explains that the guidance was created from two sets of research, a literature review of relevant research and a survey including 3,000 early years educators who were asked their opinions of the EYFS and what could be improved. This means the guidance has valued educators' voices and aimed to make positive changes. The guidance is intended to be used by educators to enhance their practice rather than directing them to tick-listing documentation:

"We want Birth to 5 Matters to support practitioners to implement the Statutory Framework for the Early Years Foundation Stage (EYFS) in a pedagogically sound, principled and evidence-based way. Educators can then use their professional judgement based on their knowledge of the children in their setting and their wider context including family, community and the setting itself to construct an appropriate curriculum". (EYE, 2021, p. 5)

In this document, sustainability is included in a way that suggests it is valued as part of daily practice. It firstly highlights that one of the purposes of the guidance is to recognise the early years sector's responsibility in adhering to the SDGs and UNESCO (p. 6). Following this, the document discusses encouraging early years settings to communities for sustainability and social justice. For instance, it states:

"Early years settings can be communities for social justice and sustainability. By bringing together diverse communities, early years settings lie at the heart of social change. As early years educators and families engage in the care of these environments, they can experience social justice and sustainability in action". (EYC, p. 37, 2021)

In addition, there is further mention on respecting / caring for the environment through teaching children how to reduce consumption. What is perhaps of most interest is the acknowledgment and value the guidance places on a fundamental of sustainability: reflection. On page 37, there is mention of the vital role the early years has to play in challenging unconscious bias and contributing to equity / equality by opening discussion around race, gender, sexual orientation, poverty, faith, prejudice and disability and how these affect life and learning, which is an essential part of sustainability for children to learn about and understand and respect differences.

The document further acknowledges that learning and development are not dependant on one particular year group a child is in, but rather values that each child develops at a different rate (Henty, 2021). Lastly, it is argued the Birth to Five guidance on assessment shifts away from ticking boxes and

prioritises an approach to help educators use practical information around children's learning.

This debate questions whether the guidance should be taken more seriously by the DfE and highlights the interesting rationale set by the Centre for Research in Early Childhood (Pascal, Bertram and Rousse, 2019) that explored what aspects of the 2017 version of the EYFS should be reviewed based on the evidence from the last 10 years. The findings demonstrated several action points and recommendations for change in the areas of self-regulation, citizenship and children's rights.

Ultimately, each of the action points noted above mirror EfS components where both Pascal, Bertram and Rousse (2019) and Gaunt (2020) have highlighted the recognition of a lack of EfS within the EYFS framework (2017) and the growing desire for change. Yet, with a new and updated version that has now come into effect, there are still no revisions or additions relating to sustainability.

2.11.2 Sustainability in ECE in Scotland

In Scotland, the Early Years Framework (ages 0-8) (Gov.Scot, 2008) aims to maximise positive opportunities for children to get the start in life that will provide a strong platform for the future (Gov.Scot, 2008). The Scottish government believes that the experiences children have in their earliest years significantly shape society and influence outcomes in adult life (Gov.Scot, 2008).

Regarding EfS, the framework does not mention sustainability itself but does give note to the rights of children, the importance of having their voices heard and the benefits of nature / outdoor play. Thus, the framework suggests a value of participatory learning. In this context, the framework mentions transformative change as a core aim of education (Gov. Scotland, 2008).

The framework acknowledges the importance of fostering high-quality and supportive environments in which children feel motivated and empowered (Gov. Scotland, 2008). Regarding the political / economic pillar of sustainability there is mention of the encouragement of opportunities which can generate sustainable economic growth (Gov. Scotland, 2008).

Accordingly, there are no mentions of the following EfS elements: critical thinking / reflection.

In the 'Case for Action' section of the framework, it outlines how effective approaches to early years policy will contribute to encouraging and upholding children's rights as defined by the UNCRC 1989, where such rights must underpin all policy for children (Gov.Scot, 2008). The framework also mentions the economic pillar of sustainability by stating that within their *Government Economic Strategy,* two of the key elements in delivering an 'economically successful Scotland' are learning skills, well-being and equity (Gov. Scotland, 2008). The use of the word 'equity' highlights the value of children learning and understanding how to be fair and impartial.

Additionally, within the 'Measuring Progress' section it clarifies that sustainable growth means building up both a rich and responsible society. Hence, recognising there is more than one meaning / interpretation to the term 'sustainable growth' and showing a recognition for the value of all three pillars respectively (Gov. Scotland, 2008).

Dunlop (2016) critiques the framework stating that much policy related to early childhood in Scotland is advancing but there remains a gap between policy goals and the reality of achieving those ambitions. Dunlop (2016) argues that policy formulation in Scotland, particularly within the early years sector, addresses issues such as social justice, poverty and well-being. However, she contends that much of the discussion primarily focuses on structural matters rather than relational aspects involving children, educators, families and communities.

The Government Standards for Scotland include EfS in more than one education framework. There is a policy on economy targeting sustainable economic growth, a policy on environment and climate change and policies on social care and rights (Gov. Scotland, 2020), all of which advocate for EfS and claim that education frameworks should mirror their governments' standards policies. More so, the Scottish government presents such policies as a set of 'responsibilities': thus, policy recommendations should be interconnected in nature and support one another.

A further supporting document is the 'Learning for Sustainability approach in Scotland' (LfS) which aims to enable learners, educators and schools to build a socially-just, sustainable and equitable society (Christie and Higgins,

2020). The whole school approach consists of global citizenship, outdoor learning and sustainable development education in attempts to create transformative learning experiences (Christie and Higgins, 2020). The approach is additionally embedded within the General Teaching Council of Scotland Professional Standards for Educators, and the document emphasises how the SDGs are core to Scotland's vision (Christie and Higgins, 2020).

In March 2013 Scottish Ministers accepted recommendations of the Learning for Sustainability framework (LfS) and suggested that every learner should receive teaching on LfS and every educator should demonstrate LfS in their practice, (Learning for Sustainability National Implementation Group, 2016). Following this, the recommendations stressed the importance for all schools in Scotland to develop a holistic approach that reflects culture, curriculum, and connects the learners to wider communities.

The report perceived LfS as a concept that links together sustainable education, global citizenship as well as outdoor learning, making another connection with the pillars of sustainability (National Implementation Group, 2016). Some of the fundamental recommendations made in 2012 are noted below:

- All learners should be entitled to learning for sustainability.
- Every educator, school and education provider should have a whole school approach to learning for sustainability that is demonstrable.
- All school buildings, grounds and policies should support learning for sustainability.
- A strategic national approach to supporting learning for sustainability should be established.

Furthermore, a recurring theme within the LfS framework is 'global citizenship' within education, which Boyd, Hirst and Siraj-Blatchford (2017) relate to educators viewing children as social actors / agents of change. This is important to note as the central element of EfS is taking action for one's responsibilities to those around them and the world they live in.

2.11.3 Sustainability in ECE in Wales

The Foundation Phase Framework in Wales (Welsh.Gov, 2015) is aimed at children aged three to seven and encourages children to be creative and imaginative (Welsh.Gov, 2015). Right from the start of the framework on page 10 under 'Social Development' there are connections to the social / cultural pillar of EfS in identifying the importance of teaching children to learn respect for others, all cultures and 'cultural-identity', feeling a part of a group and knowing the importance of valuing diversity (Welsh Gov, 2015).

The framework also mentions how young children should be equipped with the skills and knowledge to participate actively in a multi-ethnic society, thus, embracing diverse societies and encouraging participation. Sustainability is absent from the framework; nevertheless, the rights of children are briefly acknowledged by making reference to adhering to the UNCRC (UN General Assembly, 1989; Welsh Gov, 2015).

Relating to the environmental pillar, page 41 of the framework under the 'People and Places' sector highlights how actions can damage and improve the environment (Welsh Gov, 2015). It stresses the vital nature of being

environmentally friendly where children learn how to develop positive attitudes for caring for the environment.

There is discussion on page 6 (section 'Developing Thinking') about the importance of reflection and critical thinking (Welsh Gov, 2015) which is recognised as helping children acquire deep meaning. This is a fundamental element of EfS, as reflexivity can aid personal awareness through questioning actions, their place in the world and how they can positively contribute to changes in the world. This is further enhanced on page 7 of the framework which talks about the importance of children reflecting on the value of life (Welsh Gov, 2015).

Boyd, Hirst and Siraj-Blatchford (2017) outline how Wales has been influential within Europe in developing their Education for Sustainable Development and Global Citizenship (ESDGC) policy (2008). Additionally, they note how it is compulsory for all maintained education settings to include Education for Sustainable Development Global Citizenship within their teachings.

Chalkley, Haigh and Higgitt (2008) add how the ESDGC policy is about the links between society, economy and environment and the local and global implications of individual actions and achieving a better quality of life. Nonetheless, Taylor, Ryhs and Waldron (2016) evaluated the Foundation Phase Framework (2015) and found how many educators and key stakeholders identify a tension between the use of a more child-centred approach whilst at the same time balancing out the demands of the

curriculum in practice. Anew, mirroring the issue of outcomes taking priority over children's interests (Taylor, Ryhs and Waldron, 2016).

2.11.4 Sustainability in ECE in Northern Ireland

In Northern Ireland, the Early Years Foundation Stage (CCEA, 2007) for ages four to six is used, which aims to develop children's dispositions to learning and to provide them with the skills and knowledge they will need to excel in the future. As Boyd, Hirst and Siraj-Blatchford, (2017) identify, there are no direct mentions of EfS, although the community aspect is apparent where schools take on similar characteristics to that of Reggio Emilia, such as valuing the voice and interests of children. In terms of the socio-cultural and the environment pillars of sustainability, the framework values learning in different social groups and in outdoor / positive settings (CCEA, 2007).

There is no mention of nature, political / economic awareness, democratic practice, social justice or critical thinking. Nonetheless, the framework does address the value of both reflexivity and empowerment by stating how children learn best when they are actively involved in planning, reviewing and reflecting on what they have done (CCEA, 2007). This indicates an understanding of the significance of engaging children in their educational journey.

Although there are no supporting documents for ECE, McIlwaine (2014) explains how an anti-bias approach to education in Northern Ireland should be adopted by anyone who has responsibility for young children's development. The framework focuses on a fundamental aspect of EfS, namely respect, and aims to challenge negative / biased attitudes and values

that children may hold as they arrive to school. This mirrors the environmental and social conditioning influences of children's lives and the importance of the social / cultural pillar in ECEfS. It consists of a set of school experiences from which young children can learn and it provides a basis for EfS features (McIlwaine, 2014).

These experiences can be provided deliberately as part of the curriculum, incidentally as part of the informal curriculum, or they may arise unconsciously as part of the 'hidden curriculum' (biases held by teachers and unconsciously transmitted to children) (McIlwaine, 2014). It mirrors elements of EfS practice, such as education about culture, ethnicity and global citizenship. For example, section 2.1 highlights how the approach aims to help children understand the shared values of society and appreciate the diversities within it.

The document is aimed at those who have responsibility for children's development in schools in Northern Ireland and was expected to be a thought-provoking and challenging approach which would inspire educators to embed it into their classroom teaching. Hence, although this document is meant to offer support to educators it is not guaranteed such elements of EfS are being reflected in their teaching (McIlwaine, 2014).

In Hunter and Walsh's (2014) critique they contend that despite the agenda's assertion of being play-based, there is a necessity to transcend a rigid pedagogy toward one grounded in learning experiences for children.

In summary, the early years frameworks in Scotland, Northern Ireland and Wales all include some mentions of sustainability (children's rights, democratic education, social pillar aspects, nature-based, respect and dialogue). On the other hand, although England's early years framework (which Gibraltar follows) has had ample revisions made to it over recent years (2017-2023), sustainability has not been identified in the framework as a priority (Moss and Cameron, 2020; Gaunt, 2020).

The closing section of this Chapter will build on section 1.10 of Chapter 1 which outlined the conceptual framework for this project. Hence, the framework will now be revised to include the new emerging concepts from the literature review.

2.12 Developing Conceptual Framework: Summary

This Chapter has explored the literature surrounding ECEfS and found that while there is a considerable history of being aware of sustainability globally, demonstrated by policy, there is very little progress in terms of action in practice (praxis) due to neoliberalism. This demonstrated the need for reflexivity alongside an ethics of care and empathy for sustainability to become a priority of ECE which is explained later in the thesis.

As discussed throughout this Chapter, ECE was identified as a learning environment where children can learn the necessary underpinning skills required to drive sustainable change (including taking action against climate change) (UNICEF, 2023; Moss, 2017). There has also been a pivotal focus on the importance of relationship dynamics in the context of education,

emphasising the value of educators viewing children as capable contributors to society.

The value of respectful relations was emphasised when discussing Indigenous communities who prioritise relationship dynamics. Cormier (2017) explains how through an Indigenous lens, humanity would adopt the belief that everything is connected, including human and non-human. This reinforces sustainability in education and the idea that caring dispositions should be valued.

Additionally, this further emphasises the role of ethics both in relationships as part of education and society as a whole, arguing for a greater awareness of real-life issues. For instance, in the fight for sustainability, social justice and the need for decolonising curriculums. As first outlined in section 2.2.1 of this Chapter.

Wooltorton et al. (2020) points out that attempts at decolonising curricula should be rooted in Indigenous philosophies, including and accentuating their role as custodians of change. It is important to note this discourse on Indigenous philosophies and decolonising curricula is included as part of the 'Social Justice' concept in the conceptual framework, and further connections will be made in corresponding Chapters.

Ultimately, in order for such discussions to take place, the literature highlights the role of 'democratic dialogue' and 'ethics' (Freire, 1998) in opening up conversations that prioritise critical thinking, caring dispositions, listening to others, debating important topics (EfS) and producing solutions

together as a collective. As such, building upon the concepts outlined in Chapter 1 (Figure 1.2) the framework (Figure 2.1) has expanded to include the concepts of democratic dialogue, relationships (ethics), an awareness of neoliberalism and praxis (reflexivity) that have emerged from this Chapter. All of which, will inform the underpinning methodology for Chapter 3 (Social Critical Theory - Freire, 1970).

Important to add, is how the framework reflects Boyd et al. (2021) (outlined in section 1.10 of Chapter 1). In particular, Figure 2.1 highlights the importance of adults valuing children's voice (relationships & ethics) through dialogue and conversations that inspire. This was a fundamental theme throughout Boyd et al. (2021) in emphasising the value of relationships in ECEfS in working together.

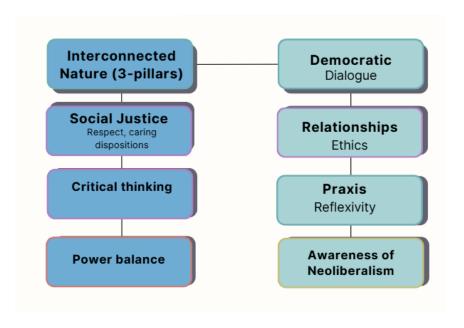


Figure 2.1: Developing Conceptual Framework: Literature Review (Author's own work)

In conclusion, the raised targets of normative goals place pressure on children, parents and educators which hinders children's development, freedom, and democratic learning, (Brogaard Clausen, 2015). It is vital for education stakeholders to resist being targeted as consumers in a neoliberal agenda by recognising and appreciating children's holistic well-being (Brogaard Clausen, 2015). Moss (2017) suggests it will be difficult to influence policy with alternative discourses not grounded in questioning neoliberal values and beliefs, but it is the responsibility of early childhood stakeholders to try. In offering reciprocal learning which promotes democracy, respect and participation, educators are resisting.

Drawing from the insights of Chapter 2, Chapter 3 will justify the use of Freire's Social Critical Theory (Freire, 1970) as the most appropriate methodology for this research study and the research methods in line with the underpinning conceptual framework. In doing so, a relational approach to ethics (Caine et al., 2020) will be embedded throughout this process.

Chapter 3: Methodology

3.1: Introduction

The aim of this Chapter is to explain and justify the research approach in relation to the research questions. Initially, the ontological position is outlined followed by the exploration of my insider-outsider positioning. Subsequently, the theoretical underpinning of the research study is discussed where the research questions are presented. Next, the qualitative research methods are justified and explained.

Ethics as a central part of this research is embedded throughout, demonstrating how a relational approach (Caine et al., 2020) was valued, and involved me working collaboratively and respectfully with participants. I introduce and discuss the relevance of research vignettes as a pivotal tool in narrating meaningful stories about Education for Sustainability (EfS) across the UK and Gibraltar. Finally, I present a revised conceptual framework, expanding upon Figure 2.1 in Chapter 2.

3.2 Ontology

Understanding and appreciating the reasoning behind choices made by any researcher is vital with regards to the meaningful interpretation of data (Moon and Blackman, 2017). While decisions taken are often based on fundamental philosophical thinking, Moon and Blackman (2017) argue that sometimes researchers are unaware of the need to question underpinning thought processes and the influence of personal bias.

Ontology refers to the study of 'being,' of what can be known or discovered, and explores what we believe can exist (Berryman, 2019). On the other hand, epistemology is about knowledge, ways of knowing and how we come to understand what we know (Berryman, 2019). My understanding of the relationship between ontology and epistemology is that my ontology as the researcher looks at what sustainability is and what my values are regarding this topic, while my epistemological stance influences the approach taken. Accordingly, I decided to adopt a participatory research approach which values participants' different opinions of sustainability.

Consequently, upon reviewing my positionality in relation to the focus of this research (see Appendix X) I began to think critically about the value of listening to others which led me to an awareness that multiple realities often exist around one phenomenon. This was challenging and uncomfortable but important for me to reflect on and acknowledge early on, prior to beginning the research (Chrost, 2017). However, understanding one perspective will be influenced by personal values, biases and lived experiences. This is explored in depth in section 3.2.1 where I look at my position as an insider / outsider and the difficult process I went through regarding conducting research in Gibraltar and across the UK.

Therefore, the methodology of this research in relation to my ontological perspective, takes a relativist stance, which is based on reality being 'relative' to 'others' experience of the same phenomena (Moon and Blackman, 2017). Thus, I recognise that each participant in this study had a

unique understanding of sustainability based on their experiences, meaning that several 'realities' of sustainability co-existed.

This means that I accept there is not 'one truth' when exploring participants' views on sustainability but rather there are multiple truths underpinned by each participants' interpretation and what makes sense to them. This epistemological stance values the influence of individual experience and how this can shape their perceptions of the world, in this case of sustainability. Consequently, this study places value on listening, respecting and giving voice to all participants' experiences of sustainability and therefore the most fitting theoretical framework is Freire's Social Critical Theory (SCT) (Freire, 1970) which is discussed in more detail in section 3.3.

Next, and in connection with my positioning, insider and outsider perspectives will be discussed.

3.2.1 Insider Outsider Research

Insider perspective relates to the researcher as part of the community within which they are conducting research (Hellawell, 2006) and in this context relates to my position, and engagement in research in both the UK and Gibraltar, as my home country. There were moments I was carrying out research as a Gibraltarian 'insider' in which I felt like an outsider, and times where I felt like an insider in an 'outsider' (UK) environment. As Dwyer and Buckle (2009) articulate, this is a result of the space that is created as part of relationships and concerned with the power balance / imbalance that is

created because of wider cultural, historical and political influences and our awareness of these influences.

For instance, during an interview with the Minister of Education in Gibraltar, I felt a power imbalance and due to this I became nervous and began to stutter and elide some of the interview questions. I was an outsider because of the space created by my unfamiliarity with government ministers and my interpretation of the associated expectations. In comparison, I considered my position as an 'outsider' encountering participants in the UK. Fleming (2018) highlights how the insider perspective (having unique perspectives on the history, culture and society of Gibraltar) can be an advantage, as it enables a deep level of understanding and interpretation. Consequently, Dwyer and Buckle (2009) explore the notion of a researcher having both insider and outsider perspective and calls this sliding between phase, 'the space between'.

The notion of the 'space between' challenges the division of insider / outsider status, and as Dyer and Buckle (2009) argue, the dialectical approach enables maintenance of the complexities of similarities and differences. They add that being an insider or outsider does not and should not lead to extreme complexities, especially in qualitative studies which tend to recognise the multi-layered differences of human experience to a greater extent:

"Holding membership in a group does not denote complete sameness within that group, likewise, not being a member of a group does not denote complete difference". (Dwyer and Buckle, 2009, p. 60)

Nevertheless, Dwyer and Buckle (2009) acknowledge the importance of becoming aware of how thought processes change when sliding between the two perspectives. For myself, this involved shifting between different emotions (positive / negative), feeling more attached and a sense of belonging rather than detachment. As a result, below I have discussed an example of being aware of my insider / outsider position and highlighted how vital constant reflection was for both my personal and professional development as a researcher (Woods, 2019).

Conflicting emotions occurred, such as when entering my first visit in Gibraltar I felt excited as I knew the setting I was going into was my old primary school, and this meant that I automatically generated positive emotions through a sense of familiarity and belonging. It is vital to add that this was not the case for all settings in Gibraltar and the unfamiliarity and sense of detachment was not the case for all settings in England, or across the UK in general.

Berger (2013) advocates for researchers to become aware of the emotions they feel in order to differentiate between them and to reflect on them. Upon reflection, I have sought to understand the 'negative' emotions associated with the first English setting as a result of my unfamiliarity with the research process, such as interviewing for the first time and the lack of confidence I felt within myself as a novice researcher.

Consequently, I may have felt the same emotions if Gibraltar had been one of my first visits. For example, the more places I visited, the less I felt these

emotions. As I gained experience conducting interviews and observations, I started to feel more comfortable and confident as a researcher.

An example of my experience of feeling like an outsider was documented and can be found in Appendix XI as 'Example 1'.

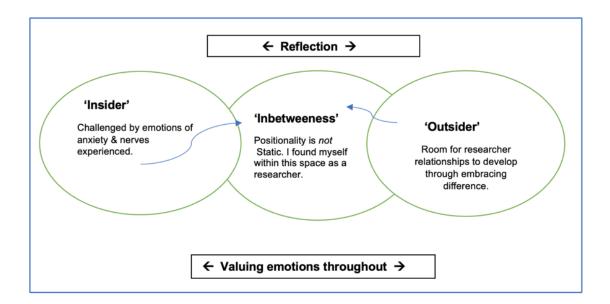


Figure 3.1: The Researcher's Positionality (Author's own work)

In conclusion, since the start of this research, and engaging reflexively, I have come to notice that my role as an insider / outsider cannot be defined simply. I have learnt the importance of being aware of my position in research, the nuances that exist and how my position was in a constant state of fluctuation. It has been a journey that has prompted critical reflection and made me recognise just how necessary awareness of my own bias and positioning is, especially in relation to the process of interpretation.

The following section will explore the research design of this project and the relevance of Social Critical Theory in relation to the methodology.

3.3 Theoretical Underpinning: Social Critical Theory

Paulo Freire was first introduced in Chapter 2, section 2.6. Within this Chapter, Social Critical Theory (SCT) will be evaluated as the underpinning theoretical framework in relation to the research questions. The theory is based on a democratic approach to education that is respectful and encourages open dialogic communication, so that new ways of seeing and being can develop (Darder, 2017). Both SCT and EfS share central concepts such as the fundamental aim of education as participatory and to encourage critical thinking, children's voice and to provide them the tools needed to empower them as agents for change (Freire, 1992; Rieckmann, 2017). This in turn is relevant to the methodology and the research methods used as part of this research project.

Freire's central view of education was that it should generate authentic learning through dialogue and open discussion, which in turn enhances understanding and empowerment (Freire, 1970). Freire urged that teachers must become learners and learners become teachers (Freire, 1970). In relation to this research, this process is reflected in the transition in which the researcher becomes the participant. This means that I have learnt about EfS from the participants' unique perspectives, and they have taught me the various ways EfS can be interpreted in practice and of the barriers which may hinder EfS.

In this endeavour, education must prioritise addressing critical issues and above all, fostering mutual respect to facilitate the transition from 'political' to 'democratic' (Freire, 1970). This is mirrored in this project with regards to the

importance of respect as part of methodology and research methods. For instance, there has been clear and open dialogue between the researcher and the participants throughout this study.

Interview transcripts were returned to participants via email to ensure they had the chance to review and check that the data was accurate. I wanted to be able to offer the opportunity to involve the participants in the analysis phase, as this additionally helped with accuracy of information and minimised room for assumptions to be made. More so, several participants made amendments to their transcripts and added important parts they forgot to mention during to the face-to-face interviews (outlined in Chapter 4, sections 4.3 and 4.7). The literature supports how these practices can improve data quality by checking data accuracy, as Rowlands (2021) shares their method of 'Interview Transcript Review' (ITR) which serves to receive participants validation. This confirms the value of this process, as some participants edited their transcripts and expressed gratitude for the opportunity to do so.

In what can be considered Freire's groundbreaking work, *Pedagogy of the Oppressed* (1970), there is a profound emphasis on dialogue across its Chapters. Within educational discourse, the concept of 'open-dialogue' is viewed as a way of communicating aimed at fostering inspiration, where educators actively engage in conversations with learners that prioritise mutual understanding (Freire, 1970).

There are overlaps with Freire's promotion of open-dialogue within education, EfS and the chosen methods of this project. These areas collectively highlight the significance of verbal exchange and dialogue in

fostering critical thinking skills - an essential aspect of a world that needs social, cultural and environmental transformations (Rickemann, 2017; Freire, 1992). Furthermore, the notion of 'hope' which Freire (1992) describes as an essential component to reflection and action (praxis) is additionally emphasised.

When considering what this means with regard to the current education system, this idea of 'hope, empathy and cooperation' is incompatible with the neoliberal drive for results which arguably ignores the opportunities for children to learn about real-life issues (EfS) (Moss, 2016; Freire, 1992). As such, the emphasis on **reciprocal relations** has been added to the conceptual framework that can be found at the end of this Chapter (3.12).

In accordance with the above and as a reminder, the following research questions were formulated:

- 1. How do early years educators, children and policy makers understand sustainability in the early years in UK and Gibraltar?
- 2. How is sustainability in the early years interpreted in practice?
- 3. What are the potential barriers that hinder sustainability in the early years in the UK and in Gibraltar, and what are their implications?

Having established the basis for the underpinning theory of this project, and outlined the research questions, next I will highlight the centrality of qualitative participatory research.

3.4 Qualitative Participatory Research

Qualitative research involves collecting and analysing empirical data to deepen understanding of a subject, making it suitable for in-depth studies that focus on identifying key features (Aspers and Corte, 2019). This means that where quantitative methods are suited to studies that are concerned with facts and measurable, fixed realities (Blackstone, 2018), qualitative methods assume a dynamic reality which focus on understanding behaviour and exploring multiple perspectives (Busetto, Wick and Gumbinger, 2020). Therefore, it is appropriate for this research as the fundamental objective is to evaluate sustainability in the early years through unravelling participants' understandings, experiences and interpretations. In addition, the research questions have been formulated to prioritise the voices and stories of participants' relationship with sustainability which require observation rather than measurement.

The use of semi-structured interviews, participant observations and the additional use of a reflective journal will be implemented. However, the research has involved a small element of quantitative data with regards to counting or keeping track of how many times something occurred, for example:

- How many times a similar response was given by participants
- How many visits were made
- How many participants / sampling processes

In this endeavour, Hannah and Lautsch (2011) explore counting techniques in qualitative research studies and refer to the above types of counting as

'credentialing counting'. The purpose of this type of counting for researchers is to document counts of data sources, for example to develop a table of the numbers of different types of respondents interviewed (Hannah and Lautsch, 2011). This type of counting can be useful to present data counts and show transparency relating to how a study was conducted (Hannah and Lautsch, 2011).

Relational ethics which advocates for respectful communication in acquiring meaningful data, is outlined below.

3.4.1 Relational Ethics

As an important element of participatory methods, Caine et al. (2020) look at the necessity of a relational ethics alongside Nodding's (2013) ethics of care. They argue that research should begin from a position of care for participants in order to holistically gain trust and express empathy and respect for all involved. In attempts to gain trust from the participants, I wanted to make sure they felt valued and felt involved in the research. Ethicality additionally encourages values such as equity, trust and accountability, which are essential for collaborative work such as the qualitative data methods this project has applied (Noddings, 2013).

This is supported by Moss (2017) who argues that an ethics of care must emphasise the importance of more individual judgements, and that it is about showing care for others (e.g., participants) through respect. In addition, a key aspect of this research is to value the voices of participants. This is important

as listening to the voices and stories of others is central to sustainability as Cameron et al. (2020) have highlighted.

Using similar terminology, Ellis (2016) discusses the importance of 'compassionate' research, which focuses on collaboration where the participants and researcher work together. Ellis (2016) further highlights that when considering an ethics of care, researchers must ensure participants are protected from harm. This includes maintaining confidentiality, debriefing and taking into account participants views, whether this brings about challenges. Hence, the following sections will look into each of these aspects and provide examples of interactions between participants and myself, and how any challenges that arose were dealt with.

3.4.2 Confidentiality

Confidentiality was important as part of an ethical approach which Flick (2017) describes as the agreement between the researcher and participants to limit access of their information, which specifically relates to the data, how it is stored and handled. The importance of confidentiality lies with the respect for persons and beneficence (Flick, 2017). The information obtained in this study has been collected and stored on devices and will be deleted after the thesis is completed within 4 years. Confidentiality has been consistent throughout the research where participants have additionally been coded and used pseudonyms unless they requested to have their details included (e.g., in the case of John, an ECE author, who specifically asked to have his name included and recognised in this study).

The details of the Liverpool John Moores University (LJMU) confidentiality process are contained within the ethics application as part of Appendix I. The Minister of Education John Cortes has additionally given permission to his name within this project. All participants had the right to withdraw at all times (an example of a child exercising their right to withdraw is outlined in the next segment).

Thus, the following section will focus on children as participants and outline the steps that were taken to prioritise respectful dialogue and relations throughout the project.

3.4.3 Respecting Children as Participants

This research project aimed to investigate sustainability within the context of early years education and to offer opportunities to value children's views about their experience and understandings which was facilitated through a relational ethics approach (Caine et al., 2020). Raheim et al. (2016) notes that in qualitative studies it is important for the researcher to attempt to minimise power relations, distance and separateness between them and the participants.

Taking the advice of O'Grady (2016), Noddings (2013) and Raheim et al. (2016), I prioritised the relationships between myself and participants to be democratic and respectful in line with the theoretical underpinning. As a result, a power balance has been a priority in this research. In practice, this involved giving participants the opportunity to review their transcripts or conversations to ensure data accuracy. This way the analysis process was

on-going throughout the research. As Slettebo (2020) notes, this approach is constructive in the way it can empower participants. Using positive and friendly language was important as part of this process.

As well as following the LJMU ethical guidelines it was important to value the children as researchers (Clark, 2017) and access their assent and views.

An alternative, more child-friendly framework supporting this project is the European Early Childhood Education Research Association (EECERA) code. Developed in 2014 by Bertram and Pascal, this framework is specifically designed for early childhood researchers (Bertram et al., 2016) to address issues of involving and working respectfully with young children in research.

Core elements of the EECERA that have supported this research are as follows.

An example of respectful interactions (principal 5 from the EECERA code) relating to 'Integrity, Transparency and Respectful Interaction' was reflected in the data analysis phase in which I read back to the children the data I recorded from our conversations. I wanted them to have the opportunity to let me know if something was not right or if they wanted to expand their thoughts. Similarly, a challenge that occurred on more than one occasion was during a conversation with the children about sustainability and their learning, they would become disengaged and ask if they could go back to play. Thus, the children were exercising their right to withdraw.

During one of the instances, I had only gathered a small amount of data, but realised after reflection that it was important to me that the children did not

feel forced to speak to me if they wanted to do something else instead. I wanted the children to feel valued and engaged.

This is reinforced by Camara (2020) who argues for children's rights to be respected and their opinions to be valued during research encounters.

Following this, I began to ask the children if they wanted to converse in their classrooms, outside or during a walk. Camara (2020) supports this as she encourages researchers to prioritise the children's comfort. Additionally, I ensured all participants were debriefed throughout and after the research encounter which is discussed in the next section.

3.4.4 Ongoing Debriefing

This section will look at a further example that is reflective of the EECERA (Bertram et al., 2016) in regards to ensuring language is appropriate and the children are appropriately debriefed. At the start and end of every visit, I thanked the children for their time and explained to them what the purpose of the study was (e.g., the content of the conversation and the value of their participation). This process was important so they were aware of the research focus, and that it was conducted in a sensitive and respectful manner using age appropriate language.

For example, on most of the occasions I sat with the children in their outside environments and introduced myself as someone who was there to find out about their views and experiences as these were important to me. I used the information that was included in the assent forms (see Appendix VI) as highlighted above, and this helped me familiarise myself with the children, ensure they were aware of their participation and gave me an opportunity to

gain extra consent prior to the conversations. The debriefing terminology was as follows:

"Hello, my name is Deinah, and I am visiting your school / setting today to find out what is important to you about your learning, what you like to play with and what is important for you in looking after our world. Is that ok? Are you happy to talk with me? If you do not want to that is fine too! Can you show me with a thumbs up or thumbs down?"

Most of the time, the children were keen to talk with me and I ensured they knew they could leave at any time by repeating the following to them: "If you do not want to continue talking to me, that is fine, just let me know". One of the challenges I noticed was that on two separate occasions, the children changed their minds, which I respected.

As ethical considerations have been outlined and were embedded, the following section will discuss the sampling and selection process.

3.5 Sampling and Selection Process

The sampling type conducted for this research was the 'purposive sampling' method. This type of sampling involves the researcher intentionally selecting participants who have knowledge or lived experience with the phenomenon; in this case, sustainability in the early years (Gill, 2020). By lived experience I am referring to individuals who have been exposed to or engaged in examples of what sustainable practice may look like or hold knowledge / interest in sustainable teaching.

The type of purposive sampling chosen was 'maximum variation sampling,' also known as 'heterogeneous sampling' which is used to gain a range of different perspectives relating to the one phenomenon (sustainability)

(Palinkas et al., 2015). For example, the first group of participants in the study were made up of early years educators or adults who held knowledge / experiences / interest in sustainability; their views and experiences are naturally going to be different from the second group of participants - children. The children experienced sustainability through a different lens to the adults and thus exhibited variation in terms of attributes and opinions; this then helped me to identify patterns that cut across variations (Palinkas et al., 2015).

Although I am aware of the potential for bias that purposive sampling brings, I chose to use this method due to its ability to generate meaningful responses to the research questions. It has given me the chance to obtain data that best suits the aims and objectives of the research and thus, enhances quality of the overall study. Supporting this, Campbell et al. (2020) argue that the nature and intent of purposive sampling is to increase the depth of understanding of the area being studied. Consequently, I chose this method to purposely target participants who were able to share with me their opinions on sustainability based on their experiences.

Additionally, not all schools across the UK and Gibraltar practice sustainability in the early years, which means that if I had chosen random sampling, there would have been a high risk of obtaining data from participants who had not explored sustainability before, and there would be little or no correlation with the research questions. Finally, Sharma (2017) adds that researcher bias is reduced when there is a clear criterion set out prior to the research phase.

In the case of this research, the study involved a range of 5-10 participants from each home nation as part of the UK and Gibraltar, leading to a total of an estimated 50 overall in order to recruit enough participants to provide rich detailed data. As explained above, participants ranged from 25–70-year-old adults (early years educators, adults who had an interest in sustainability) and children aged 2-5 who had been exposed to sustainable teaching / environments. The sample size was decided whilst considering the following factors:

- This was subject to change given the Covid-19 pandemic.
- This was dependent on whether or not early years settings wished to be involved.

It is vital to highlight that a portion of the Gibraltar participants from the public schools were sampled slightly differently, as the policy of the Department of Education in Gibraltar meant that they would choose the settings for me.

Settings were selected via three key approaches; either an interest in sustainability in the early years on their websites, social media pages or settings / participants were recommended to me because of their interest in sustainability or in the case of the public schools in Gibraltar, the Education Department chose settings which they believed would be better suited for the study, based on interest in sustainable practice. This was a necessary process of their regulations.

An overview of the demographic characteristics of participants from five settings is shown in Table 3.1. Following this, the next section will discuss background and initial intentions of this study.

3.5.1 Demographics

Setting	Female/Male/Other	Age	Location
Setting A (based on 5 participants)	All participants – female	2 participants – children aged 3-5	Central City Gibraltar
		3 participants – aged between 25-60	
Setting B (based on 4 participants)	4 participants – female	3 participants – children aged 3-5	East Coast England
	1 participant – male		
		1 participant – aged between 25-60	(Seaside location)
Setting C (based on 4 participants)	3 participants – female	2 participants aged 3- 5	Northwest England
	1 participant – male	2 participants – aged between 25-60	
Setting D (based on 5 participants)	3 participants – female	3 participants aged 3-5	Northwest England
	2 participants – male	2 participants – aged between 25-60	(City location)
Setting E (based on 4 participants)	1 participant – female	3 participants aged 3- 5	North Wales
	3 participants – male	1 participant – aged between 25-60	(Seaside location)

- Table 3.1: (Demographic data from five settings)

3.5.2 Background and Initial intentions

At the start of this research project, I had initially hoped and planned to enter and observe practice in more early years settings than what has been conducted. I had planned to visit 3 to 4 settings in each country and undertake observations in each one. Due to the Covid-19 Pandemic this has proved extremely challenging for the following reasons:

- The ongoing lifting and re-enforcing of restrictions created long periods of uncertainty, confusion and reluctance which affected the ability of gatekeepers to agree to visits / participation in this study.
- Even during periods in which the pandemic was somewhat stable, gatekeepers still refused entry to their setting to minimise any risks.

 I experienced confusion as at times the gatekeepers accepted invitations for a visit and participation and then declined shortly after due to the volatility of the unfolding events.

Central to this discussion, Strachan (2021) solidifies the challenges researchers went through during the Covid-19 pandemic and sheds light on two key areas that particularly affected this project: accessibility and engagement. As explained above, the qualitative methods of this research (observations and interviews) proved difficult to conduct due to only having access to respondents who had internet access and available time to schedule in video calls.

More so, with regard to engagement Strachan (2021) agrees that participants can find it hard to remain engaged for extended periods of time, and struggle to emotionally connect with the researcher through a screen. This aspect did have an affect regarding pressure the participants may have felt to keep their responses shorter. As a result, Covid-19 had a significant impact on access to settings, where the ones that were available also had restricted access. Due to the second wave of Covid-19, I was also not allowed to go back and re-visit some settings.

Due to the above challenges the data collection consisted of interviews with participants, but fewer observations of practice took place. As I noticed this would be the case early in the process, I decided to engage with the following:

- Digging deeper in the interview process and inviting participants in follow up emails to provide further examples of practice.

This was done in efforts to generate sufficient data, although the impact of Covid-19 on the data collection process was undeniable. As a summary, in Gibraltar interview transcripts ranged from single to group interviews requested by the setting. As examples, one group interview involved a headteacher, one deputy head and two educators and another involved a conversation with 3 children. There were a total of 4 observation transcripts. All of the educators interviewed held a PGCE and had between 6-30 years of teaching experience.

In England, there were a total of 13 interview transcripts, two of which were group interviews requested by the settings, one involved me and two educators and the other involved two children and myself. There were a total of 4 observation transcripts. The schools ranged from public schools (reception age) to nursery, and private childminding services. Educators interviewed held PGCE training and had between 2-40 years' experience teaching.

In Wales, there was also a mixture of single and group interview / observation extracts. The school involved was nature-based. Educators held PGCE training, where one educator held a Master's in Education and Early Years. In Northern Ireland, there were a total of 5 interview transcripts (one interview involved two children, which was requested by the setting). The Northern Ireland setting was nature-based, where educators held PGCE's,

and additional qualifications in outdoor play. In addition, there were 2 observation transcripts.

Lastly, in Scotland, there was a total of 1 interview transcript that expressed the views of a gatekeeper and three members of staff. The setting was a Montessori School, where all educators held PGCE's and relevant Montessori training. Due to Covid, uncertainty amongst settings in Scotland resulted in little data.

Many settings declined participation explaining they were too busy with Covid pressures. In one setting, the headteacher agreed to participate in a telephone interview after discussing the topic with members of staff (ECE educators). She asked to have a look at the questions prior to the interview, so she could share the responses of herself and the members of staff with me over the phone. This was due to the fact that she and the educators were in high demand in the setting due to Covid and could not speak to me individually.

Thus, the one transcript collected consists of the views and opinions of one headteacher and ECE educators, the phone call lasted 45 minutes where we were able to discuss sustainability in depth.

Consequently, there were no observation transcripts. After many attempts of phoning and emailing settings, up until February 2022, the continuous Covid restrictions throughout the pandemic in Scotland made it impossible for any face-to-face visits to be arranged, (meaning no observations were able to take place).

As Strachan (2021) outlines, the Covid-19 pandemic and quarantine requirements resulted in significant impacts on research methods, in particular qualitative methods such as the ones conducted in this project. It is important to highlight this, to provide clarity for the reasonings behind some of the shorter statements included in the findings Chapters (4) and (5). Where this was not the imagined nor desired outcome, the inevitable effects of the pandemic took precedence.

The following sections will outline the pilot study.

3.6 Pilot Study

A pilot study involving a small-scale survey was conducted prior to the start of the research to evaluate how appropriate the criteria / questions were as part of the research methods, namely, as part of a questionnaire and an interview (Janghorban, Latifnejad Roudsari and Taghipour, 2014).

Given that the research was due to take place mid 2020–2021, during the peak of Covid-19, there was some concern regarding my ability to conduct face to face interviews and observations (see 'Background / Initial intentions' section 3.5.2), or reluctance amongst participants in being comfortable to do so.

Due to this challenge, I decided to pilot the use of a questionnaire as an additional method to the interviews and observations. An extract from this is exhibited in Figure 3.2.

	Strongly Agree	Disagree	Neither Agree not Disagree	Agree	Strongly Agree
To learn to be empathetic / respectful	1	2	3	4	5
2. To become confident, independent, decision makers / doers	1	2	3	4	5
3. To demonstrate academic needs for future employment	1	2	3	4	5
4. To focus on demonstrating EYFS outcomes and baseline assessments	1	2	3	4	5

Figure 3.2: Pilot Study Template

The pilot questionnaire was disseminated to the educators. A week went by with no responses, which emphasised how busy the educators were with their daily routines. I was receiving more requests to come into settings and interview participants face-to-face. Consequently, I decided to carry out face-to-face interviews and observations depending on Covid-19 restrictions.

These varied across the 4 home nations in the UK. When this was not possible, online interviews were used.

Following this, I piloted the interview questions at the second setting I visited. The interview questions were heavily based on the questionnaire at first.

During the first face-to-face interview, I noticed the educators asked me to rephrase certain questions. Upon reflection I realised the combination of my nerves, formal approach and the language used in some of the questions resulted in amendments. For example, instead of asking:

"What your understanding of education for sustainability is"?

I revised this to:

"Can you tell me what your understanding of sustainability is?".

I immediately noticed much more detailed responses by the participants as soon as this change was made. The terminology 'EfS, education for sustainability' appeared not to be familiar to participants. Secondly, regarding my nerves, I began to practice counting to 10, taking deep breaths and I approached the interview process in an informal manner.

As my confidence grew, I became more familiar with the process of the interviews and it felt much more like an in-depth conversation. An experience of researcher nerves is captured in Appendix XI (under 'example 2') where I reflect on interviewing. In summary, the implications of the pilot study were as follows:

- Terminology from the questionnaire was revised for the interview questions. This was based on the formal use of language and participants' confusion about certain phrases which allowed more room for participant expression / flexibility.
- My own confidence in delivery of questions and face to face interactions. The pilot study made me aware of the need to manage my nerves when conversing with participants. Following this, I began to feel much more at ease with every visit and interview.

Ultimately, the pilot study exposed weak areas which required changes. As (Malmqvist et al., 2019, p. 1) state:

"Proper analysis of the procedures and results from the pilot study facilitates the identification of weaknesses that may be addressed. A carefully organised and managed pilot study has the potential to increase the quality of the research as results from such studies can inform subsequent parts of the research process."

As the ethics, process of recruitment and pilot study have been discussed, the research methods along with advantages and challenges of each are highlighted below.

3.7 Semi-structured Interviews with Adults and Children

The type of interview chosen for this research was semi-structured, which Adams (2010) describes as a blend of closed and open-ended questions typically followed-up by 'why' or 'how' questions. Semi-structured interviews are defined as a qualitative research tool which involves conducting individual interviews with respondents to explore their perspectives and opinions on specific areas (Boyce and Neale, 2006). The interviews involved the researcher and participants. The aim of the interviews was to gain understandings of EfS and how it is translated in practice, as well as to identify any barriers or challenges.

Such questions allowed responses to be expanded on where necessary resulting in more detailed and valuable information (Adams, 2010). Smith (2019) adds how semi-structured interviews are pre-planned but with flexibility to pursue a free-flowing format, they allowed the interviewer to compare participants responses and evaluate in depth, identifying patterns.

It is important to highlight that, due to this flexible nature, I sometimes engaged in multiple conversations with educators during the course of a single observation or interview. This emerged organically throughout the data collection process.

3.7.1 Conversations with Children

Children were invited to engage in a conversation about their learning. They were asked about what they enjoy learning about and how they lead their own learning. Expanding on section 3.4.3, Lambert (2019) highlights the issue of the potential power imbalance between the adult researcher and the child and how it is important for the researcher not to adopt a position of power or hierarchy and to interact with the children in a respectful manner. It is highly advised to consider casual, conversational and creative methods to carry out the interviews, even on walks rather than inside the classroom. This is in aid of creating a more comfortable atmosphere where the child does not feel pressure to say 'what is expected' but rather, what they truly believe (Cook et al., 2019).

An example of this was seen where one of the children asked the educator what to say in response to my question. I could sense they felt they were being 'tested' and were worried about saying the 'correct' response. I then explained to this child that we were having a fun conversation about their learning and no right or wrong answers existed.

As a result of the above concerns, it was important to ensure that power imbalances were minimised by engaging in casual but informative

conversations rather than viewing the process as formal interviews with the children. This allowed participants to be themselves and speak openly. As a result, I decided to use the terminology 'conversations' for the children to ensure a more comfortable atmosphere was respected. I chose to ask the child if they preferred to go on a walk to talk about their learning to which the child nodded with enthusiasm. This scenario reflects the importance of the participants, in particular the children feeling comfortable while the interview 'conversations' are taking place.

Similarly, it is important to explain how the language was modified so it was age appropriate. Although the term 'Education for Sustainability' was familiar to me, this was not always the case with participants (both adults and children) thus, to ensure there was clarity and children understood I decided to use the following language: "Learning about our world and nature" when referring to EfS with the children.

Interviews allow the researcher to judge non-verbal behaviour such as emotion and attitudes (Powney and Watts, 2018). Comparing with my experience, I recall several examples of conversations with the children which enabled me to develop areas of interest. One child was very enthusiastic to participate and converse with me about their learning which I identified through their constant smiling, willingness, closeness and interest in me and my role in their environment. They were curious and wanted to know about me, while constantly laughing and smiling. Through these positive emotions and attitudes I was able to expand further on answers and have an in-depth conversation.

On the other hand, in a separate setting one of the children used body language and facial expressions to show me that they did not wish to converse. They looked sad, disinterested and kept asking me if they could go back and 'play,' to which I respected their wishes and words, and we did not converse further. These are examples of how through semi-structured interviews, the researcher can get a true feel and interpretation of each participant's level of interest, allowing the researcher to judge non-verbal behaviour such as attitudes and emotions and respect them, accordingly.

Although both sets of questions are essentially asking the same things, the terminology was altered to ensure they were child friendly as explained above. The children decided when the conversations took place, but this usually occurred as part of the participant observations or afterwards / before, individually or in small groups:

- 1. Can you tell me what learning / school means to you? What do you enjoy / like about school?
- 2. Is there anything you do not enjoy? Can you explain what and why?
- 3. Can you tell me how what you learn is useful to you?
- 4. How do you choose / make decisions about things that are important to you in school? can you tell me how your teacher lets you decide / choose?
- 5. Can you tell me about how your teacher helps you learn? (expand on response)
- 6. Do you think it is important to look after our world? if so, can you tell me why?
- 7. Can you tell me about any learning you do outside and what it is like?
- 8. What helps you to learn and what gets in the way?

In the next section I have similarly outlined the interview process with adult participants.

3.7.2 Interviews with Adult Participants

Interviews lasted an estimated 20-45 minutes. I used a set of semi-structured questions relating to sustainability in the early years. Educators had the opportunity to expand and express their views. All gatekeepers (headteachers, leaders of settings / private nurseries) were additionally invited to engage in an interview about their views and understanding of sustainability in the early years. The questions were as follows:

- 1. What characteristics / skills do you think are important for children to develop in the 21st century?
- 2. How is what children learn useful / important to them? Can you give an example from practice?
- 3. Is there anything that makes it challenging to focus on what you think is important?
- 4. Could you describe how you see / view children as part of their learning? / i.e. what is their role?
- 5. Can you tell me what your understanding of sustainability is / what it means to you in relation to early years education / children's learning / what words come to mind?
- 6. Expanding on the above, why do you think sustainability is important and how is it relevant in your teaching and children's learning?
- 7. Can you see any links between children's 'engagement / participation' and sustainability?
- 8. Are you aware of the Sustainable Development Goals? / Which would you say are relevant to your role with children?
- 9. What would you describe as possible barriers to teaching sustainability in the early years?

Interviews are often undermined in value when it comes to educational research as Powney, and Watts (2018) point out the key advantages they bring. In terms of flexibility, interviews allow room for the interviewer to expand on areas and develop points of interest. During the interview process I noticed that although I had a structure of questions to follow, I would typically end up asking the questions in a sporadic order. This is because prior to the formal interview process where I began recording, the educators

or headteacher had already highlighted points of sustainable practices they promote in their school which they would like to expand on. Therefore, during some interviews I began the recording process by asking the educators / gatekeeps to explain the examples of sustainability they mentioned to me, and we then built on this using the structure outlined above.

Another example of the flexibility of semi-structured interviews was reflected in one of the settings in Gibraltar where the gatekeepers (headteacher and deputy head) had prepared a list of initiatives they had implemented in their setting related to sustainability as well as reasons for having to stop such initiatives due to Covid. Due to this, we began the interview and recording process with the participants running through what they prepared as they wanted to provide examples and highlight challenges, they were currently facing with Covid. I respected their wishes and due to the nature of semi-structured interviews allowing room for such occurrences, it was a pleasant and interesting interview which gave me a lot of room for expansion.

Contrastingly, when exploring the disadvantages Cook et al. (2019) concurs with Powney and Watts (2018) regarding the value that interviews can bring to research but stress the importance of evaluating the limitations prior to the research phase. For instance, gaining access to schools and permissions was complex given the hierarchies in place but Cook et al. (2019) recommended the idea of involving the head teachers in the purpose of the research project first, making access more possible and efficient.

This proved to be effective in some cases where headteachers were asked to participate and their responses were positive, it additionally made the

research phase more collaborative. For example, although one of the settings I tried to contact proved extremely difficult to put me in contact with headteacher, once I was finally in contact, they were delighted to hear about the research and explained to me how previously they have had researchers conduct observations without proper communication with the headteacher, which made them feel 'less-interested' in their study.

More so, a further disadvantage pointed out by Adams (2010) is that during semi-structured interviews the researcher must present themselves as being 'smart' and 'poised'. I struggled with this greatly during the initial phases of the research, I experienced a lot of nerves. I believe, the nerves I felt got in the way of fully embracing the principal advantage of this method: expanding on responses. For instance, I was nervous during the interview with the Minister of Education and I recall jumping from one interview question to the next rapidly, without allowing room for depth or exploration of content. I quickly noticed I needed to work on this, so I implemented breathing techniques and more trial runs prior to following interviews. As the research phase went on, I noticed a big change in my interviewing skills especially in terms of confidence and interactions with the participants. This is another example of how ongoing reflection and highlighting the awareness of my weak points has enabled me to grow throughout the research phase.

3.8 Participant Observations

Participant observation is a method that involves the researcher joining a group (in this study, children and early years educators) in order to examine the interactions and activities that unfold (relating to sustainability) in the

early years (Ross, 2014). Hence, this method has involved me as the researcher observing children and educators in their unique educational setting (nurseries, childminding, primary schools). In addition, Ross (2017) points out how the researcher is not observing as an outsider but instead plays two pivotal roles: being an objective observer and a subjective participant. Nonetheless, Ross (2017) points out there are several advantages and disadvantages that had to be addressed prior to conducting the observations which are highlighted in the discussion below.

3.8.1 Participant Observations with Adults

Observations took place over the course of 1 to 3 visits and lasted a morning or afternoon. During this time, I observed practice and engaged in activities with the children and educator. Notes were taken immediately after each visit of the practice / teaching observed relating to sustainability, such as: democratic practice, nature, environment, children's agency, children's rights, social justice, economic / social pillar.

A disadvantage noted by Ross (2017) relating to the difficulty of taking notes and observing at the same time became apparent to me early on. I had to find the right balance between immersing myself fully as an observer and subjective participant in the activities that would take place in each setting, being fully present but also being able to take notes down promptly to enhance accuracy. I found that taking notes down right after the observations on the train or bus back after each visit helped to keep the data fresh in my mind. It allowed me time to reflect, think about detail and note everything down rather than prohibiting me from engaging in the activities.

More so, Ross (2017) adds how this can be time consuming and stressful if not managed effectively, so I ensured I had sufficient time to engage in processes to prevent a build-up of data. In terms of validity, Ross (2017) points out how participant observations allow for rich qualitative data to emerge as it captures the reality of how individuals interact and behave. I noticed that when the participants felt more comfortable, they began to act more naturally, this usually occurred when I participated actively in their activities rather than just watching silently and taking notes.

This provided another advantage, as it allowed me to gain empathy for participants through the engagement facilitated by participant observation (Ross, 2014). This approach enabled me to uncover authentic meanings and devise perspectives on the participants' understandings and experiences of sustainability.

3.8.2 Participant Observations with Children

The children were observed in their day-to-day practice where I was looking out for sustainability aspects. Ross (2017) outlines a disadvantage to participant observations as being biased, as there is a risk of the researcher becoming too involved and friendly with the participants. Where relationships develop, this can make the researcher want to show data in a positive light. I have had to keep in the process of constant reflection (continuous journaling) to ensure I was not becoming too attached to any participant or setting; thus, this enabled me to remain constructive.

For example, in one of the settings in England although I had only visited 3 times, I had spent 4+ hours in the setting at a time, it was a private setting with only 3 young children. I noticed on the second visit the children were so happy to see me, they remembered me and wanted me to engage with them. I noticed myself at one point in the afternoon almost forgetting why I was there, and my position as a researcher was being blurred by the children's constant desire for me to play and engage with them. I had to remind myself what my role was and refrain from getting lost or too close to the participants during visits.

3.8.3 Observation Tools

In order to assist the process of observations I established the following observation prompts outlined below. What to look out for:

- How the children and educator converse / interact (look for signs of SDG 4 Quality / democratic learning) in relation to sustainability. This means looking out for signs of life-long learning (are opportunities given so the children can build resilience, independence and confidence in their abilities to participate and make choices?).
- Ways in which sustainability is reflected in practice (environment, socio-cultural awareness, political / economic awareness, nature, children's rights, decision making, agency social justice, participation, empowerment and reflective elements).

Additionally field notes were taken in instances where I was not actively engaging with the participants in the activities. As explained in the above section although it proved a difficult task to take field notes while immersing myself fully in the moment there were instances where this was possible.

As Vanderstoep and Johnston (2009) add, field notes provide the researcher with opportunities to reflect and analyse as thoughts occur. Consequently, I engaged with a reflexive framework that aided critical thinking with regards to data collection and bias. This is outlined in the following section.

3.9 The Use of Reflexive Frameworks

Early on in the research process I looked at and applied Gibbs' (1998) cycle which included: Description → Feelings → Evaluation → Conclusions → Action. I attempted to use the cycle a few times during the very early stages of research but found that it was rather simplistic and although covered the basis of my thoughts in terms of how I felt about a situation, I struggled to jump from the conclusions to action phase. This is mirrored by Finlay (2008) who claims Gibbs' cycle is 'basic' and individuals would benefit from considering a more advanced model. Offering further reinforcement, Middleton (2017) argues that although Gibb's cycle offers a clear structure it fails to offer the opportunity to go beyond practice to explore values which lead to change.

As a consequence, I considered McLeod's Framework (2019) which helped me to unpick critical incidents and facilitate self-awareness, value different perspectives through engaging in a series of prompts and respond appropriately. The framework is shown in Figure 3.3

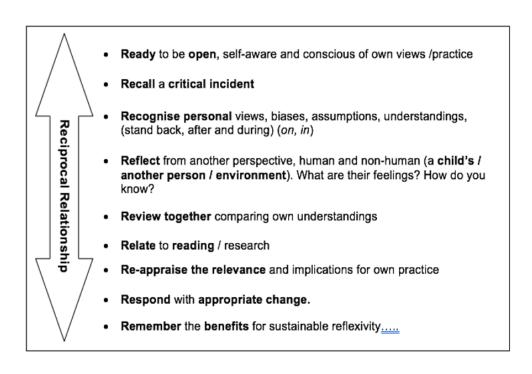


Figure 3.3: McLeod's 9 R's of Reflection (See McLeod, 2019)

Examples of my engagement with the 9 R's can be found in Appendix XI.

In a similar manner, a separate and final method used to aid the trustworthiness of this project was my reflective journal. Below I explain in what ways this enhanced the research process.

3.10 Reflective Journaling

Janesick (1998) describes reflective journals as a qualitative research method where the researcher writes down what they think and feel. In doing so, it helps to improve research practice as after the thinking process there is a willingness to analyse, re-think and go deeper into a critical stance of one's own work (Janesick, 1998). For example, the use of my reflective journal in order to enhance opportunities to explore and identify stages of research development (Bashan and Holsblat, 2017). Journaling for professional /

personal development in academic life can help to organise and prioritise (Zulfikar and Mujiburrahman, 2018).

In addition, for personal reflection and growth, keeping a journal creates prevailing ways to learn and make sense of one's actions and thoughts (Zulfikar and Mujiburrahman, 2018). I noticed this during the early stages of data analysis where I kept re-visiting my reflective journal to make more sense of what occurred, what I felt and of my perceptions.

Similarly, Lincoln and Guba (1982) highlight key elements to record in reflective journals as a research tool:

- A log of evolving perceptions

This was evident with my evolving understandings on sustainability, particularly at the beginning of the research. In addition, perceptions of myself both as a researcher and personally have evolved throughout the research process. For example, the need to control my nerves prior to interviewing to prohibit 'rushed' or 'stuttered' words became apparent by logging the occurrences in my journal. It made me aware of parts of myself I needed to work on which I may not have paid much attention to prior to researching.

A log of day-to-day personal introspections

An extract example of the researcher's reflective journal can be located in Appendix IX.

Personally, this has been very beneficial for me as the researcher from both personal and professional levels. Journaling has enabled me to track the research and encouraged me to write about my experiences, actions and rationales during the research process. In turn, according to Smith and Walden (1999) keeping an account of my feelings and reasoning will positively contribute to the trustworthiness of the findings of this research by supporting my subjectivity. The next section explores the relevance and justification for the selected vignettes.

3.11 The Relevance of Vignettes

An early definition of 'vignettes' are short term descriptions of an event or situation (Barter and Renold, 1999). Within social research, they may be used in order to clarify participants' views and to allow actions in contexts to be explained (Barter and Renold, 1999). A more recent definition by Gray, Royall and Malson (2017) explain vignettes as short stories about individuals which can make reference to crucial points in a study regarding attitudes, beliefs and behaviours.

Importantly, both Gray, Royall and Malson (2017) and Bartner and Renold (1999) highlight how there are various ways vignettes can be used in qualitative studies, the two primarily being as part of data collection or as a method to represent findings (short stories derived from the data). In the case of this project, as first explained in section 3.5.2, the limitations on data collection due to the pandemic necessitated a unique approach. Thus, after careful consideration, vignettes were chosen as the format to present the data.

Salamzadeh (2020) reinforces how in recent years vignettes have been used in qualitative data as a means of presenting findings and can range from anything between short lines to 800 word pieces. As such, for the purpose of this research project, each vignette will represent short stories from Gibraltar and across the UK. As there has been a recent increase in the number of scholars using vignettes to demonstrate their findings (Reay et al., 2019) I will firstly provide a couple of key examples that aided my understanding, taken from researchers in qualitative fields:

Firstly, in taking a look at a study conducted by Maguire and Hardy (2013) on chemical risk assessment and management, they chose to present their findings in the form of three separate vignettes each with a different theme that related to the study, or were central aspects of the research. Such themes were main risk / management practices, discursive work around barriers and specific practices.

Similarly, Anteby and Molnar (2012) explored endurance of organised identity and showed their results through short descriptive accounts under the main aspects of identity endurance. Both of these examples provided show how the research used the vignettes to highlight important stories that related to the core aspects of their topic. They helped me understand how vignettes can be used to identify themes such as barriers for example, which directly answers one of the research questions of this project.

Next, a study conducted by Miller et al. (2013) used vignettes in their research to analyse interview data. They explain how they presented summaries of interviews that highlighted distinctive features. As such, the

vignettes for Gibraltar, England, Northern Ireland and Wales presented in this study will include a combination of observation data (stories of sustainability) as well as important dialogue / interview extracts that emphasise vital aspects of sustainability and answer the research questions. In the case of Scotland, as no observations were able to take place due to Covid-19, the vignette presented will summarise an interview transcript that reflects sustainable practice (Montessori teaching). As Miller et al. (2013) note, vignettes can be utilised in various formats, and presented as a general research tool.

Having outlined three examples of qualitative studies that employ vignettes to demonstrate their findings, a final key paper which served an inspirational, pivotal basis for the chosen approach of combined vignettes to provide insights as a whole was McLeod et al. (2017). This paper set out to demonstrate the creative engagement of a group of three and four year old children at the Tate Art Gallery in Liverpool. The vignettes included provide insights into the children's responses and were used to explore their participation and engagement. Thus, this inspired the use of vignettes within this project to capture meaning through participants actions and voices on EfS. For instance, the vignettes within this thesis will be used to tell the stories that hold meaning relating to the key concepts of sustainability and ECEfS (of which have been identified throughout the developing conceptual frameworks).

In further support, Reay et al. (2019) add how some researchers re-label the findings section according to the themes they are exploring or have been

identified throughout the research as important to the study. This way, interconnections can be emphasised enabling space for the discussion to unfold. In terms of presentation, the Gibraltar vignettes will include various characters (participants) from different situations in one. Reay et al. (2019) outline how this is called a 'composite' vignette, which is used to mesh together data from various participants and observations into a single scene / character. This is due to their being less in-depth data from one setting, where several important aspects are drawn together to create a picture of the current situation relating to ECEfS.

As Reay et al. (2019) clarify, raw data extracts are rare within vignettes, instead, they are narrated to enable readers to feel like they are part of the story. They will each feature dialogue, some interactions between characters and fully developed stories. A final main reason for choosing vignettes is due to being able to present a more narrative-based format through short descriptive accounts / stories that will enable a critical discussion to follow. It is of interest to make note of the main disadvantages of vignettes being the possibility of leaving out large chunks of data to condense data into small sections.

Nonetheless, taking into account the effects that Covid-19 had on the data collection process of this project, rather than large chunks of data, there are small and detailed sections from various participants. Thus, the criterion for vignettes suits the data collected in this study accordingly. The concluding section of this Chapter will now present the revised conceptual framework based on the additional concepts and connections that have emerged.

3.12 Developing Conceptual Framework: Summary

Throughout this Chapter, the connections between Freire's SCT, what has been identified in Chapter 1 and Chapter 2, and the chosen research methods utilised as part of this project were noted. There was a dominant focus on the importance of democratic dialogue and ethics which reinforces previous concepts identified in Chapter 2. Furthermore, this Chapter has solidified the value of respectful relationships that consider power-balances, and learning from each other. Thus, a two new concepts have been added:

- **Reciprocal** (as an essential part of relationships)
- Relational (reinforcing 'ethics' in Chapter 2 and in connection with democratic dialogue & relationships)

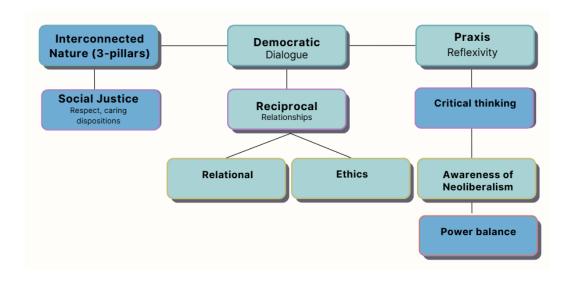


Figure 3.4: Developing Conceptual Framework: Methodology (Author's own work)

Additionally, there are overlaps with concepts already identified in previous Chapters, which reinforces the concepts identified. For instance, praxis (reflexivity) is important in the context of methodology for myself to

continuously engage in personal questioning to help to minimise interpretation bias. Moreover, the important role of reflexivity has been solidified throughout this Chapter, as encouraging learning that leads to action.

Lastly, relational ethics (Caine et al., 2020) has played a pivotal role throughout this Chapter, emphasising the connections between respect, ethics and caring dispositions, all of which are outlined in the framework and solidify the interconnected nature of sustainability. Here, an additional connection is noted with eco over ego thinking, which was first outlined by Somerville (2020) in Chapter 2. Indigenous people have a deep relational understanding with life, where a solid reciprocal respect is constantly present between both human and non-human beings. Finally, this Chapter has emphasised the critical role of maintaining 'power balances' (first introduced in Chapter 1), both within educational practices and in the dynamics between researchers and participants.

In summary, the key underpinning methodological concepts that have emerged will inform the analysis (Chapter 4) (Analysis Process and Key Findings). Chapter 5 (Discussion) critically evaluates and discusses the selected vignettes in order to highlight the implications and training needs for policy and practice in Gibraltar, where recommendations for educators are also outlined. Finally, Chapter 6 concludes by summarising the findings and presenting the final conceptual framework, discussing limitations and providing further recommendations for future research.

Chapter 4: Analysis Process and Key Findings

4.1 Introduction

This Chapter will firstly justify and explain the thematic method used to analyse the data produced as a result of conducting this research. After this, a summary of the key findings are presented under each theme. Due to the combination of the stress I experienced as a researcher during Covid-19 (during the research collection phase in 2021) and the fear that my emotions might affect the research process, I felt it necessary to provide an in-depth outline of the steps I followed. It will explain why and how the participants were invited to be involved in the data analysis process during rather than at the end of the research, to ensure it was a participatory on-going process. In this way, the participants had an opportunity to check the accuracy of data transcripts, consider the data aspects that were important to them and to make any appropriate changes.

As they reflected on their initial responses and became more involved, this helped to reduce any bias in the analysis (Darder, 2017). It is argued that themes are important within Thematic Analysis (TA) as they tell a story and show the connections between important elements of the study (Xu and Zammit, 2020), which are related to the research questions. Thus, the research questions for this study were outlined and used to guide the analysis process. The Chapter will conclude by presenting the key findings and themes, which inform the developing conceptual framework presented in section 4.11. The research questions for this study are as follows:

- 1) How do early years educators, children and policy makers understand sustainability in the early years?
- 2) How is sustainability in the early years interpreted in practice with examples of practice that can be used to support future professional development in the context of sustainability?
- 3) What are the potential barriers that hinder sustainability in the early years, and what are their implications?

All of the names of the participants and settings in the following sections are pseudonyms.

4.2 Thematic Analysis

When exploring which form of analysis was most appropriate for this research, it was important to ensure that the method would help to identify the themes that reflected the patterns across the data accurately and authentically in relation to all participants. In order to understand the participants' experiences of sustainability, TA can help to discover common and shared meanings (Kiger and Varpio, 2020). Thus, thematic analysis was employed in this research to seek an in-depth understanding of what the participants think and do in relation to sustainability by identifying, analysing, and reporting the themes (Braun and Clarke, 2017).

This meant that the themes did not just emerge from the data but had to be actively sought out by the researcher to identify and interpret their meaning (Xu and Zammit, 2020). For instance, one of the main themes identified was 'challenges relating to sustainability implementation' involving neoliberalism. This is directly linked to research question 3 which is concerned with the barriers and implications related to sustainability.

The final themes are as follows:

Interpretations of Sustainability:

- Environment-focused
- Interconnected

Sustainability Appreciation:

- Children's Rights
- Empathy
- The Value of Outdoors
- Resilience

Empowerment:

- Well-Being
- Friendships

Associated Sustainability Challenges:

- Governance
- Power Imbalances
- Traditionalism
- The Perception of Children

In order for these themes to be interpreted as accurately as possible, it was important to explain clearly how I engaged with participants using this method. As Braun and Clarke (2006, p. 80) comment:

"If we do not know how people went about analysing their data or what assumptions informed their analysis, it is difficult to evaluate their research"

This indicates the importance of minimising the bias and assumptions introduced by researchers and participants as well as demonstrating clarity

about the process followed. Accordingly, both myself and the participants were able to prioritise the identification of themes and patterns during the analysis phase. In addition, this method was adopted as it encouraged active engagement with the coding process and helped to identify the relevant data items during the initial coding process. This meant that the themes were fundamental in answering the research questions.

As Kiger and Varpio (2020) stress, the purpose of themes is to find meaning in the participants' understanding of sustainability. According to Xu and Zammit (2020), researchers are encouraged to informally validate transcripts with participants. This process not only improves the research's reliability but also allows researchers to engage with more accurate data, as it has been reviewed by the participants beforehand. This meant that my own assumptions were monitored by the participants. The findings of this study are grounded in inductive theory, as the implications were developed only after a thorough analysis and discussion of the data gathered from interviews and observations.

Streefkerk (2022) describes inductive research as aiming to develop theory, in contrast to 'deductive' research, which tests an existing theory. Streefkerk (2022) adds that inductive research is typically attributed to studies that focus on an area on which there is little to no existing literature. Accordingly, although literature on sustainability exists, there is no literature / research specifically on sustainability in the early years in Gibraltar.

Consequently, this research also implemented an inductive analysis approach and the overall findings will show what new theory evolved. In this

discourse, Azungah, (2018) explains how inductive analysis manifests itself through the continuous reading of the data sets and deriving the themes and key concepts from them. Azungah (2018) stresses that inductive analysis can help to minimise researcher bias, and in the case of this study, the results are formulated wholly through the participants' experiences of sustainability.

As Braun and Clarke (2006) and Xu and Zammit (2020) urge, researchers need to adopt an 'active' role in identifying the themes and selecting those which are interesting and meaningful. This involves the researcher engaging with each phase by coding and searching for the themes and patterns, and constantly re-reading the data. Initially, this process felt overwhelming, and I felt stressed at times, particularly during the coding and searching for themes phases, as I found myself going back and forth through the data numerous times. What was most challenging about this process was my constant fear that I was missing important aspects of the participants' stories.

Alongside thematic analysis, narrative analysis was also considered, which McAllum et al. (2019) define as a method that allows qualitative researchers to describe more accurately how humans communicatively experience and make sense of their worlds. Building on this, Ntinda (2019) explains how narrative analysis is used to interpret the stories that are told within the data, how they are structured and developed, and where the story starts and ends (ibid). I came to realise that the processes within TA (6 phases) provided a structure for me to organise my large data sample efficiently. I realised I was still able to 'tell the stories' of the participants' experiences of sustainability

through identifying the themes and engaging with narrative analysis for the vignettes.

For instance, both approaches led to themes, but narrative analysis tends to suit more dense data, whereas the data in this study were a mixture of short statements as well as longer paragraphs (Esin, 2011). This was the case in certain scenarios in which the participants did not reply or expand on their initial transcripts when I asked them to identify what was important or to provide further examples from practice. Similarly, whereas some of the children provided in-depth responses during our conversations, others provided less detailed responses, which reflect 'short statements'. The study also included extended dialogues, which allowed me to interpret and construct the participants' narratives. These interpretations will be illustrated through the selected vignettes presented in Chapter 5.

The TA processes enabled me to feel fully immersed in the data. It was important to create a comfortable space that allowed me to focus as I engaged with the phases, which usually involved cafes and library quiet zones. It is important to note that the phases were not worked through as a checklist but rather viewed as pivotal, inter-related elements, as this seemed to be the best method to produce key findings (Kiger and Varpio, 2020). For instance, during phases 2 and 3, I felt that it was clearer to search for the codes and potential themes within the same time frame. This is explained in more depth under each phase heading. Hence, Table 4.1 below outlines Braun and Clarke's thematic analysis model (2019) in a modified version, including how I engaged reflexively with this process.

Building on what Braun and Clark (2019) refer to as 'reflexive TA', I incorporated a combination of their recommendations as part of my own personal journey in relation to my position as the researcher to generate a method for continuously engaging with personal questioning and an awareness of bias relating to my experiences of growing up in Gibraltar. Thus, as Braun and Clarke (2019) recommend, I incorporated a 'Personal Questioning' element that was not part of one particular phase but, rather, a self-awareness developed through a questioning process. It is an area of learning and development that I believe one must continue to pursue in order to minimise subjectivity. Following this, Figure 4.1 shows the processes I engaged with visually and the phases are discussed accordingly.

4.3 A Modified Version of Braun & Clarke's Model of Analysis

As shown in Table 4.1 and explained above, I revised Braun and Clarke (2006) to include the element of personal questioning. As outlined in Figure 4.1, participation of all involved was central across every research phase (rereading, checking for accuracy, naming the themes). Similarly, the inclusion of participants in the analysis was embedded throughout the entire research process.

As I received the participants' edited transcripts at different times, this meant I was simultaneously engaging with two processes that naturally overlapped as I began to notice repeated codes and note the developing themes.

Braun & Clarke's Model	Modified Version →	What Reflexivity Involved
Familiarisation		This was done with the participants as they read through their transcripts
Generating the initial codes		During this phase I received most of the edited transcripts back from the participants and re-read the data once more
Searching for the themes (done after the coding, but not entirely a separate phase)		Continuously engaging in McLeod's 9 Rs of reflection to minimise assumptions and bias (examples provided throughout this chapter)
Revising the potential themes		This was done with the participants as I continued to receive the edited transcripts
Naming and defining the themes		This was only possible after the participants checked the accuracy of their transcripts
Producing the report		This involved continuously questioning and checking as the researcher which focused on minimising any researcher assumptions and bias

- Table 4.1: Reflexivity within Braun and Clarke's Model of Analysis

As discussed, Figure 4.1 builds on (Braun and Clarke, 2017) by emphasising the inclusion of participants and is outlined below.

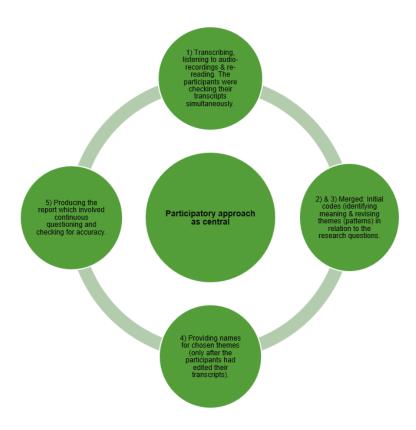


Figure 4.1: Participatory Analysis Process (adapted from Braun & Clarke, 2017)

The following sections will explain the elements highlighted in Table 4.1, starting with the personal questioning process.

4.4 'Personal Questioning' as an Ongoing Process

During the early stages of reviewing and re-reading the transcripts, I found myself reflecting on my own childhood experiences while engaging with the participants' accounts. Despite this, I was able to minimise personal bias in my role as a researcher when interpreting the data. By actively tracking my reflections, I became more aware of potential risks of bias, including when and how it might influence the analysis.

For instance, when interviewing one of the children in Early Birds nursery (England) on the 04/05/21, I asked her if she enjoyed playing with her peers, to which she responded:

Kiera: "No and also sometimes they don't want to play with me but I play on my own"

As I drew on McLeod's (2019) framework (see Chapter 3), I engaged particularly with the recognition of personal views, and realised I was projecting my own childhood experiences when I wrote down my initial thoughts:

"Kiera is using negative terminology 'don't' referring to her peers not being kind with her. Playing by herself indicating loneliness?"

I automatically assumed that Kiera was lonely because she played alone. In my own childhood, I always wanted to engage and play with others, and I felt lonely if I had to play alone – perhaps connected to me being an only child. I then read the entire transcript and noticed that Kiera was actually telling me that she enjoyed playing alone, which can be empowering. Engaging with the 'reflect from another perspective' phase of McLeod's (2019) framework, I decided to check my interpretation from Kiera's perspective. I asked her about this comment which is part of the model for ensuring accuracy, and she responded:

Interviewer: "So, did you mean that you like playing on your own? Can you tell me if that is what you meant?"
Kiera: "Yes, I like it because I play with lots of stuff, like the dolls and books."

To summarise this personal questioning, drawing on McLeod's (2019) framework proved important as I constantly strove to reduce and be aware of researcher bias. Had I not reflected on my initial thoughts on Kiera's response, I would have failed to recognise my assumption and how I was projecting my own bias from my experiences as a child. This is where the value of checking and requesting clarification is especially relevant, as it taught me to appreciate that the participants might not always share my own perspective.

For this reason, embedding this into Braun and Clarke's thematic analysis promoted the validity of the data and my own self-awareness as a researcher when evaluating different perspectives. An additional example of my engagement with personal questioning regarding the analysis phase is outlined in Appendix XI (under 'example 3').

4.5 Phase 1: Familiarisation

The first stage of the process of familiarisation was to read each transcript as a whole before reading it again and seeking meanings related to the research questions. Maguire and Delahunt (2017) add that it is important to jot down one's early impressions during this phase. Furthermore, they recommend that it is essential to listen to the audio recordings of the data repeatedly whilst coding the transcripts. I usually listened to the recordings two or three times, which proved useful early in the process, as I noticed that I had skipped and / or confused certain words.

For example, when I listened a second time to the recording of my interview with gatekeeper Mrs. Evans in Hillside Montessori (Scotland), which took place on the 3/12/21, I noticed that I had misinterpreted Mrs. Evans's meaning slightly (shown in bold):

Mrs. Evans: "Unfortunately, it's under-funded so, for example, we get paid £4.45 per child."

After listening to the recording again, I realised that Mrs. Evans had, in fact, said that they are paid "£5.45 per child". Hence, I realised how easy it was to get caught up in the transcription process and make small mistakes, possibly due to writing quickly, and this could affect the meaning of the data considerably. This highlights that it is crucial to listen to the recordings to ensure that the transcriptions are accurate (Braun and Clarke, 2017). In addition, it was around this time that I returned the interview transcripts to the participants in order to check them for accuracy as well as certain aspects that stood out as particularly important to them. I knew that this meant I

would have to go back to phases and re-read any edited data thoroughly again, which further reinforced the 'messiness' of this process.

4.6 Phases 2 & 3: Generating the Initial Codes & Searching for the Themes

This phase focused on the codes to be used to interpret the data set (Braun and Clarke, 2017), which was relevant to answering the research questions. After reading and re-reading the transcripts (phase 1), I printed out each one, leaving plenty of space for notes. I circled parts of content that I felt were meaningful and related to the research questions, and parts of the experience and story that reflected value. To show how the initial codes and themes were identified, I have outlined the process I followed with each transcript:

- Step 1: Circling meaningful / relevant content.
- Step 2: I then reflected on what was circled as a whole, and any repetitions. Once I had edited the transcript and added double-spacing, I made notes between the lines to expand on what had been circled.
- Step 3: Then, I was able to organise the repetitions into the pertinent codes. I assigned each theme a colour to promote organisation, and also noticed that there was overarching themes that best fitted as subthemes.

For example: (the first set of themes that were colour coded)

- The Three Pillars of Sustainability blue
- Barriers / Challenges to Sustainability in ECE red / orange
- Empowerment green

The purple / pink coding reflected my personal questioning of the critical incidents. These data were not used as a 'theme' or 'code' to collate the findings but rather to identify any personal bias, values and assumptions and ensure that these did not influence the themes. An example of an edited transcript (a conversation with an ECE author, John from England – 19/10/2021) can be found in Appendix XIV which represents this.

Following this process, I edited some of the theme headings slightly, which then became:

- Interpretations of Sustainability:
 - Environment-focused
 - Interconnected
- Sustainability Appreciation:
 - Children's Rights
 - Empathy
 - The Value of Outdoors
 - Experiential Learning
 - Resilience
- Empowerment & Friendships:
 - Well-Being
- Associated Sustainability Challenges:
 - Governance
 - Power Imbalances
 - Traditionalism
 - The Perception of Children

In the following phase, as I began to review the themes, I noticed that some of the subthemes overlapped, such as 'friendship' and 'empowerment'. The

themes changed further during this phase, as I re-read the edited participants' transcripts.

4.7: Phase 4: Reviewing the Themes with the Participants

During this phase, some participants provided feedback by editing or expanding on their original transcripts. I reviewed their revised transcripts and made the necessary adjustments. The child participants were involved in the data analysis differently from the adults; after each conversation, I immediately repeated their responses back to them to confirm their satisfaction and ensure the accuracy of the recordings. On one occasion, a child (Bobby) in St. Mathew's (a reception class in a primary school setting in Gibraltar) (visited on 05/10/2021) changed his initial response during this process:

Interviewer: "So can you tell me then why you enjoy playing outside?"

Bobby: "Because of fresh air"...

Interviewer: "Here you said you enjoy playing outside because of the fresh air, is that right?"

Bobby: "No, I said it's because I can breathe"

This process was important and demonstrated the need to value children's voices and the participatory nature of the research.

Further examples of data with the children can be found in Appendix XIII.

It took several months for some of the participants to return their edited transcripts, meaning that I had already begun the analysis phase and had to re-read all of the new transcripts separately, then compare them to ensure

that the themes were still relevant. Consequently, some of the initial codes and themes changed.

Although a lot of the data enhanced the above discourse on top-down pressure, I found that there was insufficient data overall for some participants. For instance, as discussed in Chapter 3 during the early stage of the data collection, I often felt nervous and rushed through the interview process, missing some questions or opportunities to collect substantial data.

Consequently, returning the transcripts to participants to check and expand on content was important. In some cases, I received a detailed response and, in others, no response at all. This meant that I had a range of detailed transcripts and other less detailed ones. There follows an example of the changes that one participant (Mrs. Jones, a gatekeeper from St. Mathew's primary, Gibraltar), interviewed on the 06/10/2021 made to their initial transcript, so that I had to review its content. The initial transcript was as follows:

Interviewer: "Can you tell me what the school promotes in terms of sustainability in the early years?"

Mrs. Jones: "Well, I've been here 19 years so, obviously, I've seen a lot of things change over the years. Some years ago, maybe about eight years ago, I remember when the previous head was here, that we started moving towards initiatives brought in by the Education Department. So, things like paper bins and recycled photocopy paper started being used, and then, about four years ago, we got together with ClimAct and I became the rep for the school. Over the years, we've slowly increased the number of sustainable initiatives that we carry out."

Mrs. Jones chose to add the following:

: "For example, we now take part in a yearly fundraising day called 'Just One Tree,' where children come to school dressed in green and bring £1 because every pound plants one tree in an area of reforestation around the world. This encourages us to consider why trees are so important to us and different year groups discuss this at different levels. We now also use paperless methods of communicating with parents via our Facebook page and our Online Learning Platform (Seesaw). Through Seesaw, the parents can also see some of the work that the children do in school, which in turn encourages the children to talk about their learning at home. The older year groups in the school also choose a weekly 'Eco Warrior' in each class who is in charge of ensuring taps, lights, fans, smartboards, etc., are turned off at the end of each lesson or day".

As outlined above, Mrs. Jones chose to expand on her initial response. This reflects the benefits of returning the transcripts to the participants.

A second example of how the themes developed and changed throughout the analysis process concerns the initial sustainability related themes; I began with:

- Interpretations of Sustainability
- Lack of SDG awareness
- Interconnected

Upon reviewing the data with the participants, I noticed many of their interpretations of sustainability (research question 1) reflected either generic or holistic, in-depth understandings. Often, the participants who expressed a less interconnected understanding related sustainability only to the environment, thus 'Environment Focused' was added to the subthemes. An example of data set that shows an environmental focus is shown below, where I highlighted the words 'environment' and 'footprint':

Interviewer: "What's your understanding of sustainability?"

Lina: "It's about the environment."

Interviewer: "Are you able to provide an example of what you mean by

that?"

terminology was evident.

Lina: "I think, I mean that we should always be cautious about our

footprint." (Lina, educator, England setting, Appleton nursery,

interviewed 05/04/2021).

Following this, I compared the blue codes and found a common theme was that participants referred to the environmental pillar but, additionally referenced elements of the other pillars very broadly. I circled the words and grouped them together where the educators' use of environmental

This is where the 'Environmental Focused' understanding theme was identified. In addition, this phase proved complex initially, due to the identification of overlap between the codes. For example, as I continued to analyse the transcripts both by myself and with the participants, following the same format, I began to notice that the subheadings 'empowerment' and 'friendship' were connected and in turn reflected empowerment. Taylor and Townsend (2016) support this, arguing that friendships are an important element of children's motivation to learn. An example of this occurred in this research when a child (Aidan) from Westwood-Primary Eco-School setting in Wales, interviewed on 18/06/2021, explained how he felt motivated when with his friends:

Interviewer: "Can you tell me what's your favourite thing about school?"

Aidan: "My favourite thing's being with my friends".

Interviewer: "That's wonderful. Can you tell me a little bit more about why this is?"

Aidan: "Because, when I'm with my friends, I learn better and can think better and it's fun".

I also noticed a pattern in which interconnected examples of data sets mirrored good mental health and well-being, a relationship that was valued by the setting as independence and freedom of expression were prioritised. Thus, the following changes were made to the emerging themes' subheadings: Empowerment: well-being and friendships.

4.7.1 Discussion of the Emerging Themes

The most prominent occurring theme and main barrier to sustainability was related to top-down pressures. This is reflected in Pratt's (2016) discourse on neoliberalism and its negative effects on the education system. Primarily, he argues that the focus on assessment in England can be detrimental to the educator / student relationship, and this may create a power imbalance that stems from top-down pressures, such as from governments and education departments (Pratt, 2016).

After receiving some of the edited transcripts, I noticed that some of the educators would use language that appeared to undermine the children's capability to understand and connect to elements related to sustainability. I provide four examples of this in the following. Another educator (Danielle) from Early Stars primary, interviewed in Gibraltar on 07/10/2021, stated:

"It's too complex for them".

The transcript of another interview, with an educator (Kim) from St. Early Stars primary school in Gibraltar on 07/10/2021, reads as follows:

Interviewer: "So do you think the children make the connections with the money/charity element?"

Kim: "My class wouldn't. I tried but, with some of them, they get worried and it causes them unnecessary anxiety".

Finally, the transcript of an interview, with a gatekeeper (Mrs. Jones) from St. Mathew's primary in Gibraltar taken from the 06/10/2021), reads as follows:

Interviewer: "Ah great, and do you see a link between the economic side of sustainability?"

Mrs. Jones: "I think, as they get older, yes. I see it with my children. My little one, who is eight, he always says to me. 'I'm so lucky because I get two sets of clothes from my brothers so you don't have to spend a lot of money on my clothes' but, at the moment, here, I think the children are still too young to make the connections."

Thus, a new subheading was identified under barriers – 'adults' perceptions of children' (regarding sustainability).

In the examples provided above, educator Kim from Early Stars explained that the children in her reception class 'get worried' when learning about money and the connections between the fundraising / charity events they hold at the school. I later asked Kim if she had discussed this with the children and she replied:

"No, but I can sense it."

This highlights the lack of the children's voice in this discussion, which makes it challenging to know how they truly feel. This identifies a gap in the research worth noting; lack of children's voices within ECE discussions. The educator had decided on the children's behalf, that they felt uncomfortable when learning about money. This response suggests that the economic pillar

of sustainability should be taught in child-appropriate ways, where children can understand and make connections, rather than viewing it as something 'difficult' that is 'inappropriate' for young children.

Once more, the literature suggests this is related to how adults view children's learning. As Foucault explained, the early years sector reflects a 'narrowing' curriculum, which positions children as static learners who lack creativity and opportunities to expand their holistic needs (Bolea, 2020) (additionally discussed in Chapter 2 of this thesis). Thus, if children are perceived as passive vessels that need to be filled with knowledge, they are not being valued as potential human beings with the right to express themselves freely, where outdoor play and sustainability play a crucial role. Accordingly, this will be analysed in the next Chapter (5), where the comparative discussion focuses on the impact of wider neoliberal influences. This will highlight how economic-related SDGs can be supported by educators in ECE.

Kim's response indicates that she views young children as not being able to make connections with money. It should be noted that this view reflects a lived experience of practice with children, however it still sparks debate around how educators perceive children's capabilities. This was explored in depth by Bower (2020) and Moss (2016) (see Chapter 2, sections 2.7 and 2.8), who note the importance of educators believing in children's capabilities, including their ability to make connections with the economic pillar. Bower (2020) encourages a 'capabilities model for education', which relies on adults and educators who are open to the idea of children as

decision-makers. Chapter 5 expands on this by highlighting examples of sustainability practice throughout the UK which show educators actively enhancing the children's abilities and offering choices as part of their daily teaching.

Another participant in Gibraltar, Mrs. Jones from St. Mathew's primary, stated that she considered the children too young to make connections.

Accordingly, Ladkin (2017) highlights the issue of the power imbalance within ECE (Chapter 2, section 2.8) between educators and young children, reinforcing the view of Pratt (2016) that neoliberalism can affect the relationship between educators and children. This power imbalance negatively affects children, as it positions them as 'less than' the educators, which may restrict their freedom of expression. Consequently, vital aspects of sustainability, such as the economic pillar, respect and democratic relationships between educators and children, become stifled.

Additionally, this is a prime example of educators assuming what children are capable of rather than questioning how to break down the concepts of money and economics to suit the children's needs. In addition, it reinforces the notion that the economic pillar is not relevant or suited within the early years. This mirrors Freire's empathetic beliefs about the reciprocal relationships between educators and children, suggesting that positive perceptions and collaborative learning are required rather than adults alone deciding what children should be taught (Freire, 1970).

Nonetheless, the wider neoliberal influences, such as political power and governments failing to value children as active citizens, make it increasingly

difficult for subjects that enhance freedom of choice and critical thinking, like sustainability, to flourish (Biesta, 2015; Ball, 2017).

4.8 Phase 5: Naming and Defining the Themes

Braun and Clarke (2017) note that separating phases 4 and 5 can often feel confusing and 'blurry'. Thus, it became increasingly important to continue writing in my journal regarding how I felt. Rager (2005) recommends that qualitative researchers should use journaling to deal with such emotions and argues that researchers' 'compassion stress' can aid clarity. Nutov (2017) concurs with Rager (2005), noting that researchers' emotional states can fluctuate widely, involving emotions of joy but also of frustration and confusion at times. The following extract from my journal, dated 05/03/2022, reflects my frustration during this phase:

"I keep getting confused with reviewing and defining the themes. It's beginning to frustrate me and make me question if I will make sense of it. I notice the pattern throughout the phases where I feel a sense of accomplishment when I feel like I have made a connection and shortly afterwards I feel confused and upset because I fail to understand something or make further connections. It's an on-going cycle at the moment".

After re-reading the data several times, I realised that this phase was beneficial for selecting the extracts that would be discussed in the vignettes. It entailed carefully choosing which data sets tell a story, in a meaningful, detailed way, from the perspective of the participants' experience of and opinions pertinent to sustainability, which address the research questions. This is when I also began to make substantial connections with the data and relevant literature and theory. By the end of this phase, the data was ready to

be discussed and analysed in greater depth to reveal the challenges and recommendations. For example, a gatekeeper (Cher), who was interviewed on 18/10/21 from Little Learners in England, commented:

"Well, we use schema play and pedagogy, so we're very much focused on what the children are interested in where we do sustainability is we draw it into the decisions we make on resourcing, purchasing what we use, things like, if a book's ripped, we don't just hide it away. We repair it with the children and talk about saving things and reusing things."

After coding the data and similar responses as repeated patterns, I was in a position to connect the above content to the Reggio Emilia pedagogy / Emergent curriculum (Sulzby and Teale, 1991; Martalock, 2012). I was able to make this connection, as Cher highlighted being focused on what the children are interested in. This requires the adult to adopt a 'facilitator' role, as Reggio (Martalock, 2012) recommends, and also to follow the children's interests and view them as capable individuals, as part of an 'emergent curriculum' (Sulzby and Teale, 1991). I followed this process with each transcript, and the initial codes now became themes related to specific literature or a particular theory. Cher provided a further useful example of this:

Interviewer: "And is there anything that makes it challenging? Or acts as a barrier to sustainability in the early years?"

Cher: "Well, in day nurseries in the UK, we're very limited by money. We're grossly underfunded. We're only funded about half what it actually costs so that's a barrier but it's also kind of an incentive, because it actually makes you do more recycling. It makes you keep your equipment for longer".

This and similar responses enabled me to make a connection with the literature on neoliberalism, governments and underfunding early childhood / early years settings (explored in depth in Chapter 5). Cher suggested that her setting is not prioritised when it comes to government funding, as she uses the term "grossly underfunded". When I asked her if she would position the government as a barrier to sustainability, she replied simply: "Yes". This ties in with the wider neoliberal issues related to how those with power view the early childhood sector and, above all, how they view children and their role in society. Consequently, this will be a focal point in the discussion section in Chapter 5. Ultimately, once I began to collate selected extracts with the literature, I naturally reached the final stage: 'producing the findings'.

4.9 Phase 6: Producing the Findings

The final phase involved continuous writing, questioning and checking my interpretations and bias as a researcher. In addition, it involved a critical discussion of the relevant literature focused on answering the research questions. Braun and Clarke (2017) stress that this phase should not be completed at the end of the project, but that the write-up should be an ongoing process. In summary, thematic analysis offered a systematic approach to managing a large volume of data. It enabled me to repeatedly review and verify data sets and interpretations, highlight key points relevant to the participants and research questions, and identify potential errors, creating opportunities for improvement.

Personally, I found the whole analysis process challenging and confusing at times. Kiger and Varpio (2020) highlight that frequently, researchers can

misinterpret the TA process. At times, I felt overwhelmed by the sheer amount of data, and it was hard to keep track of my progress and the changing interpretations. Braun and Clarke's (2006) six step model, and the modified version discussed, laid the foundation for the next section of this thesis: Key Findings.

4.10 Summary of the Key Findings

This section will explore the key findings of this study, where table 4.2 will firstly show where each country sits in relation to the themes identified as part of the analysis. This has been done to set the context for Chapter 5, which focuses on a critical discussion of the vignettes. Since this research involved multiple settings, the vignettes focus on those with the most relevant data related to sustainability. While some data from other settings are not included in the vignettes, they are presented here to support the themes identified in Chapter 5. This additional data strengthens the findings and highlights connections with the conceptual framework discussed in Chapter 3. After table 4.2 is outlined, examples of extracts from the data to demonstrate / reinforce patterns will be shown under the relevant theme headings. Thus, the following Chapter (5) will build from the data extracts presented here and allow for repeated patterns to be identified across settings.

Through the use of vignettes, quality stories of sustainability across the UK will be explored with a focus on the implications and training needs regarding early childhood education in Gibraltar. The discussion sections will critically examine theory and literature to identify any changes that indicate how to

promote sustainability in ECE in Gibraltar. Lastly, a comparative discussion explores the similarities and differences between the vignettes and highlight the training needs for educators in Gibraltar.

	Gibraltar	England	Northern Ireland	Scotland	Wales
Interpretations of Sustainability	Environmentally focused	Some examples of environmental understandings Some examples of Interconnected interpretations	Interconnected interpretations with a focus on resilience	Sustainability interpreted as democratic learning through the Montessori method	Interconnected understanding with an emphasis on children's rights and voices valued as part of practice
Sustainability Appreciation	Empathy and Emotions not explicit in understandings	Value for empathy, children's rights and nature-play	Critical thinking and outdoor learning valued as part of Sustainability	Children as problem-solvers	Children's perspectives on reflection
Empowerment	No data reflecting empowerment	Some data reflecting empowerment	Examples of empowerment reflected through friendships	Examples of empowerment through outdoor play	Examples of empowerment through an emphasis on choice
Associated Sustainability Challenges	Framework pressures, 'mindset' challenges and children perceived as vulnerable	Neoliberalism and framework pressures	Time constraints / lack of resources	Underfunding identified as a barrier	No challenges identified

- Table 4.2: Key Findings

The following section will present patterns of data extracts that represent each section of table 4.2, showing how the themes were identified.

4.10.1: Interpretations of Sustainability

An educator (Lily), who was interviewed in a nature-based setting in Wales (Westwood-Primary Eco-School) on 18/06/2021, expressed an interconnected understanding of Sustainability, viewing children as 'positive actors for the future' and referring to respect:

"Sustainability's about the future. It's important for the children's future and we, as educators, need to encourage them to become positive actors for the future. It's a combination of respect and empowerment that we should try to teach them".

A second educator (Amanda) from Westwood-Primary who was interviewed in Wales on 18/06/2021, explained how sustainability is embedded in their setting:

"Well, sustainability is something we don't often think about as one word here in our setting. We try to see it in everything we do and incorporate it. This way, it becomes something we just do and don't 'think about".

Similarly, another participant, Mrs. Evans from Hillside Montessori connected sustainability to Montessori by linking it with independence:

"Our interpretation is Montessori-focused. We believe here, at our setting, that Montessori is a way of encouraging independence and teaching children about the world around them. We want them to become confident individuals, ready to take on the world. We support them but give them the space and time to lead their own learning, as we observe. I think sustainability is about all the connections within the world, the environment and people and how we choose to live and treat one another" (Mrs. Evans, gatekeeper, Scotland, interviewed 03/12/2021).

In one of the public primary schools in Gibraltar, two participants (Abigail and Georgia) from St. Mathew's connected their understanding of sustainability to the environment:

"Well, it means helping our environment, keeping our environment clean, helping to do our part as a community, little things that we can change to make our environment more eco-friendly" (Abigail, educator, interviewed in Gibraltar on 05/10/2021).

"I will say, to keep the earth clean and beautiful, I'm sure we are already slowly destroying it, so the next generation need to start young and change human behaviour" (Georgia, educator, interviewed in Gibraltar on 05/10/2021).

At a second public primary school in Gibraltar (Early Stars), two further educators linked their understanding of sustainability to the environment:

"I wouldn't know how to incorporate sustainability into daily teaching at the moment. Environmental teaching is not currently part of the frameworks we follow" (Danielle, educator, Gibraltar, interviewed 08/10/2021).

"I would say it is about respecting our planet" (Emma, educator, Gibraltar, interviewed 08/10/2021).

Expanding on this, Mrs. Carter expressed a lack of awareness of the SDGs:

Interviewer: "Great, and can you tell me if you have heard of the sustainable development goals?"

Mrs. Carter: "I've heard of them, but I couldn't tell you exactly what they are".

A third educator in St. Albans Gibraltar, provided a detailed response of what they considered an example of sustainability. Although connections are made, they are focused on the environment:

Interviewer: "Thanks, and could you provide any examples of sustainability that you do with the children?"

Claire: "Yes. So, our aim is to embed it as much as we can from a young age, so that they take that with them as they get older. So, a few things we do, for example, is that our children are brilliant now at recycling. They know exactly where things go. We held an assembly recently and the children were challenged to put the different materials in the correct bins. That is something being done throughout the school. They're really good at that. We also have an eco-buddy system which is, every week, we change the child and they become the eco buddy and their job is to encourage and advocate picking up litter, recycling, and turning lights off, and they really enjoy it. Other than that, we also have our light monitors, staff included. We make sure we don't leave any switches on, and we've realised the children remind us of a lot, which is evidence of how, from a young age, it does get embedded in them. They also remind us to turn off the taps. We

do a lot of assemblies; for example, we do a wish tree initiative, where we put money in to plant more trees and the children are very aware of the importance of oxygen and not using as much paper. In terms of paper, we've actually managed to go paper-less, so all parents receive all information via email. The children are also aware of this. In terms of curriculum planning, for example, with art, we've been trying to make it eco-friendly and use recyclable resources, rather than plastic and paper" (Claire, educator, Gibraltar, interviewed 05/10/2021).

Mrs. Carter from St. Mathew's offered an example which again highlights the focus on the environment:

Interviewer: "So, you know how you mentioned earlier about how you incorporate sustainability into music with the children? Could you explain what is involved in this?"

Mrs. Carter: "So, usually, they learn a song; for example, there's a song called 'I am the earth' which talks about the environment and, because they're very young, we try basically to sing the songs as a group and then the children suggest ways of protecting the environment and animals in particular. It tends to be something they like a lot" (Mrs. Carter, educator, Gibraltar, interviewed 06/10/2021).

In addition, a Department of Education Member (Sarah) in Gibraltar, expressed her view on the need to learn more about the interconnected nature of sustainability:

Interviewer: "Could you tell me what your understanding of sustainability is? – how is it embedded?"

Sarah: "There's a focus on embedding the environmental pillar. My understanding of sustainability has grown as a concept. It's a 'vast' area, and we feel we couldn't really look at all of the elements/pillars due to a concern about becoming overwhelmed, so instead we decided to focus on the environment pillar which we had sufficient knowledge about and so could produce better outcomes."

In contrast, a childminder Francine from Gibraltar who offers a private service made connections with the interconnected nature of sustainability by mentioning the importance of well-being, mindfulness and children as the agents of change:

Interviewer: "Can you tell me what your understanding of sustainability is and what it means to you in relation to early years education?" Francine: "Sustainable development and education allow a child to acquire the necessary skills, attitudes and knowledge to shape a more sustainable future. Our children are the future leaders of the world and, in order to provide a safer future for them and our planet, it is fundamental that sustainable education is taught and embedded from a young age. When working with children, I often incorporate sustainable learning through activities, such as recycling, engaging with the outdoors and encouraging mindful techniques, to help them to deal with tricky situations. For example, if a child I'm looking after is feeling stressed or overwhelmed, I encourage them to practice mindful breathing techniques, such as sitting up straight and breathing in and out through their nose. In order for mindfulness to have a positive effect on a child, they have to learn and practice the coping techniques ahead of time to prepare them for future scenarios where they may need to apply these skills" (Francine, childminder, Gibraltar, interviewed 17/03/2021).

In comparison, in England, two educators (Sam and Gabriella) from the Appleton Nursery linked their understanding of sustainability to environmental factors:

"Sustainability is about saving our world, protecting the environment and doing what we can do reduce our carbon footprint" (Gabriella, educator, England, interviewed 04/04/2021).

"I think sustainability is about being mindful of what and how we use materials, teaching children to act responsibly towards the environment" (Sam, educator, England, interviewed 04/04/2021).

An observation from Early Birds Nursery affirms the prioritisation of the environment:

"As I observed the children play, the educator announced it was time for 'cleaning up the world'. All of the children began to shout with joy and went around the playground picking up litter and collecting it ready to go into the bins."

Furthermore, two children (Ollie and Stuart) from Appleton Nursery also based their understanding on environmental factors:

Ollie: "Yes, we have to take care of the world."
Interviewer: "Can you tell me why you think this?"
Ollie: "Because we live in the world and we have to clean up what we eat and drink".
Interviewer: "Can you tell me what you understand by taking care of our world? What do you think it's important?"
Stuart: "Well, I think to help the flowers and trees and pick up rubbish".

On the other hand, some educators in England interpreted sustainability in a holistic sense, appreciating its interconnected nature. Beginning with childminder Marie from Twinkle Stars Day Care:

"Sustainable practice on a daily basis; having regular discussions and involving him in the daily decision-making, such as choices when food shopping, days out. Today, he wanted to visit my hometown by bus, so we did, and we managed to visit the local museum. We learnt so much! Ensuring that we follow a respectful way of life - respecting our bodies, the environment, animals, other people. I also let him take risks and be responsible for things, such as his own money and pets, to ensure he knows his own limits and to help him to care for animals" (Marie, childminder, England, interviewed 11/06/2021).

Next, Sofia from Appleton Nursery shared her interconnecting understanding:

"My understanding of sustainability is respect in every sense. To respect oneself, but also to respect everything else around you, including others, animals, insects, plants, trees, the earth and space. It's important for children to learn this, so they will learn how to respect themselves and each other in the future, and how to look after the

wider environment and also their finances" (Sofia, educator, England, interviewed 14/06/2021).

As a further example, gatekeeper Cher from Little Learners:

"I think they need space, an environment in which they can be happy and relax first and obviously are taken of in terms of, you know, their physical needs, making sure they have access to water and are fed and that they are comfortable, with a good temperature, the air they're breathing and then they can start to learn. If you have qualified, experienced, listening educators who can offer the right activities for individual children too, preferably with quite a high number of adults available for them, then you have the perfect environment. If you have an adult who's interested and alert to what the child is interested in, and then can provide the activities to lead them onto the next steps, then it becomes development, interest, wherever that may take them. You know, if they know what the links are, the sequences that are likely to follow, then you have these highly qualified experienced educators with the children in the right environment. There you have it. Could I add, I'm not a believer in preparing children for school. I think school needs to be ready for our children, not the other way around. addressing each child's needs as an individual not as a stereotypical chunk of boys or girls, but as individuals and giving them the space to relax and to play and to learn. It always makes me laugh when the schools say, 'Oh we can't cope with children all day. You know, we can only have them for three hours', and you're thinking 'Why?' You know, we're open 12 hours a day. They should be in an environment where they can rest as well as run as well as play" (Cher, Gatekeeper, England, interviewed on 18/10/21).

With the first extracts presented as part of the first section of table 4.2 'Interpretations of Sustainability' the next section will explore 'Sustainability' Appreciation'.

4.10.2 Sustainability Appreciation

In Westwood-Primary in Wales Eco-School, one of the educators (Mrs. Brown) championed children's right to participation and choice:

"Mrs. Brown opened the door to the outside play area so the children could choose to play inside or out. Some children were engaging with the water and buckets outdoors, others were creating a 'bug-nest' and exploring the plants outside, while others were inside reading. I asked Mrs. Brown if this was a typical activity and she replied: "Well, yes, it is. I believe that letting the children choose what they wish to engage with is always best. It promotes confidence and control over their own learning" (Observation extract dated 18/06/2021).

A child named Shaun at Westwood-Primary affirmed his right to choose later that day during our conversation:

Interviewer: "Can you tell me; do you also learn outside the classroom?

Shaun: Yes, and also outside."

Interviewer: "Do you think anything ever stops you from playing outside? Or with what you want to play with?"

Shaun: "No because Mrs lets us play when we want."

Two participants in Northern Ireland from Sunshine Nursery Forest School, noted the value of outdoor environments:

"I think, for us, here at *****, sustainability is something we take seriously. It is how the children learn to interact with our outdoors, with each other and learn to have respect for things" (Mrs. Williams, educator, Northern Ireland, interviewed 03/11/2021).

"We do prioritise outdoor play for many reasons. because we feel it's so important for children to experience nature from a young age. Like this, they grow up loving nature and respecting it. They also develop social relationships and engage a lot with their friends, which helps them to care for each other too" (Erica, educator, Northern Ireland, interviewed 03/11/2021).

An observation extract from Sunshine Nursery reaffirms the valuing of nature environments:

"Aidan and Shauna were running around and exploring the forest, collecting sticks and leaves and laughing with each other. It was pouring with rain, and I had my hood on, trying not to get wet, when I noticed I was the only one doing this. All of the children and educators were fully embracing the rain and had no intention of going back into the classroom. I asked Mrs. Brown if this happens often and she explained: "Oh yes, here in Northern Ireland it does rain a lot in the winter, but we try not to take much notice. The children enjoy It, and they immerse themselves in the forest. They know about the plants and paths here and they develop relationships with their friends and with us by engaging in fun and playing. We love it."

With regards to 'empathy,' various examples were noted. The following key examples highlight the children's perspectives:

Interviewer: "So can you tell me why you like the bees and spiders?

Abby: Because they're our friends".

Interviewer: "Wonderful, and what does having friends mean to you?"

Abby: "Being nice and being loving" (Observation, England, Early Birds, visited 02/11/2021).

I noticed the children (Shaun and Shania) searching for more food for the squirrels, I approached and asked them why they were doing this. Shania told me: "We do this a lot because, in winter, the squirrels can't come out for food as much, so we have to help them to eat so they can survive" (Observation, Northern Ireland, Sunshine Nursery, visited 03/11/2021).

I saw one of the children (Peter) almost step on a beetle accidently and her friend called out to her: 'No! Watch out! You were about to kill a beetle!' I asked her why she felt that way, and she replied: "Well because the beetle has feelings like us". (Observation, Wales, Westwood-Primary outdoor learning area, visited 18/06/2021).

The following section will present data extracts that reflect the third section of table 4.2 'Empowerment'.

4.10.3 Empowerment

The following examples show a repeated pattern, whereby the children in every country covered by this study connected friendship with a motivation to learn and participate, as well as valuing well-being.

Interviewer: "Can you tell me what helps you to learn? What do you think?"

Amy: "Being with my friends, because we learn together".

Interviewer: "Great. And can you tell me how else you think your friends help you learn?"

Amy: "We talk and help each other, and it makes me feel better" (Amy, Northern Ireland, Sunshine Nursery, nature-based, forest-setting, visited 03/11/2021).

Interviewer: "What's your favourite thing about learning? What do you like most about coming to school?"

Sam: "I like seeing my friends and playing with them."

Interviewer: "And can you tell me why?"

Sam: "Because it makes coming to school more fun" (Sam, Gibraltar, St. Albans, visited 05/10/2021).

Interviewer: "What's your favourite thing about coming to school?" Erica: "Being with everyone and my friends, playing outside."

Interviewer: "Can you tell me why these are your favourite things?" Shaun: "Because when I'm with my friends I feel happier, and then I learn better" (Two children, Erica and Shaun, Wales, Westwood-Primary visited 18/06/2021).

"As Carter and William finished building their hut, I approached and asked them how they had decided to build it in that way. Carter said: "I wanted to do it another way but ****** said to try it like this so,

together, we came up with this way." William said: "Yes we made it and came up with it together, we tried something else first, but it fell so we had to think again how it would not fall" (Observation, two children, Carter and William, Northern Ireland, Sunshine Nursery, visited 03/11/2021).

Mathew: I feel happy at school because I have friends to play with.

Interviewer: That's so lovely, and in what ways does this help you learn?

Mathew: Because we talk and think together (Matthew, a child, England, nature-based setting, Early Birds, visited 04/05/2021).

An additional example of empowerment related to educators was made by John (ECE researcher):

"So, there is a job to be done in supporting educators and showing them how to go about it and the most important thing, a conclusion we have come too having worked with settings in developing this for a few years now is that we need to encourage them to celebrate sustainability". (John, ECE researcher, England 19/10/21).

The next section of this Chapter will highlight examples of data extracts that formulate the last section of table 4.2; 'Associated Sustainability Challenges'.

4.10.4 Associated Sustainability Challenges

In England, challenges associated with implementing sustainability related to governance and neoliberalism pressures were mentioned, as well as children positioning adults as barriers. This, in turn, raises questions about how the adults perceive the children, as the following extracts show:

Annette: "Time constraints, I guess, take a toll".

Interviewer: "Could you elaborate on that?"

Annette: "Well, I mean, we're following almost a checklist with the children here, so it makes it difficult to stop and think about making time for other areas, like sustainability" (Annette, educator, England, interviewed 16/05/2021).

Interviewer: "And is there anything that makes it challenging?"

Cher: "Well, in day nurseries in the UK, we're very limited by money. We're grossly underfunded. We're only funded about half what it actually costs so that's a barrier but it's also kind of an incentive, because it actually makes you do more recycling. It makes you keep your equipment for longer".

Interviewer: "Definitely turned a negative into a positive there".

Cher: "Yes, for sure, that's right. There is a limit though, it has been impinging on staff pay for quite some time, so you know we find people that work in the early years sector are actually subsidising everybody else. I think that's unfair and it's definitely a barrier. It means it's harder for us to provide training. It's harder for us to have timeouts to do these kinds of things. So, yes, that's definitely a barrier" (Cher: gatekeeper, Little Learners England, interviewed 18/10/2021 – expanding on her response outlined in section 4.8).

When asked why he prefers to play outside, one child participant stated:

Andy: "I like to be outside better because, inside, Mrs doesn't let us play" (Andy, child, England, Appleton visited 04/04/2021).

A second child from the Appleton Nursery (Riley) commented:

Riley: "I like to run and play with my friends outside."
Interviewer: "Wonderful. and do you get to learn outside too?"
Riley: "No, only inside".
Interviewer: "Why do you think you only learn inside?"

Riley: "Because the teacher's there, so we can't play".

A further example of governments and perceptions of children as barriers was identified by ECE researcher John (interviewed on 19/10/21):

"I think the biggest barrier is the government in England to be honest. We have had two revisions of EYFS that I have been actively involved in, in both cases we have argued very strongly to include sustainability and they have been totally ignored". You know, what? An MP is supposed to be representing their constituents, but you know, as they see it, no child is a constituent for them. They are not recognised as citizens; they do not recognise that as members of parliament they have a job to actually respond to their needs. So that overall, I think fundamentally we need to work on the UN Convention on the Rights of the Child".

Similarly, further challenges were mentioned by the participants from St. Mathew's primary school in Gibraltar:

Interviewer: "Can you tell me what stops you from learning? Have a good think."

Robert: "In class, because Mrs is there, so we have to be quiet".

Interviewer:" Oh, and does Mrs do this when you play or learn outside too?"

Robert: "No, outside, no."

Interviewer: "Can you tell me why you think this happens?"

Robert: "Because inside we have to do work and outside, we play" (Robert, a child, Gibraltar, 05/10/21).

A second child from St. Mathew's primary school in Gibraltar named Ellie offered a similar perspective:

Interviewer: Can you have a little think about anything that you don't enjoy in school? Anything that stops you from learning? Ellie: "Well when I'm in the classroom I don't enjoy learning very much.

Interviewer: Oh really. Why do you think that?

Ellie: Because you can breathe better outside, so I can think better.

Some educators at St. Albans and St. Mathew's Gibraltar primary, labelled the frameworks and curriculum as key barriers to sustainability, as well as 'mindsets' and 'traditionalism' in Gibraltar:

Interviewer: "What would you say are the barriers to sustainable teaching?"

Mrs. Jones: "Well, definitely our frameworks and curriculum. I know we're always being told there's space for us to be creative with our teaching and flexible and sort of allow all this type of learning with the collaboration of the children and encouraging them to be critical thinkers and all that, but at the same time I feel that teachers feel very constrained by, well, at the end of the day, the targets we need to achieve. We try to sway between one area and another. We have periods where we do project-based learning and a lot of topic-based teaching, so at least we try and make connections between the different areas of learning."

Interviewer: "Lastly, in terms of sustainability as a whole, what you would say are the barriers to teaching this in practice?"

Mrs. Smith: "I think it very much depends on how you focus on the curriculum. If you've a mindset that 'these are the topics we're doing and we're not moving away from these topics', then it becomes very difficult to slot in the interests of the children/sustainability but, if the curriculum's more open, which I think we aren't there yet, but we're getting there here, then you can go into the roles that interest the children a bit more."

Interviewer: "Right, so, given that Gibraltar follows the National Curriculum and Early Years Foundation stage, have you noticed any differences?"

Mrs. Smith: "I think, for me, it's the traditionalism. I find here there is kind of an attitude of 'This's what we've done for a long time', whereas in England it's more focusing on the needs of the children, it's more flexible. I don't think people have had the training and experience, so when people like me come in and suggest something new, we encounter problems."

This was further reinforced by Department Member Sarah, who also mentions a need to challenge and change attitudes of adults in Gibraltar:

Interviewer: "And in terms of any challenges or barriers, what would you say?"

Sarah: "It's essential to change and challenge the attitudes of adults. Particularly in Gibraltar, we live in a 'materialistic,' chaotic society, and have a long way to go. As a representative of the Department of Education, I feel we could always be doing more but the busy schedules mean that there is little time, which limits us to focusing on sustainability."

With reference to adults perceiving children as incapable of making sustainability connections, there were some examples noted in Gibraltar:

Interviewer: So, do you think the children make the connections with the money/charity element?

Kim: My class wouldn't. I tried but, with some of them, they get worried, and it causes them unnecessary anxiety" (Kim, educator, St. Gibraltar setting (07/10/21).

Interviewer: Ah great, and do you see the link between the economic side of sustainability?

Mrs. Jones: I think as they get older, yes (Mrs. Jones, St. Mathew's gatekeeper, Gibraltar setting 2, 06/10/21).

Danielle: "I think sustainability is too complex for them." (Danielle, educator, Early Stars primary Gibraltar setting, 07/10/21).

In Scotland, at Hillside Montessori there was one mention during an interview of governance as a barrier with regards to the underfunding and undervaluing of the ECE sector:

Interviewer: "Would you like to provide another example, or would you like to talk about your experience of barriers, if any, to sustainability?"

Mrs. Evans: "Well, from a business point of view, there is obviously the underfunding. There are real issues with recruitment in the early years, particularly in the private sector, because the public sector tends to offer better wages because they're subsidized by taxes and, in the private sector, the only money you have coming in his parents' fees and funding, which of course fall short. We've always found it tricky to get staff, location-wise. In the last year, we have advertised a post in our baby room and, a year on, we're still advertising it. We did

recruit a lady but, in-between, she fell pregnant and fell terribly ill with it, so she actually resigned. So, what we have had to do now is restrict our baby room, which can accommodate nine babies, but we're only accepting six because we are understaffed. At the moment, I would say recruitment/resources".

Interviewer: "So would you say that, generally, the barriers are financial/political?"

Mrs. Evans: "Yes" (Hailey, gatekeeper, Scotland, Hillside Montessori, interviewed 03/12/2021).

One interviewee in Northern Ireland (Mrs. Williams) from Sunshine Nursery forest school setting mentioned the time constraints and lack of resources as barriers:

Interviewer: "What would you say are the barriers to teaching such sustainability pedagogies?"

Mrs. Williams: "I think time and resources, I was in an old nursery, Montessori-type school, which used all natural resources – no plastic at all, but there's a big difference between that and schools buying all the plastic toys and most recent things.

Additionally, in Westwood-Primary eco-school (Wales), one interviewee (Lily) stated that she did not perceive any barriers to sustainability implementation:

Mrs. Brown: "I don't feel like we have any here. I want the children to be able to learn all the time, through their input and choices. It's important. For example, when you came in today, we didn't plan on having such an extended play time, but the children seemed to be really enjoying it, so we value that and are flexible in following that" (Lily, educator, Wales, interviewed on 18/06/2021).

In summary, in England, more opinions were related to the environment but there was some evidence of interconnected understanding. The interpretations of practice also varied but there were examples of

sustainability as interconnected, and the barriers were strongly related to pressure and power imbalances. In Scotland, there were more interconnected understandings and interpretations noted, where underfunding was seen as a barrier. Northern Ireland included related understandings of sustainability connected with children engaging with nature and the outdoors. Time constraints and lack of resources were noted as potential barriers.

Finally for participants in Wales, interconnected understandings were noted and, interestingly no barriers identified. In contrast, the data gathered from Gibraltar showed a problematic view of the pressures and adults as barriers, similar to England, as well as a concern for traditional mindsets.

The educators' understandings and interpretations were heavily environmentally focused where further examples of this can be found in Appendix XIV.

Additionally, full interview transcripts with the Minister of Education for Gibraltar, and an Education Department member are included in Appendix XII. The final section will provide a summary of the developing conceptual framework, outlining and discussing overlaps with the themes identified throughout this Chapter, and the concepts in the framework.

4.11 Developing Conceptual Framework: Summary

This Chapter has identified some key overlaps between the themes identified and the concepts in the framework, as shown in table 4.3.

Conceptual Framework:	Themes Identified from the Data:		
Neoliberalism	Curriculum Pressure, outcomes, governance and power as part of the 'Associated Challenges' theme.		
Social Justice (caring dispositions / respect)	Children's Rights, well-being and friendships as part of the 'Empowerment' theme.		
Interconnected Nature (3-pillars)	Environment-focused and interconnected understandings as part of 'Interpretations of Sustainability' theme.		

Table 4.3: Key connections between themes & concepts

To deconstruct table 4.3, participants in this study identified curriculum pressure, outcomes, governance and power imbalances as main barriers.

These factors align with the principles of neoliberalism, highlighting an overemphasis on outcomes and its impact on teaching, educators, and their interactions with children (Moss, 2017) - reinforcing the conceptual framework.

Additionally, educators across the UK emphasised the importance of children's rights and voices in relation to sustainability, reflecting the value of respect, dialogue, democratic learning and reciprocal relationships within the framework. As Bennett et al. (2019) outlined in Chapter 1, children's rights and human rights are essential aspects of social justice. In Chapter 2, Leicht, Heiss and Byun, (2018) discussed how respecting children and their rights to participation can positively enhance feelings of empowerment. Thus, in the framework (Figure 4.2) 'empowerment' and 'children's rights' have been added, and shown in connection with 'social justice'.

As shown throughout the thesis, there is a call for adults to listen to and respect children's capabilities concerning sustainability (Bower, 2020;

Martalock, 2012). In addition, many participants linked their understanding of sustainability primarily to the environmental pillar, highlighting the interconnectedness mentioned in the framework and solidifying the importance of understanding the relationship between the three pillars.

Upon reviewing the themes and concepts, a couple of themes emerged that were absent from the framework. For example, there was a notable emphasis on the value of outdoor learning, which allows children to engage with nature and animals, enhancing their resilience. Given the pivotal role outdoor experiences play in facilitating sustainability (Boyd et al., 2021; Siraj-Blatchford, Smith & Samuelsson, 2010), 'nature' was incorporated into the framework as an umbrella term encompassing outdoor play, wildlife and child-animal interactions. To provide a core example relating to the importance of learning through and within nature, Cormier (2017) discusses how Indigenous communities hold deep connections with land and their environments. This relationship to land offers a unique perspective of viewing nature as a learning landscape, a non-materialistic and friendly environment that offers constant opportunities for children to learn about the non-living world from a point of care.

Furthermore, participants highlighted the importance of empathy in shaping children's worldview, particularly when looking at interactions with nature and wildlife. Although empathy was previously discussed by Font, Garay, and Jones et al. (2016) in Chapter 2, and noted as important, data from the conversations and observations with the children reinforced its significance, resulting in the inclusion of 'empathy' in the framework. Lastly, an important

challenge noted by Gibraltarian participants was the influence of 'traditionalism' as a barrier to embracing new approaches. Specifically, an educator with prior experience in England explained encountering resistance when suggesting new ideas:

"When people like me come in and suggest something new, we encounter problems."

This notion stresses the need for adults to be receptive to alternatives and recognise the role of mindset in teaching and sustainability implementation.

Bolea (2020) highlights the connection between power and mindset, noting that educators' adherence to rigid outcome-focused curricula can limit individual freedom and opportunities for reflection. This concept underscores the need for a shift in mindset and stresses the importance of being mindful of the mindset we adopt, particularly in relation to practice and what is reflected or mirrored. As a result, 'mindset' was incorporated into the framework.

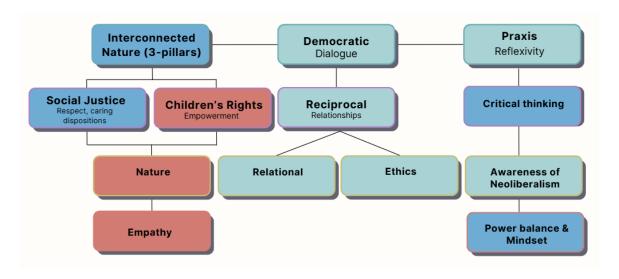


Figure 4.2: Developing Conceptual Framework (Analysis) (Author's own work)

To conclude, the analysis of data in relation to the research questions and literature review will inform a critical discussion in Chapter 5, after the final vignettes are presented. With the Gibraltar vignettes, the data was valuable in determining the relevant needs and barriers to sustainability teaching. The vignettes across the UK were selected as there were some interconnected examples of sustainability that can potentially inform sustainability in Gibraltar. Each of the vignettes address the research questions throughout.

Chapter 5: Discussion

5.1 Introduction

This Chapter will present and discuss carefully selected vignettes to demonstrate different understandings of sustainability that could be used to inform early childhood education for sustainability (ECEfS) in Gibraltar.

As first outlined in section 3.11 (Chapter 3), in particular building on from Miller et al. (2013) vignettes can range from small pieces of text (data) to short stories, from a few lines to a maximum of 1000 words. They explain how in their study they presented vignettes based on interview transcripts and short extracts that highlighted important parts of the research, in relation to the research questions.

Within this study the vignettes presented have been used to describe situations that bring content together to capture the essence of a particular area (McLeod et al., 2017). The Gibraltar, England, Northern Ireland and Wales vignettes will tell short stories based on observations and dialogue. In contrast, as observational data was not possible in Scotland due to Covid-19 (see Chapter 3, section 3.5.2) the vignettes presented will merge together interview extracts from a gatekeeper and their staff in a Montessori setting.

As Miller et al. (2013) note, summarising important interview extracts can also tell a story, and in this case, will be used to capture a range of key stakeholders' understandings, interpretations and perceived challenges relating to sustainability.

Hence, the purpose of the Gibraltar vignettes is to highlight the potential challenges from the perspective of a range of different key stakeholders (children, policy makers, education department members and educators).

Before each vignette is presented, the 'rationale' and 'background information' sections firstly explain why and how the content specifically relates to sustainability in early education. Following this, the date of the visit or conversation, those involved in the vignettes (disguised by pseudonyms) and the content (conversations and observations) will be outlined. After the vignettes, a critical discussion is included that is structured using the following key headings:

- Interpretations of Sustainability
- Identified Challenges
- Empathy (or lack of within Sustainability interpretations)
- Role of the Adult
- Perceptions of Children
- 'Birth to 5 Matters' (Early Years Education, 2021)`
- Emerging Themes

Following this, a final critical discussion of the key themes that were identified from the vignettes as a whole is provided, exploring the following areas:

- Awareness of Power / Politics
- Awareness of Values / Relational Ethics / Emotions
- Personal Questioning
- Doing Things Differently

In doing so, the challenges and implications arising from the research about how to resist the wider pressures associated with neoliberalism are discussed, together with the potential for reflexivity. The Chapter concludes

by presenting the final conceptual framework based on the final set of themes that emerged from the vignettes.

5.2 Rationale for the Gibraltar Vignettes

Overall, the data gathered for this study from a range of ECEfS related stakeholders in Gibraltar revealed conflicting interpretations of sustainability and its associated practices. Sustainability was not embedded in an interrelated way as part of daily practice. The following vignettes demonstrate this and also identify the current situation in Gibraltar regarding ECEfS and how the UK vignettes could potentially be used to inform practice in Gibraltar. Important to add that relevant connections will be made with the data presented in the vignettes and previous data extracts presented both throughout Chapter 4 and in the Appendix. This has been done in order to solidify the themes by demonstrating repeated patterns in the data that answer the research questions.

5.2.1 Background Information on the Gibraltar Vignettes

The first vignette involved both an observation extract and a conversation between an educator (Mrs. Edwards), two children (Danica), (Sam) and myself at St. Albans school on 30/06/22. St. Albans was the first school in Gibraltar to introduce a 'forest-zone' area. The visit lasted three hours and I was able to observe the children engaging with the forest-zone. There were wooden bollards around it, trees, flowers and specific play areas, such as a mud kitchen, and reading, planting and climbing areas.

When I arrived at the school, the children were excitedly putting on their boots and jackets. The first time I visited, I observed classroom practice and interviewed Mrs. Smith (vignette 2). The forest-zone was being built and not yet open, so the staff kindly invited me to return in June of the following year to observe their practice. Thus, the second vignette involved an observation and interviews with an early years educator (Mrs. Smith) and two children (Stacy) and (Robert) from the same public mainstream setting in central Gibraltar named St. Albans. The observation and interviews provided insights into teaching in both England and Gibraltar. Mrs. Smith had over ten years' experience as an early years' teacher. The observations and interview took place in the classroom during her lunchbreak and we discussed her understanding and interpretations of sustainability, as well as the reasons why she believed sustainability may be difficult to implement in Gibraltar.

The third and final vignette captures a music lesson I observed at St.

Mathew's public school Gibraltar, with primary teacher Mrs. Carter, and children (Kenneth) and (Sofia), as well as dialogue between myself and the Deputy Head (Mrs. Jones). The discussion relating to the vignettes will make important connections with additional data (key interviews can be found in Appendix XII) held in Gibraltar (Minister of Education and Education Department Member) whose views correlate and provide further reinforcement with the data and stories told in the vignettes, solidifying the final themes.

5.3 Different Perspectives of Sustainability in Gibraltar

Vignette 1: An observation in the forest-zone (St. Albans) with educator Mrs. Edwards and children Danica and Sam

As the children put their boots and jackets on, they were smiling and excited about entering the forest-zone area. Mrs. Edwards firstly gathered the children by the centre of the forest-zone and explained the rules to them, which consisted of not throwing mud at each other in the mud kitchen and not running. Mrs. Edwards then warned the children not to climb up too high on the climbing frame. The children explored different features of the zone. Some were in the mud kitchen, others watering the plants and others collecting acorns to add to their chocolate cake creations (using the mud and bowls provided in the mud kitchen). As I approached the children in the mud kitchen, and asked them if they were enjoying themselves and if they came to the forest area often. Danica yelled:

"Yes, we love it here but we only come here when Mrs Edwards says yes, we take it in turns but I wish we did because it's so much fun!"

I approached Mrs. Edwards and asked her about this:

Mrs. Edwards replied: "We've different times and days the children can go into the zone but we're happy to be the first school in Gibraltar to try this out. The children seem to love it. We're new to this and we're trying it. It's a first step in the right direction."

Sam and Danica were playing in the mud kitchen, when Sam spotted a snail and said: "Look, I'm going to step on it"

Some of the children gasped as they closely watched Sam.

Danica then interrupted and asked Sam why he wanted to step on the snail, and Sam replied: "because it's only a snail".

Just at that moment, Mrs Edwards came by and reminded the children not to run and keep the mud kitchen tidy and there was some mess.

After 15 minutes, play-time came to an end and the children were taking off their boots and jackets and getting ready to go back into class. Mrs. Edwards explained to me that although the forest-school is a "good start" for Gibraltar, they have a long way to go regarding being "more open to new approaches".

Vignette 2: A morning in class with educator Mrs. Smith from St. Albans, and children Stacy and Robert

As I arrived at the school, I was told by the headteacher as well as Mrs. Smith that I would be unable to observe sustainable practice, as this is done in the summer months.

The children line up outside the classroom ready for Mrs. Smith to let them inside. Stacy and Robert sit on the carpet beside each other and look visibly excited to begin their day. The children were curious about who I was and why I was there, and I reminded them I was going to see in what ways they learn about the world and nature. Stacy looked at Robert with a confused face, and asked: "But nature is outside and I don't think we are going outside today".

I asked Stacy why she thought this, and she explained: "We only play outside when the sun is out"

Mrs. Smith proceeded to tell the children they had 30 minutes of play-time, to which the children all yelled with joy and stood up, each going to their preferred area of play. Some children were drawing with coloured pencils, others were playing with the Lego, while Stacy and Robert stayed together and remained sat down for a while. They exchanged conversation about wanting to play outside. Robert looked upset and quickly jumped up, grabbed Stacy's hand and went straight to the board of 'Emotions and Feelings' that was visibly displayed on the wall, at the back of the classroom.

The 'Emotions & Feeling' board was colourful and large, and contained all the children's names with little stick-on faces stuck beside each name. The stick on faces ranged between different emotions, some were happy faces, some were sad faces, some were angry faces. Robert observed the board carefully, before moving his happy face and changing it to the sad face. Stacy paused for a few seconds and then asked Robert: "Why are you sad?" and Robert replied: "because I just want to be outside today". Stacy grabbed Robert's hand and said: "me too", then she proceeded to take him to the Lego station, where they remained for the rest of their play-time.

After this, it was break-time and I engaged in a conversation with Mrs. Smith. We walked to the classroom beside and began to talk about her views on sustainability. Mrs. Smith was very expressive of the barriers she experienced in trying to move away from the curriculum, she explained:

"I think the way that teachers are expected to teach, especially in Gibraltar. I came from the UK; I worked in the UK for 12 years and it's a very different mindset to how we work. At our school, we're more in line with the UK in terms of, you know, it's not just sit down at a desk and write, but that's taken a little while to embed. I know in other schools; it isn't like that. It's about thinking that our children are not robots, our children are children and should be encouraged to play, explore, wonder, and create more and it's changing that sort of adult mindset with teachers."

Vignette 3: A music lesson at St. Mathew's with Mrs. Carter, Kenneth and Sofia and a conversation with Mrs. Jones.

The children were jumping up and down with excitement for their music lesson. As they walked into the class, they asked me if I would join them in singing their songs, to which I said of course. The classroom was colourful

and had music notes stuck to the walls, as well as animals and different cartoon characters. Mrs. Carter asked the children to sit down in the lined benches and be quiet while she set up the interactive screen and prepared the songs and lyrics to appear visibly. As we waited, I noticed Kenneth was already singing a song to himself. Sofia turned to him and asked him to wait so they could all sing together. I turned to Kenneth and asked him how he knew the song so well, Kenneth replied: "It's always the same song that we do". Sofia interrupted Kenenth and added: "Yes we sing about animals and the sea and how to love the earth".

Mrs. Carter announced the songs were ready and brought out a small baton to point along the board as the children follow. The songs were about a wide range of animals and involved periods of interactive engagement where the children had to make the sounds of each animal, and sang about where each animal lives in the wild. Kenneth and Sofia could sing the songs without looking at the board, and turned to me to check if I was singing along too. After we sang 3 animal related songs, the last song was about 'our world' — and the board visibly showed images of the world and nature, the lyrics were about 'taking care of the sea and land'. I observed the children singing enthusiastically. Sofia turned to Kenneth and said: "This one is my favourite".

The bell then rang for break-time, and as the children left the classroom and went into the playground, I stayed behind with Mrs. Carter and we began to talk about sustainability and how she incorporates this into her music lessons.

Mrs. Carter explained that her understanding of sustainability is: "to keep the earth clean and beautiful, I'm sure we are already slowly destroying it so the next generation need to start young and change human behaviour".

In terms of how she merges sustainability into the sessions, Mrs. Carter explained:

"Usually they learn a song, for example there is a song called 'I am the earth' which talks about the environment, and because they are very young, we try to basically, sing the songs as a group and then the children suggest ways of protecting the environment and animals in particular, it tends to be something they like a lot".

15 minutes later I proceeded to join the children again in the playground. I approached Sofia who was by herself, skipping. She was excited to see me and we began to talk about the lesson and our singing together. I asked Sofia if she could explain to me why the 'Earth' song was her favourite. Sofia said: "That's because we always do this song and I like to sing about loving the birds and trees and the sea". I proceeded to ask if she learns about anything else in school relating to the world and people around us, and Sofia responded saying: "No. We just always do the same".

After lunch, the Deputy Head, Mrs. Jones and I engaged in a conversation about her views on sustainability, where she explained to me that children understand sustainability as they get older:

"I think, as they get older, yes. I see it with my own children. My youngest one, who's eight, always says to me, 'I'm so lucky because I get two sets of clothes from my brothers, so you don't have to spend a lot of money on my clothes' but, at the moment here, I think the children are still too young to make that connection."

I proceeded to ask her about how she views children, to which Mrs. Jones said

: "Well I think it depends a lot on the parents and how they're bringing up their children. Every now and again, we get children from Nordic countries, and you definitely see they seem to be more independent. Sometimes, we get Polish children and children from Finland and Norway, even Germany, and you see in them something you don't see a lot in children in Gibraltar in terms of being self-sufficient, problem solvers and creative. For example, they would ask for help when they need it rather than wait for help to come. That's not to say that there aren't self-sufficient, creative, or independent children in Gibraltar but that's because of how their parents bring them up."

After our conversation, I joined Mrs. Carter's class for the afternoon, where the children were engaged with their drawings and colouring in with crayons.

Discussion

5.3.1 Interpretations of Sustainability

In the third vignette, Mrs. Carter explained that the focus of her music lessons is to sing about the world (relating primarily to animals and keeping the sea clean). When discussing this with the children, both Sofia and Kenneth explained a sense of repetition for the same songs and topics of songs, especially when Sofia said: "we just always do the same".

Additionally, when Mrs. Carter expressed her understanding of sustainability, she related this directly to keeping the land and sea clean. This is mirrored

both in the lessons as well as in Sofia and Kenneth views where they claim to repeat and focus the songs on animals and the sea.

More so, in the second vignette it was noted how the educators warned me prior to the observation and interviews that sustainable practice would not be taking place as this is done in the summer months. The children in the vignette expressed a sadness for playing inside, and a desire to go outside. This suggests there is some confusion about what sustainable practice looks like, as they mentioned warmer weather was necessary for this to take place. Hence, there appears to be a dominant focus on the environmental part of sustainability when exploring educators understandings of sustainability throughout the vignettes.

In further emphasising this, key participants in Gibraltar who have some influence as to what is being taught in schools; Minister of Education (MoE), John Cortes and Education Department Member (Sarah), also expressed the prioritisation of the environmental pillar in their views. For instance, the MoE acknowledged that in the 21st century the term 'sustainability' is often "Linked mainly to the environment", while the Education Department member (Sarah) offered a similar interpretation with a focal point on the environment: "There is a focus on embedding the environmental pillar" (Sarah). In addition, various educators in Gibraltar also expressed similar understandings of sustainability as being primarily related to environmental factors. These can be located both in section 4.10 of Chapter 4 as well as in Appendix XIV.

This suggests understandings are not holistic in fully understanding the interconnected nature of sustainability and the three pillars model.

Consequently, as Rieckmann (2017) notes, this can create issues when trying to embed sustainability in a meaningful way, since valuing or promoting one pillar in isolation will create additional problems for the remaining pillars. For instance, if educators focus solely on environmental concerns with the children and fail to embed the element of respect for each other, the socio-cultural pillar will suffer.

UNESCO (2020) highlights the importance of education tackling the socioeconomic and socio-cultural issues that exist in the modern world. According
to the MoE, educators have a crucial role to play in shaping the next
generation of advocates in order to create a more respectful world (see
Appendix XII). SDG numbers 1 (No poverty), 5 (Gender Equality) and 16
(Peace) primarily depend on humans showing compassion for one another
(UNESCO, 2020). Although the SDGs were published in 2015, they are
relatively unrecognised (González-Alfaya et al., 2020), so it is important to
highlight ways in which they can be translated into ECE practice.

Consequently, Education Department member, Sarah, openly identified a potential struggle about understanding sustainability and the SDGs; namely, a sense of feeling overwhelmed by all three pillars:

"We feel we could not really look at all elements / pillars in worry of becoming overwhelmed" (Sarah).

Although her acknowledgement is honest, it indicates that environmental factors are prioritised, reinforcing the above. When examining all of the vignettes from Gibraltar, there are conflicting views about the current situation

regarding sustainability. For example, as explored above with Sarah, while there is a need to understand and learn more about the interconnected nature of sustainability, the MoE expressed a different view:

"There are much more sustainable practices in ECE than there has ever been thanks to the teachers being 'very aware' and introducing them" (Minister of Education).

This excerpt highlights that there may be some miscommunication between different stakeholders and the need for conversation between them. For instance, while the Minister claimed there are more sustainable practices than ever before as teachers are "very aware", Department Member Sarah challenged this view by stating they are unable to understand sustainability holistically (all three pillars) due to the fear of becoming overwhelmed. Furthermore Sarah also stated that as a member of the Department of Education she feels they could "always be doing more but the busy schedules mean there is less time which sets a limitation to focusing on sustainability".

This questions, if the adults are not prioritising dialogue and the sharing of their views and understanding of these complex issues, how will they value encouraging this among the children? - Arising from this, it is essential therefore, as Cameron et al. (2020) argue, for adults to listen to the voices and stories of others if sustainability is to be prioritised effectively. This challenge is discussed in the following sections.

As a reminder, full interview transcripts of the MoE and Department Member Sarah can be found in Appendix XII.

5.3.2 Identified Challenges

When exploring the barriers identified by the participants, there is an important remark made about 'mindsets' in Gibraltar vignette (2), made by educator, Mrs. Smith from St. Albans. She draws attention to the attitude and mindsets in Gibraltar. This is additionally reflected in further interview extracts with Mrs. Smith (outlined in section 4.10.4 of Chapter 4) explaining how there is a sense of: "this is what we've always done" and "traditionalism" being met with problems when people mention the possibility of change.

In addition, Mrs. Edwards in vignette (1) highlighted how in her opinion, although Gibraltar has made a good start in sustainable practice by introducing the forest-zone, they still have: "a long way to go" regarding sustainable teaching and being open to new approaches. In contrast, the MoE stated in his interview that:

"There aren't any political barriers in Gibraltar, self-imposed curriculum change does not like to move out of comfort zone, most people don't like change, anything that is going to change; may be met with resistance from being set in their ways, the young are more open to developing-less of a problem now. There are many more sustainable practices in early years education than ever before, thanks to teachers being very aware and introducing them into their teaching. I will always welcome improvements to this."

This is similar to the view of Department Member Sarah, regarding selfimposed curricula and resistance to change:

"It is essential to change and challenge attitudes of adults particularly in Gibraltar." (Sarah).

Further evidence of educators labelling frameworks / curricula and target pressures as the barriers to sustainability implementation can be found in section 4.10.4 of Chapter 4. This makes a connection with neoliberalism as a detrimental force with respect to ECE systems when she positions frameworks as making teachers feel 'constrained' by targets. This shows that the educators are experiencing the negative effects of neoliberalism with regards to pressure, where the ECE system focuses more on documentation than teaching.

Ball (2017) stresses that the education systems prioritise outcomes and targets over the learning process. In addition, Ball (2017) claimed that creative and critical thinking subject areas, like sustainability, are pushed aside as the education system and governments continue to prioritise 'STEM' subjects. This correlates with Mrs. Jones' opinion that teachers are being constrained by targets, even though they are told there is 'space' for educators to be creative. Lindon and Trodd (2016) highlight that, although reflexivity is associated with open-mindedness, educators may often be reluctant to extend their current boundaries.

Additionally, when educators are strongly focused on 'what works for them' or a rigid teaching routine, which educators in Gibraltar labelled as "pressure", this can limit their ability to be open and create a balance between reflection and practical action (Lindon and Trodd, 2016). Ultimately, there are different opinions regarding which challenges exist, as the Minister stated that there are 'no education policy barriers', yet many of the educators

voiced concerns about either framework pressures, attitudes towards traditionalism and closed curricula.

5.3.3 Empathy

Having examined the Gibraltar vignettes and interview transcripts, any feelings or evidence of empathy being part of sustainability are not explicit in the data. Taylor and Townsend (2016) state that the role of empathy within sustainability is arguably most crucial when relating to SDG 4 (quality education), as it encourages a culture of peace, non-violence and appreciation of differences, all of which contribute to a better world.

Within ECE, educators have a duty of care to promote environments in which children can develop their empathy (Taylor and Townsend, 2016). In the vignettes, there was no evidence of the word empathy or indicators of the value of being caring and compassionate towards nature / one another. This suggests that the role of empathy may not be valued as part of their understanding and interpretation of what constitutes sustainable practice.

As a prime example, the children in vignette (1) referred to the snail as "just a snail" when referring to stepping on the snail. Consequently, Nenes (2016) stresses the vitality of educators inspiring and supporting children in their ethical standards, built on respect, as part of participatory learning processes. This includes teaching young children about the importance of eco-lens perspectives, where animals including insects are viewed with compassion.

For example, in the England vignettes (see 5.4), there are examples of dialogue between the educator and children that mirror care for others and the environment. If the adult is unaware of the role that empathy plays in sustainability and how important it is when attempting to create a better future, the children will not be given opportunities to value it themselves (Nenes, 2016). The next section expands on why the role of the adult is pivotal within sustainability.

5.3.4 Role of the Adult

Both in vignette (1) and (2), the children expressed a strong love for playing and learning outside and in the forest-zone. Nonetheless, Mrs. Edwards from vignette (1) explained how this was only possible when it was their turn, as there was a structure and schedule involved. Particularly in vignette (2) the children themselves highlighted how they only play outside when "the sun is out". Regarding the role of the adult, it is vital for educators to minimise the power dynamic between adults and children by listening and learning alongside the children and offering opportunities for the children to become agents of change (Hall et al., 2014). For instance, perhaps in listening to and responding to the children's desire for learning outdoors (outlined in vignettes (1) and (2).

Additionally, Freire's social critical theory aims to define the role of the adult in terms of adopting a respectful, democratic stance by opening up conversations with children about their own learning (Freire, 1970). In turn, this will enhance the children's confidence in their ability to communicate and

speak up about matters that may affect them, and thus begin to value their own voice and role in society.

When further exploring the role of the adult, Mrs. Smith from St. Albans (vignette 2) expressed her opinion (outlined in section 4.10.4 of Chapter 4) that children should learn and educators prioritise:

"I think regarding communication, we do see a lot of children struggle with this, you know they are not always read a bedtime story they do not always have books in their houses it is very YouTube based now, not in all houses but in some houses, so it's our jobs to really focus on enhancing their communication skills." (Mrs. Smith)

Although Mrs. Smith refers to enhancing children's communication skills, providing the example of 'reading', the role of the adult is far deeper than simply providing basic level communication skills within sustainability. An example of an education approach that promotes sustainability and the importance of open communication is the Reggio Emilia approach (Malaguzzi, 1990; Moss, 2019), which encourages children to embrace their potential to learn from the world, and become agents of change.

5.3.5 Perceptions of Children

Mrs. Jones from (vignette 3) mirrored a 'vulnerable' view of children which relates to viewing them as not being able to understand and absorb sustainability. For instance, she commented how in her view, children are too young to make wider connections beyond the environment. Interestingly, this was a common theme mirrored in section 4.10.4 in Chapter 4, in which further examples of educators in Gibraltar expressed limiting perceptions of

children's ability to understand sustainability are provided. The MoEs perspective is outlined below:

"By way of what children can understand, children of primary school age particularly the smaller ones may not see the world in quite the same way as the grown-ups teaching them do, although a good teacher will understand that and be able to relate to that and put it across in a way that they will understand. So, I think it's the ability of young children to understand the long termism that sustainability by definition is."

It is important to add that the Minister saw a connection with how children are viewed and what practice looks like when he explained how an effective educator should be able to teach sustainability in a way that children can understand. He made a further connection with children's engagement and sustainability by stating:

"Well if children do not engage, they are not going to participate in sustainability and in understanding, so yes there is clearly a link."

Yet, he also stated that children's ability to understand the long-term nature of sustainability may be a barrier. Mrs. Jones in vignette (3) added that children make connections with the economic side of sustainability as they get older, and provided the example age of 'eight'. She argued that younger children are still too young to make that connection.

As Martalock (2012) argues, adults' images of children are directly influenced by the adults' own experiences. This means that, if adults do not believe that children can understand sustainability, then they are failing to view children as confident, capable agents of change who can positively impact our futures. Siraj-Blatchford, Smith and Samuelsson (2010) urge educators to reconsider young children's ability to absorb sustainable practices. They

highlight how children are far more capable of comprehending issues when educators give them opportunities to learn and embrace new concepts, rather than assuming that something is too complex for them (Siraj-Blatchford, Smith and Samuelsson, 2010).

In vignette (3) Mrs. Jones went on to explain that children from the Nordic countries are more independent than children in Gibraltar in terms of being 'self-sufficient', 'problem solvers', and 'creative'. She commented:

"Sometimes we get Polish children and children from Finland and Norway, even Germany and you see in them something you don't see a lot in children in Gibraltar in terms of being self-sufficient, problem solvers and creative."

"That's not to say there aren't self-sufficient, creative or independent children in Gibraltar but that's because of how their parents bring them up." (Mrs. Jones)

This implies that there is a wider issue regarding how children are brought up at home by their parents as well as taught by their teachers at school. There seems to be a sense of 'protection' and resilience against embracing children as independent individuals in society. Consequently, Spiegal et al. (2014) note the importance of offering opportunities for children to 'fail' at things, in order to learn by themselves.

As a further example of this, in vignette (1), I noticed that the 'rules' and structured element of the forest-zone area made it a controlled environment rather than somewhere which the children could choose to engage with freely. This was confirmed by the Danica (a child), who told me that she enjoyed the forest-zone but wished that she could engage with it more often. When I asked Mrs. Edwards about the reason for this, she explained they

currently had a schedule with dates and times for each class to enter the area. It is vital to consider here why the adults do not appear to see or value children as capable to explore for themselves and find their way in the world without having restrictions and regulations constantly imposed on them by adults. This observation shows the power imbalance between educator and child, where the adult makes the rules and the children are viewed as requiring protection. As Ladkin, (2017) argues, such power imbalances can have detrimental effects, as the children are positioned as less than the educators, which affects the learners' voice and freedom of expression.

Ultimately, the core elements of sustainability, such as respect, reciprocal relations and Reggio Emilia, become difficult to embed in practice. For instance, Figure 5.1 provides a visual representation of the importance of an adult's perceptions of children within ECE from a Reggio perspective.

Consequently, Figure 5.2 highlights the perceptions of the children taken from the vignettes in which children may be perceived as more vulnerable:



Figure 5.1: How perceptions of children can enhance sustainability in Reggio (according to Martalock, 2012)

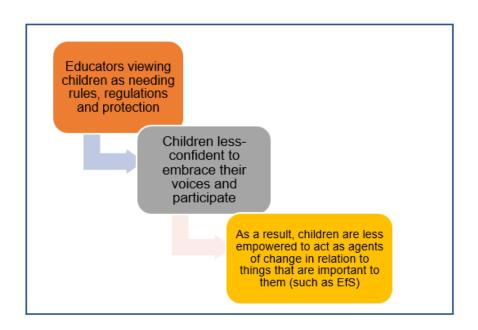


Figure 5.2: Vulnerable perceptions of children and sustainability (according to Martalock, 2012)

Figures 5.1 and 5.2 are based on Martalock's (2012) argument on the importance of the perceptions of children. When educators prioritise regulations and protection over enhancing children's interactions and experiences, children will struggle to develop self-confidence (Martalock, 2012). For example, the Northern Ireland vignettes (see section 5.6) features the benefits of play which involves children being the decision makers and agents of their own learning, demonstrating how adults trust the children, and view them as capable.

5.3.6 Birth to 5 Matters (Early Years Education, 2021)

In vignette (3) the children from St. Mathew's expressed a desire to learn and sing about different things, and explained how they feel they are always "doing the same". Mrs. Smith from vignette (2) stated a longing to move

away from the current frameworks and a concern for how teachings that focus on rigid structures, especially when she stated that: "children are not robots". Furthermore, in additional extracts with Mrs. Jones from vignette (3) (outlined in section 4.10.4) she voiced her opinion on wishing to see Gibraltar move away from the current education system by promoting more interactive learning in the early years:

"I am very much of the thought that I would like to see us moving away from our current education system in the sense that I would like to see the promotion of more hands on activities especially in the early years, creative and unstructured." (Mrs. Jones).

Mrs. Jones provided examples of activities that are creative, unstructured, and hands-on. In opposition to the statutory EYFS framework, the 'Birth to 5 Matters' non-statutory document, was developed by the Early Years Coalition (EYE, 2021) and written by early years educators for professionals in this area. Moreover, it acknowledges the 'early years' responsibility for advocating the SDGs (EYC, 2021, p. 6). Priority is also given to respecting the environment and caring for others. Specifically, when exploring the connections to Mrs. Jones' concerns, the 'Characteristics of Effective Learning' include the 'Creative and Critical Thinking' section, which focuses on encouraging children to think for themselves, through having their own ideas, making links and working with the ideas (EYC, 2021).

Accordingly, 'Active Learning' begins by valuing children's intrinsic motivation, and involves children trying again if they fail and, most importantly, enjoying what they set out to do. Consequently, the Scotland vignettes (see section 5.10) provides insights into experiential learning and

how educators are promoting activities that embrace trial and error. Lastly, the 'Playing and Exploring' section additionally values active engagement, such as exploring and being willing to participate (EYC, 2021). As such, the Wales vignettes feature an example of children actively participating in activities and discussions through play, that encourage sustainability. Crucially, this sector credits the important role of 'playing' which is not currently recognised as part of learning in the statutory EYFS framework – correlating with what that Mrs. Jones criticised for focusing too much on 'targets'.

5.3.7 Emerging Themes Clarified

The vignettes for Gibraltar and discussion points have highlighted a range of recurring themes and challenges pertinent to an integrated and meaningful interpretation of ECEfS in Gibraltar.

Theme 1 – Traditionalism and an openness to trying new things

Each of the above vignettes and data throughout the thesis for Gibraltar supports doing what has been done for many years in Gibraltar rather than questioning the relevance of this in the 21st century and the need for an alternative approach (McLeod, 2019). Additionally, wider neoliberal pressures are identified regarding adhering to the curriculum-related demands.

Theme 2 - Young children as unable to understand sustainability Overall, children are perceived as incapable of understanding and engaging

with all three pillars of sustainability and, thus, of acting as agents of change and taking responsibility as respectful decision makers (Rieckmann, 2017).

Theme 3 – Environmentally focused understandings of sustainability and inexplicit awareness of the role of empathy within sustainability

Overall, sustainability is viewed as an environmental rather than a holistic inter-related concept where the role of empathy was not evident. The following vignettes are from England and demonstrate the importance of listening to children, valuing them as agents of change, and resisting neoliberal pressures that focus solely on curriculum planning agendas.

5.4 Rationale for the England Vignettes

After reviewing and comparing the interview transcript from the childminder (Mrs. McCarthey) with the observation transcripts and notes, I noticed when exploring research questions 1 (understandings of sustainability) and 2 (interpretations of sustainability practice) that this nature-based setting contained many repeated elements and substantial evidence of good, interrelated, sustainable practice.

Thus, as explained in Chapter 3 (section 3.11) the vignettes demonstrates the research questions associated with this study and reinforces the participatory, reflexive nature of the project which are crucial for valuing sustainability. Examples from practice observed at the setting reflect SDG 4 (quality education), specifically with 4.7, which emphasises the need to teach sustainability, thus promoting a culture of global citizenship and respect (UNESCO, 2020).

5.4.1 Background Information on the England Vignettes

The vignettes involved conversations and observations between myself, the childminder Mrs. McCarthey and three children (Jake, Amanda and Kiera). The conversations and observations took place on 02/6/21 and 02/11/21, and each visit lasted four hours. The setting is nature-based, meaning that it values sustainability, and is located in the North-West of England. The children were aged between two and five years old. Mrs. McCarthey had 12 years' experience of working outdoors with young children and had adapted her house to suit the children's needs, providing both an indoor learning area and an outdoor play area in the garden. This outdoor space is where Mrs. McCarthey and the children spent most of their time. Additionally, the garden was filled with various flowers like foxgloves and hollyhocks, along with animals such as guinea pigs and birds.

The DfE: EYFS statutory Framework (DfE, 2021) is followed and the setting is subject to OFSTED checks, as are all registered ECE settings in England.

OFSTED rated this setting 'outstanding'. Mrs. McCarthey had the opportunity to read the data transcript and edit it where she felt appropriate.

5.5 Nature-Based Learning in England

Vignette (1) - A morning at the beach.

Mrs. McCarthey has asked the children what they wanted to do this morning and Jake, Amanda and Kiera yelled together: 'To the beach!' Mrs. McCarthey responded, 'OK, let's get our boots on' and proceeded to put the children's jackets / boots on. The walk to the local beach from the setting took about five minutes. The children held hands as we walked along as a group. As soon as we arrived, the children ran down to the sand and took off their boots and socks. Jake and Amanda sat by the rocks, looking for crabs, while Kiera sat on one of the short boulders nearby. Shortly afterwards, Kiera

called her friends over to join her on the boulders which they did. Mrs. McCarthey and I observed them. We noticed that the children were moving their hands like the 'choo-choo' movement of a train. Then Mrs. McCarthey joined in:

Mrs. McCarthey: "Hi there! Is it OK if I join your wonderful train ride?"

Jake/Amanda: (yelling together): "Yes!"

Mrs. McCarthey then asked the children if they had their train tickets with them, to which they all said 'yes'. She then asked them how much the tickets had cost them:

Abby: "I don't know."

Mathew: (interrupting) "Mine was £1."

Mrs. McCarthey: "A train ticket usually costs a little more than that. Can we have another guess?"

Jake: "Why does it cost more?"

Mrs. McCarthey: "It's because usually prices of train tickets will be more expensive if where you are travelling to is further away."

Jake: "Oh, then maybe my train ticket was more than £1 then."

They all started to decorate the train with the shells and rocks from nearby, and sang 'choo-choo train' together. The children were constantly smiling.

A conversation with Amanda by the shore:

Interviewer: "Can you tell me why you are picking up the crisp packets from the sand. Abby?"

Amanda: "To clean the beach so more people can play."

Interviewer: "Ah, wonderful, and did you enjoy our time at the beach earlier?"

Amanda: "Yes. I love it and when we walk together and hold hands too."

Interviewer: "Great. Can you tell me why Abby?"

Amanda: "Because we do it all together."

An observation on the way to the beach:

We were on our way to the beach when the youngest child, Kiera, began to stumble. I noticed that Jake kept a watchful eye on Kiera. As we continued, we arrived at a small hill where Kiera began to stumble again. This time, Jake ran towards her and offered to help her. Kiera and Jake took each other's hand, both smiling, and made their way down the hill together. Mrs. McCarthey observed this and smiled too. I asked Jake why he had helped Kiera and why he wanted to hold her hand:

Jake: "I like to play with Kiera and Amanda all the time because we're best friends."

Mrs. McCarthey: "I really enjoyed the walk from the setting to the beach. It was a little cold and the children had their wellington boots on, but we were all holding hands and smiling and embracing the beauty of the scenery around us...We try to walk everywhere we can rather than going in the car. This includes the shops, which are about a 20-minute walk away. The children enjoy it as much as I do."

Vignette (2) - A critical observation later that day in the garden:

The children had just changed the water for the guineapigs, which live in a fenced-off area in the garden. Mrs. McCarthey then asked the children if they wanted to feed the birds. The children said yes, appeared overjoyed, and fetched the bag of bird seeds Mrs. McCarthey remained in the setting. Together, they took it in turns to collect a few seeds and then scattered them around the garden. We then sat back, waiting patiently for the birds to arrive. Shortly afterwards, a few arrived.

Jake (yelling): "Look, it's a magpie!"

Interviewer: "Can you tell me how you know that, Jake?"

Jake: "Because they're smart and are black and white and green."

Vignette (3) - Mrs. McCarthey's interconnected understanding of sustainability:

As we returned from the beach, on a cloudy afternoon, Mrs. McCarthey suggested we engage in a conversation about sustainability while the children were playing with the water-box outside. We sat on the outdoor chairs watching the children, listening to the birds. Mrs. McCarthey then explained her understanding of sustainability:

"Ultimately, we try to ensure our learning has as little negative impact and as much positive impact on the health of people and the planet as possible. That means that everything in the setting – from the resources the children play with to the food they eat to the focus of the activities and our transport choices - are mindfully considered to do as little harm and as much good, environmentally, as possible. Most of our food is plant-based (it is all vegetarian), the learning resources are natural, recycled, pre-loved or borrowed wherever possible, we walk wherever we can, or use public transport or a hybrid vehicle, and our learning is always within the context of the seasons or the natural world. We aren't perfect, but that's only human. I follow the children's interests, and sometimes those interests are aeroplanes or plastic toys – things that I would prefer to move away from if we were to perfectly reflect sustainably lifestyles and behaviour - so we incorporate these interests within an environmental context (pretending the aeroplanes are electric, for instance!) along with an understanding of 'greener' alternatives. We try to live sustainable choices as much as possible. normalising these for the children and their families (growing some of our own food being an example). Also, I try to keep learning about how to make the setting and our practice more sustainable, trying to add breadth and depth to my own knowledge and understanding of sustainable and regenerative behaviour, and trying to find ways to build this into our setting. I want the children to value each other and the world around them ... I never use the word 'sustainable'. What we do is I will tell the children maybe if I notice that something is not sustainable, I will point that out and say, for example, when we are in a shop, 'Oh, I wish those apples weren't in plastic bags. Wouldn't it be better if they weren't?' just so they don't see sustainability as something special. They see it as something they should be doing all the time and what they are used too. I think embedding that and having them really comfortable with sustainable practices and familiar with them at an early age just means that they feel like it's normal, and it should be."

During our conversation, Mrs. McCarthey shared a reflection from her childhood:

A reflection by Mrs. McCarthey:

"I was very fortunate to have a real kind of outdoor nature-based childhood and I was just really drawn to trying to replicate that for children, for as many children as possible, to enable them to have that experience where they can see animals all the time and have the space to follow their own investigations and interests without me helicoptering over them all the time. It was preventing them from really expressing themselves, being truly imaginative and being the children they wanted to be. We do call it learning sometimes but, really, we just say we're playing, because play is learning, even for adults too. When we're enjoying ourselves, we're also learning, flexing some kind of muscle and improving and getting better at something. The children lead the learning and I facilitate that for them."

Just before the children began to tire from playing, Mrs. McCarthey outlined her relationship with the children:

Mrs. McCarthey's relationship with the children:

"I like to see us as learning together so, because the children have a lot to teach me as well about childhood and practice and how they learn, as every child is different, I am learning that again and again with every child that comes to the setting and also as the children grow up and develop and relearn who they are, what they like, what they don't, I see us as, kind of, colearners really. The children lead the learning and I'm always observing and facilitating the learners."

The children came to us and asked us what we were doing. I explained we were talking about our world and about how we learn together. The children smiled, and asked Mrs. McCarthey if they could lie down inside and have a snack, which they did.

Vignette (4) - An afternoon observation in the garden with Jake and Emma

Jake had returned to the garden after visiting the bathroom:

Amanda (yelling): "Did you turn the tap off?"

Jake: (shouting back): "Yes!"

Interviewer: "Why did you turn the tap off, Jake? Why was this important?"

Jake: "Because we have to save water to help."

As we all sat on the grass, Mrs. McCarthey asked the children if they wanted to sing the 'Bee song'. Mrs. McCarthey explained that they sing songs and read books that relate to an aspect of the seasons.

Mrs. McCarthey: "In autumn, the bees begin to die, before making an appearance again in the spring."

The children were very excited about this and, before even replying, with smiles on their faces, they stood up, ran to a nearby box in the garden and brought out bee-wings and headbands with antenna and put them on. As they began to sing, the children performed a dance routine that they had practised, turning around clapping and making the sound of a bee. I joined in with them. When we had finished singing and had sat down again, we

noticed that a bee was nearby, perched on a flower. It was right next to me and I started to move away from it:

Amanda: "It isn't going to hurt you if you don't hurt him."

Jake: "It's on the hollyhocks."

Vignette (5) - A final incident in the rain during the second visit on 02/11/21:

The weather's awful, rainy and windy today, and Mrs. McCarthey asked the children what they wanted to do. She suggested they could play inside in the play area. Amanda and Kiera agreed, but Jake wanted to play outside in the rain. He expressed his desire for this as he really enjoyed playing with water.

Jake: "I love the water! – I play with the water boxes and splashing."

Mrs. McCarthey: "You can play outside if you want to Jake."

Jake: "Yay!"

Jake proceeded to put his jacket on before playing in the rain/garden and Mrs .McCarthey then sat by the front door, observing all of the children. Meanwhile, inside the house, in the learning/play area, the youngest child (Kiera) was tired, and was yawning and rubbing her eyes. - Kiera: "Can I please go to sleep now?"

Mrs. McCarthey: "Of course you can. Here are some pillows." Shortly afterwards (half an hour later), all three children were inside the setting and Mrs. McCarthey asked them if they were happy to choose a book to read together. The children said, 'yes' and proceeded to choose a book they liked.

Discussion

5.5.1 Interpretations of Sustainability

When exploring the childminder, Mrs. McCarthey's, interpretations of sustainability, she explained in vignette (3) how she prefers an education where children value each other and the world:

"I try to keep learning about how to make the setting and our practice more sustainable, trying to add breadth and depth to my own knowledge and understanding of sustainable and regenerative behaviours, and trying to find ways to build this into our setting. I want the children to value each other and the world around them."

Table 5.1 below (Connections with Sustainability) summarises the examples from practice which show how the children and Mrs. McCarthey reflected an appreciation of the interconnected nature of sustainability. Given that the literature argues that there exists a crucial need for educators to value balanced, integrated sustainability, where the three pillars carry equal weight (Rieckmann, 2017), it is important to recognise how this setting has valued this. As such, Figure 5.3 (presented below table 5.1) builds on Figure 1.1 in Chapter 1 (visual representation of the 3 pillars of sustainability - Purvis, Mao and Robinson, 2019) by expanding to include interconnected elements of sustainability demonstrated by Mrs. McCarthey and the children.

Environmental	Social	Economic
The children demonstrated an	UNCRC – children's rights respected	Evidence of homelessness
awareness of water wastage	by Mrs. McCarthey	awareness and empathy
and recycled materials		
A developing 'love for nature'	The children demonstrated care and	Mrs. McCarthey and
was evident – shown through	respect for one another, listening to	children engaged in
their compassion for the animals	each other, sharing toys, wanting to	conversations about the
and flora - empathy for the non-	hold hands to help each other on the	cost of transport - train
living	journey to the beach	tickets
The children expressed a	A clear sense of 'belonging' to a	Discussion of local grocery
preference for walking to places	community, where the children feel	costs and trips to the
rather than going by car	safe and protected	supermarket noted

Table 5.1: Connections with Sustainability

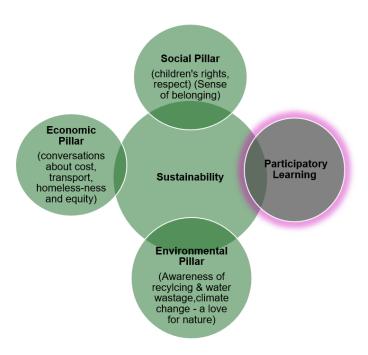


Figure 5.3: Extension of Figure 1.1 (Three pillars in practice) (Adapted from Purvis, Mao and Robinson, 2019)

The added parts include the examples of practice demonstrated in the vignettes that highlight important examples of each pillar. Such as, starting conversations with the children that discuss each pillar in child-friendly contexts, enabling them to become more aware of the world around them, and encouraging thinking critically and asking questions. The element of 'participatory learning' has been added to the diagram and highlighted in a different colour, to emphasise how adults and children participating together and actively in learning is necessary in order to create the space and opportunities for sustainable practice to flourish, as demonstrated by Mrs. McCarthey and the children in the vignettes.

Additionally, in regards to table 5.1, each of the sections in the table were taken from the vignettes. For example, environmentally, there were incidents where the children expressed concern about water wastage, litter on the

beach, a preference for walking to places as well as empathy towards animals and nature. Economically, there were conversations on the value of money and, socially, there was an evident adherence to the UNCRC (UNICEF UK, 2020), which plays a major role in sustainability with regards to respecting children's rights, which will be discussed in the following section with examples from the data discussed and connected with the SDGs throughout.

SDG 4 (quality education) stipulates the need for children to develop lifelong learning skills within their education, and the observations demonstrate examples of how an educator who is attentive to the children's play and conversations can build on this by opening up a dialogue to support their understanding of something so important in our world.

This is seen in the first vignette, where Mrs. McCarthey opens up a dialogue on the use of money and an awareness of the cost of transport. Dealing with money is a skill the children will undoubtedly require in adult life, and Siraj-Blatchford, Smith and Samuelsson (2010) emphasise the importance of children developing an awareness of money at an early stage. They suggest that educators should prompt or engage in conversations about the value of money to aid children's understanding of real-world economics. This is precisely what Mrs. McCarthey did when she listened to the children's discussion and took the opportunity to shift the focus to the prices of train tickets, hence targeting SDG (4) with regards to lifelong skills, following the children's interests and valuing the economic pillar simultaneously, all of which mirrors quality education.

In Mrs. McCarthey's own words, a sustainable lifestyle is valuable (SDG 11, Sustainable Cities/Communities) as she expresses a desire to have as little negative impact and as much positive impact on the environment as possible:

"Ultimately, we try to ensure our learning has as little negative impact and as much positive impact on the health of people and planet as possible."

This was further reinforced by Amanda, whom I observed picking up litter from the beach immediately before we returned to the setting. This supports Mrs. McCarthey's desire that she and the children will make as little negative impact as possible. Amanda made an additional connection with the social pillar of sustainability, displaying a compassionate desire to leave the beach tidy so that others can enjoy it, just like she herself has.

There is a further connection with SDG 4, with regards to 'global citizenship', which relates to educators viewing children as potential agents of change, as social actors who are capable of taking responsibility for their actions (Boyd, Hirst and Siraj-Blatchford, 2017). The children were able to take responsibility for litter that was not theirs, engaging in the positive action of making the beach cleaner for others, reflecting a strong sense of citizenship.

Additionally, during the interview in vignette (1), Mrs. McCarthey mentioned 'mindful choices', such as transport and food choices, which both reflect core elements of SDG 12 and 13 (Responsible Consumption and Climate Change). For instance, the way people travel and eat can have a major impact on the environment and negatively affect greenhouse gas emissions.

Walking to places rather than going by car or using other forms of transport also requires less energy. Accordingly, both Mrs. McCarthey and the children expressed a preference for walking:

"I really enjoyed the walk from the setting to the beach. It was a little cold and the children had their rain boots on, but we were all holding hands and smiling and embracing the beauty of the scenery around us'. We try and walk everywhere we can rather than going in the car." (Mrs. McCarthey)

"Yes, I love it and when we walk together and hold hands too." (Amanda)

The value that Mrs. McCarthey and the children place on walking and the positive experience of walking together again reinforce Mrs. McCarthey's view regarding 'having as little negative impact on the environment as possible'.

Fundamentally, this is an example of SDG 15, which advocates for the protection of all life on land, including animals and nature. Additionally, compassion and understanding are demonstrated regarding caring for the world, specifically with reference to SDG 6 (the sustainable management of water) seen in vignette (4), where there is a clear recognition that 'saving' water is a positive action, as Jake associated preserving water with 'helping':

"Because we have to save water to help." (Jake)

All of the above SDG connections mirror the fundamental aim of the 'Love, Living Goals' (LLGs), which are a version of the Sustainable Development Goals (SDGs) for young children, which focuses on children developing a 'love for learning' (World Press, 2020). Ultimately, demonstrating an interconnected interpretation of sustainability.

An important piece of vignette (3) is noted when Mrs. McCarthey reflected on her childhood and identified her values which included outdoor-nature based learning, seeing animals and following up investigations and interests.

This is a key example that illustrates how Mrs. McCarthey was 'ready', as outlined in the 9 R's framework (McLeod, 2019). She demonstrated this readiness by recognising the personal values associated with her practice, enabling her to reflect on what meaningful practice looks like to her. Only then, was she able to shape her own interpretation of sustainability and actively embed and model this into her own practice with the children.

Mrs. McCarthey further demonstrated her awareness by explaining that she does not want to 'helicopter' over the children, as she noticed this behaviour was preventing them from truly expressing themselves. This aligns with Moss (2017), who advocates for educators to engage in 'active resistance' against the neoliberal pressures tied to documentation and outcomes. Additionally, it highlights Mrs. McCarthey's resistance to confirming to a 'rigid' set of rules and regulations, instead prioritising meaningful learning through her engagement in self-questioning.

5.5.2 Empathy

Throughout the vignettes, the children demonstrated a knowledge of flowers and insects (bees in particular) and showed kindness towards the bees, speaking up in their defence unprompted. Amanda then proceeded to explain to me that the bee should be left alone and I did not need to be afraid, as it would not hurt me:

"It's not going to hurt you if you don't hurt him." (Amanda)

When exploring SDG 15 (Life on Land), there is a crucial connection to be made with post-humanism in ECE and the adoption of an 'eco-lens' perspective. For example, this is seen in vignette (2) which highlights an example of the children caring and demonstrating an awareness of the characteristics of birds. Mrs. McCarthey welcomed animals into the setting and encouraged the children to help look after them. The children are developing an eco-lens view of the world, where the value of empathy for animals begins in childhood.

Mrs. McCarthey is encouraging the children to develop their relational thinking, which Walsh, Bohme and Wamsler (2020) stress is important if we are to respect humans as well as non-human life. This form of thinking stems from post-humanism (Somerville, 2020) and, within ECE is encouraged in the context of creating opportunities for children to encounter nature / animals through nature-based education. In this way, children grow up with compassion for all relations, beyond human life (Malone, 2016).

A second example of empathy was noted in vignette (1) when the children expressed their love for learning together and their friends. Specifically, Jake referred to his peers as his 'best friends' and, when he observed the youngest child Kiera struggle on her walk to the beach, he insisted on helping her. They were constantly holding each other's hands and smiling at one another, mirroring a welcoming, safe atmosphere.

Central to the discussion around respect and early childhood, Leon-Jimenez et al. (2020) argue that empathy is vital during early childhood if children are to develop into adults who appreciate a world full of differences and culture, a world that promotes peace and respect, all of which are essential contributors to sustainability. Most importantly, the role of ECE is essential in encouraging supportive, safe environments where children can naturally display kindness to one another.

As seen throughout the vignettes, Mrs. McCarthey prioritised stimulating environments, ranging from the garden area, inside learning area, and outdoor area (beach), where the children could interact freely with each other, without a strict set of rules / structure and control in place. Leon-Jimenez et al. (2020) affirm that it is such experiences of learning that empower children to embrace emotions of joy collectively.

5.5.3 Role of the Adult

When exploring her role in the children's learning experiences, Mrs.

McCarthey stated in vignette (3) that she views herself as a 'co-learner'. This reflects how Mrs. McCarthey has tried to diminish the power-imbalance between herself and the children by learning with the children and viewing them as 'co-learners' rather than considering herself superior (Ladkin, 2017). Additionally, Mrs. McCarthey stated in vignette (3) how the children love learning just as much as she does, which was reinforced by the children when they expressed their love for learning 'together'.

Such respect and love for both each other and the experience of learning lies at the heart of sustainability. Accordingly, SDG number 16 (Peace, Justice & Strong Institutions) promotes peaceful, sustainable societies, which is mirrored in Mrs. McCarthey and the children's interpretation of sustainability as having an awareness of and acting on the pillars and SDGs in order to create a more sustainable, peaceful society / world.

5.5.4 Perceptions of Children

How children are viewed is directly related to 'Children's Rights' (UNICEF UK, 2020). It is clear that Mrs. McCarthey respected the children from the activities and learning I observed, fulfilling in particular articles 13 (Right to Expression), 12 (Right to be Heard) and 31 (Right to Play and Relax) (UNICEF UK, 2020). It follows from the agentic perception of children, which argues that positive perceptions of children are necessary for children's rights to be respected. This, in turn, also advocates for child-led play. Accordingly, Ladkin (2017) argued that, without children's rights in education, the power imbalance can position children as 'less than' the educators, thus negatively affecting the democratic, participatory learning environment. The vignettes demonstrate that Mrs. Mccarthey listened to the children's wishes and needs.

For example, she respected and acknowledged the children's voices, responding thoughtfully instead of disregarding them. This demonstrated her dedication to a democratic learning approach that values children's rights, voices, and active participation, rather than prioritising the pressures of

meeting outcomes and assessments (Smith, Fitzallen, Watson and Wright, 2019).

Another example can be seen in vignette (5), where Mrs. McCarthey encouraged the youngest child Kiera, to rest when needed and respected Jake's wish to play in the rain. These actions reflect Article 31 (the right to rest and play) and Article 12, which emphasises children's right to express their views and have those views considered by adults (UNICEF UK, 2020).

Mrs. McCarthey recognised that each child had different needs in the moment and chose not to force them indoors due to the weather. Instead, she respected their perspectives. This approach highlights the importance of adults listening to children and learning to share authority, fostering a reciprocal relationship built on mutual respect - something Mrs. McCarthey exemplified in her practice.

Engdahl (2015) emphasises quality education and SDG 4, arguing that within sustainability, this would require child participation and listening to children's voices. Yet, Cottle and Alexander (2012) challenge this, questioning whether educators' understanding of quality can be influenced by government discourses and therefore reflect personal and professional circumstances.

Supporting this, Jones et al. (2016) argue that the understanding of quality – SDG 4 is therefore skewed to focus on achievement and early education.

The following section explores the connections with the EYFS statutory framework while exploring how Mrs. McCarthey resisted the pressure and demands that accompany such frameworks. It will additionally outline two

specific areas of the Birth to 5 Matters 2021 guidance (EYE, 2021) and show how Mrs. McCarthey and the children reflected such areas in their daily practice.

5.5.5 Birth to 5 Matters (Early Years Education, 2021)

The vignettes show that the childminder Mrs. McCarthey prioritised the children's interests while still prioritising opportunities for the children to engage with free-play, such as promoting their personal, social and emotional development. Specifically, this mirrors the characteristics of effective learning in the document:

- Play and exploring (engagement)
- Active learning
- Creative and Critical Thinking

In the observation extracts presented throughout the vignettes, the children were given ample opportunities to play and explore, investigate the beach and garden area, experience free-play and have the choice to play with their peers and self-direct their learning. Moreover, with reference to the 'critical thinking' element, the children were able to appreciate that positive actions equate to a 'better', more sustainable world. This was shown in particular through:

- Litter picking and recognition that cleaning the beach can promote others' enjoyment.
- Understanding that wasting water is not good for the planet.
- Being able to speak up and defend the non-human (observation relating to the bees) where there is a clear compassion and understanding that living things that are not human also require love and respect.

Mrs. McCarthey also provided spaces for the children to dance, run, and sing together, thus enhancing their physical development, encouraging conversations and reading together, promoting their communication and language.

This demonstrates that it is possible to merge the Development Matters Birth - 5 Document with sustainability and the SDGs, when there is a passion for sustainability and children's agency is valued. Thus, the following section will address the identified challenges.

5.5.6 Identified Challenges

When educators / adults view sustainability as separate to learning, they are failing to understand that sustainability *is* learning. It is important to note that the statutory framework for ECE in England (DfE, 2021) neither mentions sustainability nor guides educators on the importance of sustainability within ECE. Moss and Cameron (2020) criticised the framework for focusing on and prioritising the outcomes. Nevertheless, Mrs. McCarthey has taken it upon herself to value and merge sustainability into her practice, validating Sims' (2017) argument that educators should engage with 'active resistance' (see section 2.7, Chapter 2).

Moreover, the vignettes also show how Mrs. McCarthey respected the children's wishes regarding where they would like to learn that morning (they collectively preferred to go to the beach). This is an example of how Mrs. McCarthey has resisted the EYFS statutory framework pressures associated

with the expectations and datafication of what 'should' be taking place, viewing education as a 'checklist' for young children where their voices and opinions on where and how they would like to learn are dismissed.

For instance, Hammond (2019) associates control and power with neoliberalism, which results in educators adopting a 'technical' view of education, one where educators focus predominately on the EYFS outcomes rather than the process of meaningful learning experiences that prioritise sustainability.

Correspondingly, once Mrs. McCarthey noticed that the children were engaging in an activity together, she supported this by responding and joining in, opening up a dialogue around the price of train tickets (vignette 1). Rather than viewing the children's activity as a chance for her to observe and analyse the EYFS outcomes related to development or assessment, she joined in the children's activity and initiated a conversation around the economic pillar of sustainability. This merges respect, free / child-led play and the economic pillar. The children are engaged and motivated, as they are enjoying what they are doing.

Expanding on this, Mrs. McCarthey explained how learning needs to incorporate a reciprocal process for sustainability to be valued (vignette 3). This reflects Freire's SCT (Freire, 1970; Darder, 2017) through her advocacy of the adult also being a learner, as recognition that each child is different and their needs should be prioritised by the adult. For example, Mrs. McCarthey stated that she has to learn about their differences every time a new child enters the setting. This reflects an appreciation for uniqueness, as

she states that 'every child is different', as further promoted by Froebel, who encourages a learning environment that values children's uniqueness (Tovey, 2016). Again, this contradicts the very nature of the EYFS as viewing all children through the same lens, as equally capable of succeeding in the exact same subjects.

Moss and Cameron (2020) stress that there is no value placed on the holistic, unique needs of children in the current framework. Further discussion around the EYFS pressure, neoliberalism and how Mrs.

McCarthey resists this pressure may be found at the end of this Chapter (in the final critical discussion section).

5.5.7 Emerging Themes Clarified

Theme 1 - Children as agents of change

The vignettes demonstrated how the educator encourages the children to embrace their full potential as confident, able and responsible individuals.

Theme 2 – Empathy as crucial within sustainability

Throughout the vignettes, references were made to the importance of kindness between peers and towards all forms of life.

Theme 3 – Active resistance through reflexivity

The educator provided a key example of self-questioning and being aware of her values in order to reflect this in her practice and prioritise meaningful learning over curriculum pressures.

5.6 Rationale for the Northern Ireland Vignettes

The reasons for selecting these vignettes are due to an evident appreciation of three areas: outdoor play, building resilience in children and advocating for independent learning. This setting clearly demonstrated an interconnected understanding and interpretation of sustainability. Additionally, the vignettes displayed various links with key ECE pioneers, such as Rinaldi (2006) and Steiner (Boyd, 2018), both of whom encourage core elements of sustainability (the environment as a 'third' teacher and developing a sense of justice and responsibility through play).

5.6.1 Background Information on the Northern Ireland Vignettes

The presented vignettes involved observations and conversations between myself, an educator (Mrs. Williams) and four children (Shania, Amy, William and Carter) that took place on 03/11/21. The setting was located in the East of Northern Ireland and is a 'Forest School' and 'Eco-setting', with an outdoor forest area located approximately a five-minute walk away from the classrooms.

The educator, Mrs. Williams, explained to me upon my arrival that it is part of their daily routine to visit the forest with the children. The forest featured pathways, small ponds, and an abundance of trees, flowers, birds, and squirrels. Mrs. Williams described how they value exploring the forest with the children and offering opportunities and experiences in nature as part of their learning. When I arrived at the setting, it was a cold winter's day with incessant rain. The children were in the classroom for registration and eager to meet me.

5.7 Sunshine Nursery

Vignette (1) – A morning in the forest.

It was a cold and rainy morning as I walked into the classroom and was greeted by many smiling and excited faces. The children all waved at me, and Mrs. Williams introduced herself and the children. She then said: "Here, in Sunshine Nursery, we prioritise learning that the children enjoy. We're very lucky to have our wonderful forest, that we explore with the children and follow their natural curiosity. It's great."

They took the register, and immediately after Mrs. Williams asked the children they wanted to play.

All of the children (yelling) said: "In the forest!"

They all proceeded to put on their outdoor clothes (wellington boots, waterproof jackets and woolly hats). The children held hands and we walked from the nursery door to the forest. When we arrived, it was raining heavily and they were smiling, excited to explore.

Carter: "Look, can you see the squirrel in the tree? He's always there. He lives in the forest."

Interviewer: "That's wonderful. Why do you think being outside and in the forest is important? Can you have a little think, Carter?"

Carter: "Because you can breathe better and it's not warm. We're with friends and having fun."

The children held hands and collected sticks and leaves in small groups. I noticed that Amy and Shania were running whilst holding hands when Amy fell over. Before I could approach to see if she was OK, two other children, including Carter from the opposite side of the forest, noticed that Amy had fallen and quickly came over to offer help. I was by then standing nearby, and overheard their conversation:

Carter: (reaching out his hand to help) "Are you OK, Amy?"

Amy: "I am but I've lost my bracelet."

Carter: "OK. We have to find your bracelet! Come on, everyone, we have to help find Amy's bracelet!"

I joined the children and Mrs. Williams in searching through the fallen leaves for the bracelet and, after searching for five minutes, Mrs. Williams found it.

Amy was delighted, thanked Mrs. Williams and then ran and hugged Carter, who had initially offered to help her.

Vignette (2) - An incident in the forest.

Mrs. Williams and I were sitting on tree stumps, observing the children as they explored. The children were running around, sliding on the autumn leaves lying on the little hill nearby. They were observing a squirrel and one group of children were collecting fresh leaves to place close to the squirrel's habitat, to provide the squirrel with food. I approached and asked them why they were doing this:

Shania: "He's a friend."

Interviewer: "How wonderful. Can you tell me in what ways you take care of your friend?"

Shania: "We bring food and make houses for it, like piling up leaves for it to sleep on."

The group of children then proceeded to approach the squirrel, smiling and dropping the collected leaves nearby. I that noticed Amy and William were collecting litter with pointed sticks and piling it up. I asked them what they were doing, and they explained to me they were cleaning the forest:

Interviewer: "Could you explain to me why you're cleaning the forest?"

Amy: "Because, otherwise, we can't play and the animals can't live."

I then noticed that Shania had fallen while running down the hill, and grazed her knee.

Mrs. Williams: "Are you OK, Shania?"

Shania: "Yes, thanks, but I hurt my knee. I really wanted to run down it."

Mrs. Williams: "Falling over's part of playing, isn't it, Shania? Just make sure you take better care next time."

Shania ran back up the hill smiling, and ran down the hill for a second time but this time at a significantly slower pace.

After an hour of exploring, Mrs. Williams called the children and said it was time to head back to the setting. The children collectively expressed discontent about this:

Carter: "Please, five more minutes."

William: "Just a little longer, please." **Mrs. Williams**: "OK, we'll stay here, you win!"

The children all cheered.

Vignette (3) - Two conversations with William and Carter later that day in the forest.

I asked William and Carter where they wanted to go to have a conversation with me about their learning, and they both suggested we go and sit in the forest. As we arrived, it was lightly raining and you could hear the birds chirping. We sat on a tree stump and began our conversation.

William: "Did you know that we like to play and look for the characters from feelings?"

Interviewer: "What feelings? Could you tell me more?"

William: "Joy and happiness and things that make us angry."

Interviewer: "That's wonderful, and how does this activity make you feel?"

William: "Good, because we tell each other how we feel."

Interviewer: "Ah, that sounds wonderful! One big question now: do you think it's important to share how we feel and take care of each other, and the world?"

Carter: "Yes."

Interviewer: "Can you tell me why?"

Carter: "So people and animals don't get hurt."

William: "To keep people safe."

Second Conversation:

Interviewer: "Can you tell me where you play when you go outside?"

William: "We go to the forest."

Interviewer: "And what do you do in the forest?"

Carter: "We pick up rubbish and bring it back and play and run."

Interviewer: "Oh, and why do you pick up the rubbish? Can you tell me?"

William: "Because it's not good to leave our mess."

After our conversation, we made our way back to the classroom, the rain had now cleared out and the sun was shining between the clouds.

Vignette (4) - A final conversation with Mrs. Williams in the forest.

It was lunchtime, and Mrs. William's suggested we sit in the staff room to engage in our conversation. We walked through the school, and I noticed many posters on the walls about climate change and cleaning up the world. It started to rain again as we crossed through the forest to the staff room.

Mrs. William's understanding and interpretation of sustainability

Interviewer: "In terms of how you view children, their role in their learning, what would you say?"

Mrs. Williams: "I believe different teachers will have different views about whether children are all learners who can be independent and are all innately creative. I believe in child-led learning so, for example, if a child sees a butterfly and asks about it, then that should become the focus. It shouldn't be something else. Quite often, children in the early years ask us questions that make us pause and we don't have the answers to them, so we can learn a lot from them and I think they are highly creative. There are no boundaries at that age. They are capable and it's a privilege working with that age."

Interviewer: "Great, and how does that relate to sustainability in your teaching?"

Mrs. Williams: "I love the Reggio Emilia and Montessori style, That's kind of where my thinking about children comes, from the idea that children have 100 languages in which to express themselves. From my experience in a local nursery, that is built on the principals of the Montessori/Reggio Emelia approaches, the role of the teacher is to set up a learning environment which stimulates children's natural curiosity (driven by their interests); to encourage children to explore and model language - to promote 'thinking' through questioning; to document children's thoughts and to make their thinking visible; and to provide authentic tools and materials. Teachers also observe children carefully, with a belief that children communicate in '100 different languages' - it is a very child-centred, nurturing approach. The Montessori aspect teaches children to persevere, and gives them the skills for everyday living, e.g. tying knots for tying shoelaces/buttoning for buttoning a coat."

Interviewer: "Earlier we discussed some barriers briefly, what you say are the main barriers?"

Mrs. Williams: "Could be that educators are not thinking about it, not thinking about sustainability, I mean. They think about it as secondary when it comes to education when it shouldn't be. Also, as mentioned, time constraints, at times, can be a barrier."

We ended our conversation and headed back to the classroom, we noticed the squirrels came back out and two of the children were looking and pointing, smiling at them.

Discussion

5.7.1 Interpretations of Sustainability

In vignette (4), Mrs. Williams made a connection with both Reggio and Montessori, as well as sharing her preference for child-led learning:

"I love Reggio Emilia and Montessori style, that's kind of where my thinking about children comes from the idea that children have 100 languages to express themselves...The Montessori aspect teaches children to persevere, and gives them skills for everyday living." (Mrs. Williams).

Mrs. Williams refers to the 'hundred languages for children to express themselves' Rinaldi (2006). This can only happen if children are given an opportunity to spend time in nature, for the 'environment' to act as the third

teacher. Accordingly, most of the visit at this setting was spent in the outdoor forest, where the children were experiencing play in nature. Martalock (2012) argues that, although a curriculum built upon the Reggio Emilia approach / image of the child promotes unlimited possibilities, planned yet flexible teaching, based on the children's responses and interactions, is key. Mrs. Williams 'planned' outdoor learning but discussed it with the children first and offered them the space to express their needs.

The conversation with William and Carter in vignette (3) reinforces the children's interpretation of sustainability as being embedded in their actions:

"We pick up rubbish and bring it back and play and run" (Carter).

"Oh and why do you pick up the rubbish, can you tell me?" (Interviewer).

"Because it's not good to leave our mess" (William).

This demonstrates a strong initiative and value for caring for the environment as well as highlighting how it has become part of their daily routine, a healthy habit rather than something they feel they 'have' to do. There was also a recognition that leaving a mess behind should be avoided and the act of engaging in picking up litter is positive. Boyd (2018) describes how children develop a sustainability mindset through play-based experiences. Offering children the chance to explore their surroundings and develop an appreciation for them encourages a sense of responsibility toward the environment and others (Luff, 2018).

Additional connections can be made with the Steiner philosophy. Boyd

(2018) explains in Chapter 2 how Steiner advocated for children to develop

their sense of justice and responsibility in the world through play. A further example of this arose during one of my conversations with the children in vignette (2), who expressed concern about taking care of the world and related this to taking care of people and animals, (being safe) and not 'hurting' them:

"So people and animals don't get hurt" (Carter).

"To keep people safe" (William).

This connects people with the planet (Social / Environmental Pillars) and demonstrates that an ethics of care has been instilled in the children. The children in this setting expressed a value for their holistic development, and spiritual / emotional health which uses Steiner's philosophy as an underpinning basis for their learning.

5.7.2 Identified Challenges

Mrs. Williams suggested in vignette (4) that educators may not be thinking about sustainability as embedded in practice but, rather, as secondary:

"Could be educators not thinking about it, not thinking about sustainability I mean. They think about it as secondary when it comes to education when it shouldn't be."

According to Ball (2012), educators' inability to 'think about sustainability' as embedded in practice but rather as secondary is connected to the neoliberal pressure associated with global competition. This means that educators are under constant time constraints to focus on generating outcomes.

Interestingly, this also reinforces the brief mention of 'time constraints' Mrs.

Williams highlighted in the vignette (4). In accordance with the barrier that Mrs. Williams identified above, Ball (2012) argues that subject areas like sustainability that prioritise creativity and critical thinking are supressed.

5.7.3 Empathy

Various examples of practice reflect empathy throughout the vignettes. For instance, compassion was shown in vignette (1) when Amy stated that she had lost her bracelet and Carter proceeded to call the other children collectively to help find it. This empathetic perspective is linked to Dybdahl and Lien (2017) (see Chapter 2 section 2.9.2), who discuss the importance of mental health and positive peer relations between children as part of the Sustainable Development Goals. It is believed that showing kindness to others during ECE can prevent children from suffering from mental health issues, such as social exclusion, poor overall health and discrimination.

Central to SDG (3) is children's well-being, which is not exclusive to their physical health. It involves holistic health, such as mental and emotional regulation, as evidenced by healthy, respectful relationships, based on empathy. Thus, an ECE experience where children can demonstrate kindness towards others can enhance children's development both socially and emotionally through play (Penney et al., 2019).

When exploring the children's perspectives on empathy, William and Carter explained to me that they incorporate 'feelings' into their daily engagements (vignette 3). This involved Mrs. McCarthey guiding them to explore their emotions, reflect on why they feel that way, and share their feelings with

each other. This links with the social pillar and mental health as part of SDG (3) Good Health & Well-being.

As Dybdahl and Lien (2017) argue, without a healthy mindset, one cannot truly strive for a better world, meaning that children who can maintain empathetic, healthy relationships with those around them are more inclined to develop positive dispositions towards sustainability. More importantly, both William and Carter expressed a fondness for engaging in discussions where they can express their emotions, which further supports the value of such discussions.

Furthermore, vignettes (1) and (2) demonstrated that the children had an awareness of the squirrels' habitat including what they eat, and even showed an initiative in taking the squirrel some food:

"He is a friend. We bring food and make houses for them like putting the leaves on top of each other for them to sleep" (Shania).

Accordingly, this demonstrates that the children viewed the squirrel as a 'friend', which mirrors compassion for animals and a post-humanist perspective. This is similar to the comments made by the children in the childminding setting in England (5.5) who also reflected an eco-lens perspective.

5.7.4 Role of the Adult

In vignette (4), Mrs. Williams described her role as one which encourages children's curiosity, inspires children to explore and facilitates stimulating learning environments:

"The role of the teacher is to set up a learning environment which stimulates children's natural curiosity (driven by their interests); to encourage children to explore" (Mrs. Williams).

As such, there are further aspects of both Montessori and Reggio reflected in the educator's responses, who highlights how the Reggio approach values and prioritises children's natural curiosity. This is evidenced where Mrs. Williams follows the children's interests, who wanted to play in the forest and prolong their learning in that environment (vignette 1).

Mrs. Williams noted an additional value for the interconnectedness of sustainability, expressing a belief that it is essential to explore and question the world (curiosity). Moreover, the Montessori method, which is heavily aligned with sustainability in respecting democratic learning, advocates for an educational pedagogy that 'follows the child' (Montessori and Livingston, 1917). This means the children are guided rather than led by the teacher, and given choices based on their interests (Isaacs, 2018).

Mrs. Williams explained that the children enjoy outdoor learning and suggested that learning takes place in the forest environment where the children are able to explore and thrive. Ultimately, it was the children who had the final say on the matter, which shows that a collaborative relationship between the educator and the children exists:

"Please 5 more minutes" (Carter).

"Just a little longer please" (William).

"Ok, we will stay here, you win!" (Mrs. Williams). - The children all cheered.

5.7.5 Perceptions of Children

In vignette (4) Mrs. Williams' described the children as being independent, innately highly creative and capable:

"We can learn a lot from them and I think they are highly creative there are no boundaries at that age, they are capable and it's a privilege working with that age...Children are all learners who can be independent and are all innately creative."

Such perceptions of children correlate with Bower's (2020) rights-based model of education, which positions children as active learners. Mrs. Williams' comments suggest that she values children's rights to expression and participation, in accordance with articles 12 (respect for the views of the child) and 13 (freedom of expression / participation) of the UNCRC document (UN General Assembly, 1989; UNICEF UK, 2020).

5.7.6 Birth to 5 Matters (Early Years Education, 2021)

The non-statuary guidance makes various references to the importance of resilience:

- Children should develop the capacity to cope with, adapt to and recover from setbacks and adversity.
- Adults can support resilience by helping children to develop a view that not getting the result they want or expect is not a failure, but an opportunity to try again.
- Children should learn and develop an attitude of 'keep on trying' and persisting even in the face of difficulties.

Firstly, it is important to highlight the connection between resilience and sustainability. Spiegal et al. (2014) note the benefits of risky play, which

involves children being exposed to certain elements of 'risk' that are unavoidable in the real world. In this instance, the risk would be falling over and hurting themselves. Harper (2017, p.1) stipulates that:

"Children do not learn to walk and run without first navigating the perils of tripping, falling and experiencing failure".

It is argued that children require experiences to strengthen their environmental adaptability. As outlined in vignette (2), when I observed Shania fall over while playing, it was interesting to note that despite grazing her knee, she did not cry or call for Mrs. Williams. Shortly afterward, Mrs. Williams asked Shania if she was ok, to which Shania stood up and continued running down the hill, albeit a little slower than before:

"Are you ok Shania?" - (Mrs. Williams).

"Yes, thanks but I hurt my knee, I did really want to run down it" – (Shania).

"Falling over is part of playing, isn't it Shania? Just make sure to take better care next time" – (Mrs. Williams).

Shania ran back up the hill, smiling, and ran down the hill again but, this time, at a significantly slower pace.

This supports Harper (2017), who argued that children develop environmental adaptability only through experiencing elements of 'failure', such as tripping or falling over. Shania was able to begin running again after falling over, demonstrating bravery and also confidence in her ability to run again but at a slower pace, showing that she had understood that running more slowly can prevent falls. In addition, Mrs. Williams did not tell Shania off or ask her to walk or 'not run', but simply checked on her and acknowledged

that falling is part of playing. This highlights a trusting relationship between the educator and child, which Freire would argue is crucial in enhancing learning (Darder, 2017).

In vignette (4), Mrs. Williams makes a connection with the importance of thinking through questioning:

"To promote 'thinking' through questioning; to document the children's thoughts and to make their thinking visible; and to provide authentic tools and materials."

This indicates that there is an understanding of the role that reflection plays within ECE. Encouraging questioning entails simultaneously encouraging critical thinking skills, where the children are able to practice thought patterns and learn more about themselves in the process (Chrost, 2017).

Additionally, Ball (2017) and Biesta (2015) highlight how critical thinking enhances freedom of choice and confidence in decision making, both of which contribute to children becoming agents of change. The value of questioning is noted in Birth-5 Matters guidance, (p. 15) where it stipulates how educators should encourage and ask open questions to the children, to help them make their own connections in their learning journeys.

5.7.7 Emerging Themes Clarified

Theme 1 – Resilience in sustainability

Evidence from the vignettes demonstrate an example of resilience in the children's actions and the educator's encouragement of environmental adaptability.

Theme 2 – A value for questioning / critical thinking

The educator made a specific reference to the importance of questioning and encouraging the children's natural curiosity through thought processes.

Theme 3 - Emotions as embedded

The children explained their perspectives on the importance of expressing their emotions with the educator and each other.

Theme 4 – Appreciation for outdoor / nature learning

Lastly, throughout the vignettes, there were clear examples of the children and educator exploring the forest and advocating their love for nature-play.

5.8 Rationale for the Wales Vignettes

The vignettes were selected as the data from this setting focus specifically on children's perspectives of sustainability as being compassionate, understanding and reflective. It foregrounds an in-depth activity that I participated in with the children, as they asked me to join them in their outdoor play.

There is a specific focus on friendship, empowerment and the value of respectful dialogue throughout the vignettes.

5.8.1 Background Information on the Wales Vignettes

The setting (Westwood Primary) is located in a coastal town in North Wales. The setting is based in a diverse, colourful location, with trees, flowers and even chameleons, lizards, chickens, tortoises and frogs. Additionally, there is an outdoor learning area connected to the indoor space. Their ethos consists of encouraging children to be ethical, informed, capable citizens, who can think for themselves. The vignettes draw on observations / conversations between myself, three children aged between three and five years-old (Shaun, Erica and Peter), and one educator (Mrs. Brown), that took place on 18/06/21.

5.9 Westwood-Primary

Vignette (1) - Mrs. Brown and the children's views on sustainability (a conversation in the garden).

As I entered the vibrant setting, I was greeted by Mrs. Brown who recommended we have our conversation before the children arrived as it was before 9am. She suggested we sit in the garden as it was a warm and sunny summers day.

Mrs. Brown then explained to me her view on sustainability:

"Sustainability, to me, is about the future and it's important for the children for their future. The term 'sustainability' is not actually thought about as a term here, but rather we don't think about it, we just do it. We don't necessarily have to have expensive resources in the classroom or outdoor spaces to create a stimulating environment. The children enjoy coming to school both in the indoor and outdoor environments together, which I think is central so learning is fun for the children. Together with the children, we incorporate a lot of nature into the children's learning, through reading or drawing or engaging in conversations around nature, animals, and insects and encouraging the children to care for them and what's around them. We try to incorporate the sustainable development goals naturally. I think, in the 21st century, the value of respectful relationships is so important. I value the children's input and choices. For example, when you came in this morning,

we didn't plan on having such an extended play time but the children seem to be really enjoying it so we are flexible and follow this. I want the children to decide what they want to engage with."

She then shared how she has not experienced a barrier:

Interviewer: "Have you experienced any barriers to teaching sustainability?"

Mrs. Brown: "I guess I would say, not really. I think here, in Wales, we're lucky. I don't feel pressured when it comes to teaching. It's really an enjoyable process."

As we were just starting off our conversation, two of the students Peter and Shaun came into class early, so we all went inside and interacted with them. Mrs. Brown suggested Peter and Shaun explain to me their views on the world and being kind to one another. We sat in a circle and discussed this together.

(Children's Perspectives)

Interviewer: "Can you tell me why it's good to be kind to each other?"

Peter: "Because we have to be kind and learn and play together and that's important. It helps me concentrate."

Interviewer: "Oh, great! Can you tell me how it helps you concentrate?"

Peter: "Because I get more excited to be at school and learn."

Interviewer: "Do you think you can tell me what your favourite thing about learning is?"

Shaun: "I like to read books about bugs (picking up a book to show me called 'Mad about Bugs). This book I like, because it has bugs and animals and also frogs and it says how spiders eat the bugs like flies and then the tadpoles turn into frogs. Also, the more I read, I love the bugs and animals more."

Interviewer: "Wow, that sounds so interesting. Can you tell me more about why learning/reading about this is useful to you?"

Shaun: "Because I know spiders are good because they kill flies. Look, I can show you".

Shaun turned to the page in the book which explained the food-chain cycles and pointed at a diagram showing spiders eating flies and frogs eating spiders.

Interviewer: "Do you get to read your favourite books all the time?"

Shaun: "Yes, because Mrs knows it's my favourite."

Interviewer: "So, can you come and read your favourite books when you choose to?"

Shaun: "Yes, she even lets me take it home when I want and bring it back for others to read."

As the rest of the children came into class, we ended our conversation until later.

Vignette (2) - A critical incident later that day: Erica initiating an activity

We were all playing together outside in the interactive nature-based outdoor space. There were climbing frames made of wood and various wooden boulders for the children to jump on and around. I approached Erica who appeared to be playing by herself:

Interviewer: "Can you tell me why you enjoy learning outside?"

Erica: "Outside, I can laugh more. When we play outside, we build houses for the insects. Look, I can show you."

Erica led me over to her peers who were building a house out of the building blocks in the outside play area. She took me outside and explained to me how they often build houses for the bugs and call them their bug houses. She explained that the bugs are then removed and put back 'safely' in the grass area, and they then remove the blocks, in case they 'squish' the bugs. Two friends joined Erica, and they jointly described how to build the bug house: Firstly. they collect sticks and rocks found lying around the outdoor space, then use the play blocks to set up the outline of the house. Lastly, they bring in leaves and place them at the centre of the house, where the insects are crawling. There were ants and a beetle.

Interviewer: "Can you tell me why you're building this?"

Erica: "Because we read about the insects and we take care for them and feed them. They like to eat the leaves we get for them"

Peter (observing nearby): "I don't think you should be picking them up like that because you could hurt them by accident. You should leave them where they are and take the leaves to them, that'd be better."

Erica and Shaun paused for a few seconds, then said:

Erica: "OK, that's true. I never thought of that."

Shaun: "Thank you, Peter. Show us how you think we should do this, then."

Peter: "OK, so let's pick up all the leaves and take them to the bugs together. From now on, we can just pretend the bugs are in the house"

The children continued to build their bug house as I continued to observe and lend a helping hand when they asked.

Vignette (3) - Shaun, Peter & the water box:

The two children were playing with the water box and I overheard Peter say to Shaun:

"Stop wasting and throwing water on the floor."

Shaun looked confused and asked Peter:

"Why not?"

Peter: "Wasting water's bad and we should try not to do it. Mrs has told us this before."

Shaun then paused for a second, and said:

"Oh, ok, I won't do it again. I forgot but now I will remember."

They proceeded to play with the water boxes. It began to rain suddenly and unexpectedly, and the children asked me if we could go inside to get their coats, before returning back outside to continue playing.

Discussion

5.9.1 Interpretations of Sustainability

In vignette (1), Mrs. Brown gave a detailed account of why she believes that sustainability is not a term that should be thought about as such but, rather, embedded in daily practice. In her response, Mrs. Brown acknowledged how sustainability is important for the children's future. She explained how, in her view, stimulating environments, both indoors and outdoors, where children can enjoy and care for one another and what is around them, is important for sustainability:

"Sustainability to me is about the future and it is important for the children for their future. The term sustainability is not actually thought about as a term here, but rather we don't think about it, we just do it. We don't necessarily have to have expensive resources in the classroom or outdoor spaces to create a stimulating environment, the children enjoy coming to school both in the indoor and outdoor environments together, which I think is central so learning is fun for the children."

In advocating the importance of learning environments, John Dewey championed the value of children's surrounding environment and how this can influence how they think and act (Luff, 2018). For example, reinforcing Mrs. Brown's words, Dewey claims that an environment that encourages participation, democracy and exploratory play can enable children to develop connections with the world around them (Luff, 2018).

In addition, Mrs. Brown expresses a similar understanding / interpretation of sustainability to the childminder in England (vignettes 5.5), where they both explain how they normalise sustainability and embed it into their daily

practice. This demonstrates that they view sustainability as part of learning, rather than as separate from it.

A conversation with one of the children Peter in vignette (1) at the setting shifted the focus to the importance of friendships and how this enhances motivation. Peter expressed his love for his friends and how this encourages participation in learning:

"Because we have to be kind and learn and play together and that is important, it helps me concentrate" (Peter)

"Oh great! Can you tell me how it helps you concentrate?" (Interviewer)

"Because I get more excited to be in school and learn" (Peter)

There is an awareness of the importance of being kind, and learning / playing together. There is a further link with friends empowering each other, as Peter explains that being around his peers helps him to concentrate, which enhances his desire to be at school. Darrah (2019) connects 'quality' with 'empowerment' in education, arguing that motivation is part of what would be deemed 'good quality practice'. As Peter explained in his response, he values his friendships, which enhances his intrinsic motivation to be at school, which comes from a deep inner drive to *want* to learn (Theodotou, 2014). Thus, Peter has identified friendships as important within sustainability. This shows how Mrs. Brown and the children interpret sustainability as valuing stimulating environments, children's freedom to explore, play and make decisions, as well as creating a 'love' for learning.

5.9.2 Identified Challenges

The educator Mrs. Brown stated in vignette (1) that she had not experienced barriers relating to sustainability teaching, and instead stated that she felt lucky to come from Wales, where pressure is less evident:

"I guess I would say not really. I think here in Wales we are lucky. I don't feel pressured when it comes to teaching, it is really an enjoyable process." (Mrs. Brown).

Central to this discussion, Boyd, Hirst and Siraj-Blatchford (2017) highlight how ECEfS in Wales has been significantly influential in Europe. As an effective example of sustainability, the 'Education for Sustainable Development and Global Citizenship' (ESDGC) policy has been developed and prioritised, so all settings must include this within their teaching. This identifies how the educators in Wales who follow the curriculum conductive to sustainability are embedding core elements, such as global citizenship, within their teaching. In accordance with Mrs. Brown, this prioritisation and acknowledgement of sustainability may have reduced the pressure associated with test outcomes and neoliberalism (Biesta, 2015).

5.9.3 Empathy

When I conversed with 4 year old Shaun in vignette (1), he expressed a love for insects / bugs and reading books on nature. In his responses, he made connections with life cycles in nature through his love of reading. Shaun then chose to show me a book as an example of one he enjoys learning from, and

explained to me the food cycle of bugs, spiders and frogs. Most importantly, he made a connection with reading and appreciating the bugs / animals more as a result of this:

"Also the more I read, I love the bugs and animals more" (Shaun).

This type of learning is important in encouraging children to reflect on other living species that co-exist with humans in the world. Accordingly, Somerville (2020) outlines how post-humanism within ECE aims to encourage the perspective where children recognise that all living and non-living beings are part of the same world, including humans, animals, insects, nature and plants. Hence, Shaun expressed a love for learning about nature and the life-cycles and food-chains in particular through reading and educating himself, enhancing his relational thinking, and advocating for SDG 15 by respecting and learning to care for all life forms (here, life on land).

5.9.4 Role of the Adult

In vignette (1), Mrs. Brown did not refer to herself as the one who initiates the learning, but instead indicates a co-construction of learning 'together':

"Together with the children, we incorporate a lot of nature into the children's learning"

As Malaguzzi (1993) states, it is essential for educators to view education as an opportunity to embrace reciprocal relationships with children. This means that the adults do not consider themselves as more important than the children. Similarly, Mrs. Brown expressed a fondness for learning with the

children, which positions her role as a facilitator of learning. This relationship between adults and children minimises the power dynamic, and enhances learner participation (Martalock, 2012).

5.9.5 Perceptions of Children

Building on the above section, when exploring Mrs. Brown's perception of the children in vignette (1), she explained how respectful relations are crucial for sustainability. There is a clear connection to the social pillar here, where Mrs. Brown is expressing a value of children's rights, the importance of following their needs and listening to their voices. She provides the example of not having planned a long play time but being sufficiently flexible to recognise that the children were having fun so she respected and responded to this by not cutting the session short. This shows that she views children as being worthy of participating and expressing valid opinions to which adults should listen and respond to.

Hence, the Welsh Government Strategy document also prioritises 'Rights to Action (2004)', which aims to promote children's rights. This shows that the educator is in line with the framework and, most importantly, that the framework *does* value children and views them as individuals who deserve to be listened to. This is in contrast to England's statutory EYFS framework (DfE, 2021), which makes no mention of children's rights at all. This type of respectful relationship between adults and children is crucial within sustainability, as it positions children as individuals who deserve respect in both education and society. Freire argues that this will in turn, enhance opportunities for children to become aware of their potential to become

confident, self-aware adults who are more inclined to participate and express themselves in important world matters (Freire, 1970).

5.9.6 Birth to 5 Matters (Early Years Education, 2021)

The 'Enabling Environments' sector of the non-statutory guidance stipulates the importance of 'supporting good ecological habits' within ECE. A prime example of this is mirrored in the vignettes where Shaun and Peter discussed water wastage:

"Wasting water is bad and we should try not to do this, Mrs has told us this before." (Peter)

"Oh ok I won't do that again" (Shaun)

This demonstrates that Peter had remembered Mrs. Brown explaining to them the need to avoid wasting water and took the opportunity actively to remind his friend about it. This is additionally advocating SDG (6), as it explains how one in three people still live without sanitation / clean water and so those who do not should aim to avoid wasting water.

The Early years Foundation Phase Framework in Wales (3-7) (Welsh Gov, 2015) also notes the need for 'Positive attitudes towards caring for the environment' and to 'recognise how people's actions can improve or damage the environment'.

Vignette (2) highlights a discussion among the children (Peter, Erica and Shaun) which involved a different perspective being shared by Peter. Erica

and Shaun then reflected and decided that Peter's perspective was better as they proceeded with their activity:

"I don't think you should be picking them up like that because you could hurt them by mistake you should leave them in their place and take the leaves to them better" (Peter)

Erica and Shaun paused for a few seconds and then said:

"Ok that is true I never thought of that" (Erica)

"Thank you, Peter. Show us how you think we should do this then" (Shaun)

"Ok so let's pick up all the leaves and take them to the bugs together. From now on we can just pretend the bugs are in the house" (Peter)

This discussion demonstrates the three children's ability to reflect and think critically, which is an essential part of sustainability. Being able to reflect on one's actions, and most importantly listen to what someone else says and consider their opinion, reflects an ability to value respectful, democratic relations. When Peter suggested that picking up the bugs and taking them to their bug house (Shaun and Erica's chosen approach) might harm the bugs so it might be better to bring the food (leaves) to the bugs' natural habitat instead, Shaun and Erica paused, reflected and discussed how this was actually a better idea that they had not considered previously.

Again, this demonstrates the value of alternative perspectives and how adults can learn from children, enhancing Freire (Darder, 2017) in his reciprocal learning advocacy. Additionally, this incident is in accordance with the Early years Foundation Phase Framework in Wales (3-7), which states

that children should be able to reflect on the value of all life. It also mirrors care and protection for the environment for becoming environmentally friendly citizens (Welsh Gov, 2015). More so, in the non-statutory guidance on p. 39, it states the following:

"Sensitive interactions involve listening, guiding, explaining asking appropriate questions and helping children to reflect on their learning in a playful, co-constructive partnership"

Hence, vignette (3) demonstrates how children themselves can be learners and teachers for one another.

5.9.7 Emerging Themes Clarified

Theme 1 – Children as critically reflective

This vignettes featured an incident where the children considered a different perspective and learnt from this new way of thinking.

Theme 2 - Sustainability as embedded

Throughout the vignettes, the educator and children demonstrated how sustainability is not viewed as secondary or separate to learning, but rather as embedded and part of their everyday practice. There was also an emphasis on children having choices in their learning journeys.

5.10 Rationale for the Scotland Vignettes

These vignettes were selected as there are many connections between the Montessori method to learning and sustainability, which stem from the

portrayal of the child as the constructor of civilisation (Boyd, 2018).

Accordingly, the setting in Scotland (Hillside Montessori) highly values and integrates Montessori in their daily practice and provides examples of how the children learn through experiential play, where the child's freedom of expression is valued and prioritised.

As explained at the start of this Chapter and in section 3.11 of Chapter 3, Miller et al. (2013) outline how vignettes can be used to summarise interview transcripts, in order to highlight important parts of data that answer the research questions. Due to Covid-19 and the lack of observation data in Scotland, the following vignette will only include small sections of dialogue, which capture important aspects of sustainability and Montessori teaching.

5.10.1 Background Information on the Scotland Vignettes

This setting is located in West-Central Scotland. They follow the Montessori method to learning and all staff are Montessori qualified teachers. There are self-contained baby, toddler and pre-school rooms, and the children are aged from three months to six years. The Montessori method assumes that children are naturally curious, sensorial explorers. Additionally, there is a large outdoor learning environment, which is prioritised as part of the children's learning.

As explained, due to Covid-19 and the constantly changing rules in Scotland, I was unable to visit the setting in person. The gatekeeper of the setting, Mrs. Evans, instead suggested that we have a detailed conversation, so that she could give examples of what sustainability looks like through their integrated

Montessori method. Our conversation took place on 03/12/21 and lasted 45 minutes. Mrs. Evans revised some of her responses after reading the raw transcript by providing further examples. Mrs. Evans spoke to the early years staff prior to our interview to gather their thoughts on Montessori and sustainability in their setting to share with me. The setting requested that their opinions should be included in the research.

5.11 Hillside Montessori

Vignette (1) - Mrs. Evans's Views on independence and Montessori, with shared examples of practice:

As we started the call, Mrs. Evans greeted me kindly and expressed her regret about not being able to observe their setting in person. She reminded me that the responses she would share today were based on her views as well as three members of their early years staff.

Views on independence:

"It gives children independence. For example, in our baby room, as soon as they can walk and walk steadily, they'll get their own glasses, their own plate and bring them to the table. They collect their own lunch boxes. The staff also felt that we give them time. If a child has to go and get a plate and glass, we give them time to do that. It would be far quicker if we did it for them but, you know, we'll encourage them to get their own plate/glass and bring it to the table. That all takes time. We encourage the children's independence and what's really interesting is we serve a number of primary schools. We don't just feed into one, so the primary 1 teachers have always said they can spot the children who come from us because they're able to do everything for themselves. We help the children; you know we won't leave them to struggle but we encourage them rather than us just doing it for them. Not only are we getting them ready for school, but Montessori prepares them for life."

Views on Montessori:

"Montessori also believed that children of this age, it's an age where they can afford to make mistakes and won't face massively serious consequences and the children learn from their mistakes. Our goal is to have the children confident and ready to face the world when they leave our care. Also, in Montessori, we do not over praise the children; for example, if someone puts their jacket on for the first time, we won't be all singing and dancing we will just say that's how you put on your jacket, well done! because what we want is for the child to feel the joy inside and to have that intrinsic joy and then you're not raising adults who are dependent on praise from others to feel worthy. I think it can roll into mental health issues, it's important to not do and start embedding when they are young so they learn how to take care of themselves and others."

An example of practice:

"In Montessori, there are a lot of pouring activities so, when you start with the youngest child, we start with the most simple pouring activity so, in our baby room, that would potentially be a small tray, it would be relatively small, and fine, light metal jugs. There'd be two jugs and there'd be something like butter beans inside one jug and the child takes the tray with the two jugs to the table and the idea is that they pour the content of one jug into the other and back again and when you use something big like butter beans, if one of them falls to the ground, the child can pick it up and put it back in the jug by themselves. As they get older, the contents of the jugs, size and weight will change, for example, to whole dried peas, then we move to split lentils, then to rice, then the hardest thing to transfer is water, because it spills and it gets harder to control. You know, it progresses through but, with every pouring activity, there'll also be available a little dish and sponge and, if they spill the water, they can mop it up and squeeze it back into the jug/dish and that's your control of error. They can fix it themselves together and it's not the end of the world if they spill it. It means as well that they can problem-solve and think for themselves and the tools are there for them to do so, so we have similar things at mealtimes. If they spill their drink, we have cloths available. One of them is white with a green trim for cleaning up spillages. One has a red trim and is for cleaning up paint and that's used if you spill paint. We have different clothes for different purposes. It means that they learn to fix things themselves."

An example of outdoor play:

"We've incorporated outdoor play into the Montessori curriculum. The owner's quite a modern Montessorian. She isn't stuck rigidly to the rules because we've realised there are times where children just absolutely need to be outdoors. Montessori believes that children until the age of three pretty much are acting subconsciously. Everything that they do is because their brain is firing and making neural pathways and making connections and what's really interesting is the theory that she built many years ago through observations, that we now know is true, that children need repetition for them to build the neuropathways in their brains. They go from zero to three years, where they need to run or they need to climb or pick up small objects, sweep, etc., subconsciously, and once you're aware of this theory, if you've a child in the classroom who's climbing on the table and chairs, there's no

Vignette (2): Mrs. Evans detailed account of the settings' outdoor space

As we continued our conversation, Mrs. Evans appeared eager to tell me about how their setting facilitates for the children, while providing examples:

Mrs. Evans: "If we've a baby in our baby room who's climbing in the classroom and we redirect them to the outdoor climbing frame, then that child would be taken outside. It's all child-driven and child-centred. The most important thing is to look at a child and try and Figure out what they're trying to tell me. We need to provide opportunities for them to fulfil their needs and that's how, you know, our forest school kind of became born. A couple of our staff were very interested in outdoor play and the forest school and underwent their training and that then came back through the nursery. We've a group of children, 15 of them, that go out once a week for the entire day, into our forest school environment, as a rural setting. We're very lucky we lease a piece of woodland and meadow. It's in an estate and the owner actually lets us run about everywhere as we have access to the whole estate. For example, the children will decide themselves in the morning what they want to do, where they want to go, and do their own risk assessment so, for example, if they decide they want to go down to the river and paddle in the river, we'll talk first about what the weather was like last night, what state the river will be in, would it be safe? And they carry out their own risk assessments and they'll have a Plan B so no one will be disappointed so, in our garden, for example, we're surrounded by fields and hedges and, in our last nursery, we'd pull out all the nettles. We don't do that here. The children need to be able to identify which plants will hurt them so they know to stay away from them. They also know, if they do touch a nettle, they need to find a Dock leaf and then they know how to treat that themselves. We want them to be responsible."

Vignette (3): Mrs. Evans identifies barriers to sustainability

As the call was coming to an end after an engaged conversation, I asked Mrs. Evans if she would be happy to share with me any barriers (if any) that they have experienced to sustainability teaching:

Mrs. Evans: "At the moment, I would say recruitment/resources."

Interviewer: "So, would you say that, generally, the barriers are financial/political?"

Mrs. Evans: "Yes."

I thanked Mrs. Evans for her time, and she thanked me back.

Discussion

5.11.1 Interpretations of Sustainability

As vignette (1) outlines, Mrs. Evans interprets sustainability through the Montessori method, as one which views young children as capable, independent individuals. She explains that this setting's understanding of the Montessori method focuses on encouraging and guiding children so they can self-direct their own learning, preparing them for life in the real world. Within early childhood, a meaningful, quality education (SDG 4) must encourage and value children's capabilities (Engdahl, 2015) where educators understand that children require guidance but also opportunities to enhance their independence.

SDG (4) concerns preparing children for the world which the gatekeeper explains, in their Montessori method, begins with independence and providing activities for the children that enable them to learn how to fend for themselves. Quality education is additionally attributed to approaches where children can learn responsibility and demonstrate their ability (Engdahl, 2015). As noted in Chapter 1 and throughout Chapter 2, the Montessori method is closely connected to sustainability in terms of democratic learning experiences (Isaacs, 2018).

5.11.2 Identified Challenges

During our discussion in vignette (3), Mrs. Evans identified financial issues relating to recruitment and resources as a barrier to sustainability:

"At the moment, I would say recruitment/resources." (Mrs. Evans)

"So would you say that, generally, the barriers are financial/political?" (Interviewer)

"Yes" (Mrs. Evans)

Mrs. Evans links underfunding with early years recruitment. There is significant evidence to support Mrs. Evans's claim that understaffed ECE settings are unable or struggling to provide 'quality' practice, which includes sustainability. For example, Celinska (2021) argues that recent documentation in the UK reveals the following:

- Early years funding rates for 2020/2021 were less than two-thirds of what government officials estimate to be the true cost of 'fully funding' the sector.
- Ministers were aware that the inadequate level of investment proposed would result in higher prices for the parents of younger children.
- Ministers were aware that this underfunding would result in nurseries, pre-schools and childminders being forced to apply the maximum statutory adult-to-child ratios, despite this risking the quality of provision.

Hence, this suggests that ECE across the UK may be de-valued and not a priority for the government when it comes to supporting settings financially. This brings the focus back to neoliberalism, which suggests the governments do not view the early years as a valuable process of learning but, rather, as a

means of generating future workers (Hastings, 2019; Pratt, 2016; Hammond, 2019).

5.11.3 Empathy

With regards to empathy, Mrs. Evans noted various links between the importance of emotions and mental health throughout the vignettes. Children are growing up in a world with constant pressure, social media and education demands, where learning how to communicate effectively, show empathy for others and how to believe in themselves should be prioritised in ECE. Mrs. Evans acknowledges this in vignette (1):

"I think it can roll into mental health issues, it's important to not do and start embedding when they are young so they learn how to take care of themselves and others." (Mrs. Evans)

The value of mental health is noted as she highlights the importance of raising confident, independent, future adults. She notes the need for stable mental health and how this is important if children are to take care of themselves and others, regulate and express themselves in an empathetic manner. Moreover, Mrs. Evans states that overpraising children can lead to a dependency on praise in adulthood to feel worthy. SDG 3.4 stipulates that health and well-being should be promoted within a quality education.

Consequently, Penney et al. (2019) argue that ECE should be a place where children can develop socially and emotionally, and that developing confidence and emotional regulation is crucial. Additionally, Mrs. Evans has expressed a value for the children's well-being by addressing the importance of children developing a strong mindset and how this can help them later, as

adults with regard to decision making and dependency. This mirrors sustainability in the journey of engaging with praxis (where children can begin to think and take action), making positive changes in the world and believing in their own capability to do so, rather than relying on adults.

5.11.4 Role of the Adult

In order for children to develop into constructors of civilisation or agents of change, educators must value and prioritise independence (Martalock, 2012). This sheds further light on the link between Montessori and sustainability, both of which are based on a belief that children deserve an education that offers experiences and provides environments in which they can act and think for themselves. That is not to say that the educators do not offer guidance or assist the children where necessary but that they tend to adopt an observer / supporter stance and avoid removing children's agency by doing everything for them.

Again, this reinforces Isaacs (2018), where the Montessori method does not involve the educator taking full control or leading but, instead, viewing learning as non-directive, following the child and acting as a facilitator. In vignette (1), Mrs. Evans supports this view of adults acting as facilitators rather than leaders in their setting:

"We encourage the children's independence" (Mrs. Evans)

"We help the children; you know we won't leave them to struggle but we encourage them rather than us just doing it for them." (Mrs. Evans)

Additionally, Mrs. Evans portrays the role of the adult as one who encourages problem solving and children being able to think for themselves. This is shown throughout the vignettes, in particular vignettes (2) and (3) which provide examples of practice. Within sustainability, there is an emphasis on children partaking in learning environments that influence how they behave (think and act).

Dewey advocates for activities and spaces that encourage respectful social interactions that allow children to grow through their experiences (Luff, 2018). When I asked Mrs. Evans to provide an example of an activity where the Montessori method encourages children to be independent thinkers, she mentioned the children learning from their own mistakes (vignette 2). This activity includes elements of Froebel's ideas about what constitutes meaningful learning experiences through exploration.

Tovey (2016) notes how a core criterion of Froebel's view on sustainability was that learning can only take place when children are actively participating in a task. Accordingly, in the activity that Mrs. Evans describes, the children are testing their thinking processes. This example reflects elements of fun, interactive and creative ways to encourage children to think critically, problem-solve and keep trying when things go wrong, all of which correlates to the aspect of reflection, where children should be encouraged to question themselves and their actions and evaluate the outcomes (Chrost, 2017). These views coincide with perceptions of children as confident individuals, which is explained in depth in the following section.

5.11.5 Perceptions of Children

In vignette (2), Mrs. Evans stated:

"The most important thing is to look at a child and try and Figure out what they are trying to tell me."

This is a crucial aspect of sustainability, where adults value children's right to express themselves and to be heard by the adult, which corresponds with Article 12 of the UNCRC (children's rights to express themselves on matters that affect them and for such views to be considered). Mrs. Evans's response reflects a listening approach to ECE and thus provides an example of sharing adult power / positioning in society, so that children are respected as equals.

Similarly, Mrs. Evans highlights how the setting holds an agentic view of children where they understand that children's role in society is crucial. As Mrs. Evans explains, their goal is for the children to feel confident and ready to face the world:

"Our goal is to have the children confident and ready to face the world when they leave our care."

Martalock (2012) argues that educators who adopt a positive view of children's development, agency and capabilities can, in turn, have a positive influence on the children's experience of ECE. Accordingly, Mrs. Evans explains that they provide opportunities for the children to decide what and where to learn:

"For example, the children will decide themselves in the morning what they want to do where they want to go and do their own risk assessment"

The children engage in their own risk assessments, which gives them space to develop agency over their own learning. Similar to the Northern Ireland vignettes, the focus here is on how children need to be exposed to an element of risk in order to develop environmental adaptability (Spiegal et al., 2014). This is highly reflective of sustainability with regards to enhancing children's independence, and strengthening their ability to be courageous, learn from experience and take action where necessary.

In vignette (3) Mrs. Evans explains how the children are aware that a Dock leaf can soothe a nettle sting, which can be found in their outdoor learning space. Unless they were exposed to nettles or made aware of the harm that nettles may cause, the children would not have truly learnt of the healing power of Dock leaves. Again, this highlights Mrs. Evans viewing the children as capable of thinking for themselves.

5.11.6 Birth to 5 Matters (Early Years Education, 2021)

The birth-5 matters framework (EYE, 2021) stipulates the importance of ECE settings developing the use of the outdoors so that young children can investigate.

Accordingly, Mrs. Evans explained in vignettes (1) and (2) that the setting has access to outside nature areas and that they facilitate the children's needs within the outdoor environments, in line with the Montessori method:

"Our forest school environment, as a rural setting we are very lucky we lease a piece of woodland and meadow it's in an estate and the owner actually lets us run about everywhere as we have access to the whole estate" "We have realised there are times where children just absolutely need to be outdoors"

This shows that the inclusion of outdoor environments is valued when it comes to the children's need to explore freely and learn. Mrs. Evans further explains that children require opportunities to build connections, and that educators should facilitate such experiences. The example shared by the gatekeeper involving children freely engaging with their forest area demonstrates her awareness that children require spaces for exploration and stimulation, and how adults should facilitate spaces based on such needs. She is emphasising the importance of adults following the child's interests instead of dismissing or deflecting these due to pressures to stick to a rigid routine, curriculum or a 'one way of thinking'.

Consequently, the Birth to Five framework prioritises the importance of 'free flow' learning, where children have a choice to move freely between outdoor and indoor environments (EYE, 2021).

5.11.7 Emerging Themes Clarified

Theme 1 - Children as problem-solvers

Throughout the vignettes, various examples are provided of the children being positioned as capable, critical thinkers.

Theme 2 – Montessori as a democratic learning alternative

The vignettes demonstrated how an alternative teaching method like

Montessori is closely connected to sustainability and enhances a democratic
learning process, where children have choices.

5.12 Critical Discussion of the Vignettes

This section will critically discuss the vignettes in relation to power / politics, values / relational ethics / emotions, personal questioning and doing things differently.

5.12.1 Summary of the Themes

Gibraltar:

In Gibraltar, the themes identified from the vignettes were traditionalism and an openness to trying new things, young children as unable to understand or absorb sustainability concepts, and environmentally focused understandings of sustainability, where empathy is not explicit.

- England:

In England, the themes identified from the vignettes were children as agents of change, empathy as crucial within sustainability and active resistance through reflexivity.

Northern Ireland:

In Northern Ireland, the themes were as follows: resilience in sustainability, a valuing of questioning / critical thinking, emotions as embedded and an appreciation for outdoor / nature learning.

- Wales:

In Wales, the two key themes were: children's perspectives on reflection and sustainability as embedded in daily practice (voices valued), with an emphasis on choice.

- Scotland:

Lastly, in Scotland, the themes positioned the children as problem solvers and the Montessori method as a democratic learning alternative.

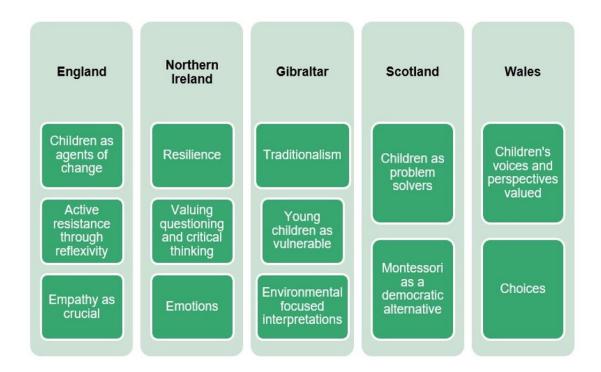


Figure 5.4: Final Themes

5.12.2 Power / Politics

In the England, Northern Ireland and Wales vignettes, there were various examples of different types of learning that do not stem from curriculum pressure. For instance, in England, the childminder prioritised play at the beach and outdoors when the children requested this. In Northern Ireland and Wales, there was extended 'play' time as the children were enjoying themselves, and no specific check-list was being followed. In Scotland, the vignettes embraced sustainability through adopting the Montessori method, involving experiential play (advocating independence, problems solving skills and agency) and the valuing of outdoor environments where children are encouraged to think and act, make mistakes and learn from them in order to build their resilience and environmental adaptability as part of 'real experiences'.

In contrast, in Gibraltar, the data suggests that less experiential learning is taking place as well as less outdoor learning and advocacy. The data for Gibraltar additionally displays a tendency for adults to take control of children's learning and, thus, restrict the children's freedom of expression and opportunities to learn how to act independently. Furthermore, some of the data for Gibraltar highlights how the educators felt pressured to abide by the statutory EYFS framework (DfE, 2021) in order to achieve the required targets. This suggests that the educators felt restrained by neoliberal pressure.

Ultimately, tensions are outlined throughout Chapter 4 and within the vignettes that highlight the Minister's words are in contrast with other key stakeholders in Gibraltar. Although the Minister stated that he welcomes new improvements as fundamental, an Educational Adviser in the Department of Education, who was originally a member of the Gibraltar CLIMACT committee (an EU-funded project about reducing our carbon footprint) challenges this statement by stating that more that could be done, but other priorities and busy schedules prohibit this. This suggests that Gibraltar could benefit from open communication regarding sustainability and how it is being prioritised and embedded in practice.

If the educators are expressing a lack of understanding and feeling pressured by the frameworks (government policies), and the Education Adviser is advocating that more should be done, while the Minister of Education is claiming that more is being done regarding sustainability than ever before, this suggests that opposing views exist about the current ECE system, which would benefit from more discussion and prioritisation around both sustainability and ECE in general.

In order to achieve this, it is essential to consider the relationship between ECE and how children are valued in society. When exploring the purpose of education there is a need to promote democracy, as Fielding and Moss (2012) argue. It should be about viewing the children as agents of change, as individuals who have a voice and a right to participate and express themselves. Thus, the conversation is moving more towards a lack of respect for children's rights, rather than ECE itself, even though the UNCRC (UN

General Assembly, 1989) promotes the core values of sustainability, which include listening to and respecting the views of the child (see Chapter 2 section 2.8). Unless this is prioritised in policy outcomes then practice will not follow.

To summarise the critique of the current ECE system in England (which is followed by Gibraltar), the next section discusses power imbalances and political governance, starting with a summary of the detrimental effects neoliberalism has on ECE and sustainability respectfully. The points highlighted in the table have been taken from the identified barriers relating to neoliberalism in the Gibraltar vignettes and data extracts outlined throughout Chapter 4.

Identified barriers from Gibraltar vignettes:		Detrimental Effects on ECEfS:
Framework and Curriculum Policy Pressures.	\longrightarrow	This indicates educators may experience periods of stress trying to abide by the checklists required. The narrow focus on a few subjects reduces space for creativity and children's interests to be followed.
2: 'Time'	$ \longrightarrow\>$	Due to the pressures of high stakes assessment and outputs, educators may struggle to embed alternative areas of teaching, such as EfS that focuses on viewing children as agents of change.
3: A sense of control by the adult – Power Imbalance	$ \longrightarrow\>$	Ultimately, this creates a learning environment where children's voices are supressed. There is less room for children to be encouraged and viewed as confident individuals able to create positive changes in the world. Thus, a power-imbalance is present where children's voices are not respected.

Table 5.2: Neoliberalism: detrimental effects on ECEfS

Building on from Table 5.2, Chrost (2017) highlights how humans should reflect on what is important, which calls for reflexivity to be valued as a process. A bottom-up approach in ECE focuses on how to become more open and how we can engage and demonstrate an awareness of personal

views, which can open up new ways of viewing the world (McLeod, 2019). It is essential for adults, both educators and those in power, to question their personal views / practice and establish what is truly important.

The key stakeholders in Gibraltar could work *together* in order to encourage the valuing of what is important first, before any changes can be made. For governments to value ECE, and for educators to resist neoliberal pressures, they must first ask themselves how they value children's participation in society and sustainability. Again, this is connected to what may be the most fundamental barrier of all: **how adults view children.**

5.12.3 Values, Relational Ethics and Emotions

When examining the data for Gibraltar, the participants did not mention or make an evident link between humans and valuing nature and the environment. In contrast, the participants and children England, Northern Ireland and Wales mirrored compassion for insects and nature, understanding they are to be cared for as different life forms. This suggests that an embedded daily sustainability ethos is not explicit in Gibraltar, where children are not being encouraged by educators to develop relational thinking.

As highlighted throughout the vignettes and data, particularly in Wales, Walsh, Bohme and Wamsler (2020) discuss relational thinking in ECE as children beginning to understand and respect non-human life forms as equal, from an empathetic perspective. In Gibraltar, a reflection of an interconnected understanding of sustainability in practice is not apparent,

where the primary focus is on the environment (recycling, collecting litter, switching off lights).

Although the environmental awareness and prioritisation demonstrated by Gibraltar participants is evident, the focus appears to be solely on the environment, not recognising that many of the social / cultural aspects (like encouraging emotional expression) and economic practices also form part of sustainability. This highlights that they may be missing some connections and viewing sustainability as a separate concept to learning rather than viewing it as something that should be *integrated into* learning.

5.12.4 Personal Questioning

In England, the childminder's words and actions show evidence of reflection as a meaningful part of practice which had a positive impact on children as agents of change. There is further evidence of children's learning that connects the three pillars of sustainability with the ECE frameworks and government policy. This is an example of an educator adopting a praxis in action approach (Pascal and Bertram, 2018. 2012), where engaging with one's own personal values and experiences can make one's work more meaningful, thus leading to more democratic experiences for children.

For instance, the childminder explained how through reflecting on her own outdoor nature based-childhood, she recognised the value this added to her education and wanted to replicate this for the children in her care. Perhaps of greatest importance is how she blurs the line between 'play' and 'learning'.

Her interpretation of sustainability in practice is evidenced within real-life opportunities as part of child-led play.

As Moss (2016) argues, educators must recognise quality as a choice rather than a necessity, as an individual responsibility to question personal / professional practice. In this way, educators can evaluate what quality means to them rather than what the political system dictates as quality (outcomes). There would be less nuance around how quality and SDG4 are understood by educators if personal questioning was prioritised as part of government ECE policy. Consequently, the data for Gibraltar demonstrate both a lack of engagement with personal questioning as well limited awareness of the SDGs.

Ultimately, educators in Gibraltar would benefit from guidance on what the SDGs are and why they are important, especially within ECE as a way to guide and embed important societal, environmental and economic issues as part of learning and teaching. Building on from section 5.12.2, there is a need for policy makers and educators to question understandings associated with quality, its relationship with sustainability and how to embed this as part of practice in a meaningful way.

5.12.5 Doing Things Differently

Crucially, the statutory EYFS framework (DfE, 2021) that is followed by both Gibraltar and England makes no reference to children's right to participation (explored by Freeman, 2018). Yet, in attempting to resist the neoliberal pressures and return the focus to children's holistic needs, the childminder in

England and educators across the UK mirrored a view of education as a meaningful experience, where children are able to express their views, and learn life-long skills that will enable them to become agents of change.

In turn, this results in better quality education, where sustainability can thrive. This mindset is essential if educators are to resist the neoliberal pressure actively, as Moss (2017) advocates, and begin to reject the view that the purpose of education is to produce outcomes. There is a need for educators in Gibraltar to question in order to resist the neoliberal associated pressure, just as the childminder in England actively decided to prioritise children's rights, participation and the SDGs.

Providing opportunities for children to develop their resilience by 'failing' and picking themselves up again, was discussed in the Northern Ireland and England vignettes, yet the data for Gibraltar indicates children as overprotected and a reluctance from educators to step away from what is familiar. Ultimately, the Scotland vignettes encourage children to learn through experiential play, how to discover the world and themselves, thereby giving them the confidence to act. Thus, it would be useful for educators in Gibraltar to consider alternative teaching styles, such as those found in the Scotland vignettes (Montessori and Experiential learning, as examples) and avoid restricting their teaching to a narrow range of subjects that focus on school readiness and assessment. Moss and Cameron (2020) stress that the dominant European discourses on ECE are solely focused on outcomes, and that it is crucial to fight for quality forms of education (sustainability), that are vital in the modern world (UNESCO, 2020).

Ultimately, the Scotland vignettes demonstrate that adopting the Montessori method enabled the educators to resist the pressure of neoliberalism (teaching for outcomes), where skills are only learnt and required for the exam process and, rather, prioritise the child and focus on life-long skills. Although the processes of self-questioning and reflexivity can be uncomfortable and scary to engage with at first (Chrost, 2017) it is important for education stakeholders to at least *try* to make a change, to be *brave* and consider the possibility of an education system that inspires children; rather than one which forces children to fit into a mould that prioritises and benefits economic values, and ignores creativity, critical thinking and being independent.

5.13 Final Conceptual Framework

The developing concepts throughout this thesis have been presented at the end of each corresponding Chapter, with the last framework outlined in section 4.11 of Chapter 4. Here, the framework is displayed in Figure 5.5 incorporating the themes that emerged from the vignettes and data of each country included in this study. For clarity, the main purpose of the framework is to capture the important elements of sustainability and their interconnections. Thus, the vignettes and data extracts suggest that educators in Gibraltar could benefit from personal questioning. In Scotland, through the Montessori approach as a democratic alternative, resilience and courage were identified as important within sustainability.

As first noted in Chapter 1, although Gibraltar educators are able to complete their teacher training across the 4 home nations and in Gibraltar, the majority

have been trained in England. A study by Bamber et al. (2016) highlight how a statutory requirement for sustainability in Scotland and Wales has enhanced sustainable practice. Yet, they stress sustainability within teacher training in England is not integrated in policy or practice level.

In a more recent discussion, Rushton et al. (2024) found that educators in England require more value to be placed on curricula and extra-curricular spaces for climate change and sustainable education. They argue, if children are to learn about the climate crisis researchers and policy makers must deliberate how educators can have more agency in their teaching in order to transform children into agents of change (Rushton et al., 2024).

Additionally, it is important to highlight how teacher training in Gibraltar does include specific modules on reflection and emotions, yet the program only launched in recent years meaning a majority of participants in this study did their teacher-training across the UK. Consequently, it is important to recognise both Rushton et al. (2024) and Bamber et al. (2016) note how sustainability is not explicit in teacher training nor education frameworks (as first identified in Chapter 2) across England, despite this study finding key examples of effective sustainable practice.

In this endeavour it is of value to re-visit and support Rushton et al. (2024) in their concluding points suggesting researchers should consider ways educators can enhance their agency and role despite policy.

Thus, the vignettes and data from England demonstrated how the educator engaged in personal questioning in order to identify the values she:

- Felt were important for the 21st century.
- Mirrored her positive experiences as a child.
- Felt would enhance sustainable education and provide opportunities for participatory learning.

Once more this centres Moss (2017) in his advocacy for educators engaging in 'active resistance' encouraging them to focus on what can be done within the restrains of policy and focus of neoliberal outcomes, such as creating alternative discourses rooted in questioning and democracy.

As first discussed in Chapter 1 it is of value to highlight there are no OFSTED checks in Gibraltar meaning there is more space and opportunity to consider implementing alternative pedagogy.

Consequently, 'personal questioning' has been added to the framework, in conjunction with 'praxis and 'reflexivity' which were already noted prior.

Furthermore, the concept of 'vulnerable perceptions of children' was first highlighted in the data presented in Chapter 4. The vignettes for Gibraltar further emphasise and solidify the need for adults to consider how children are viewed in their learning. As a result, 'perceptions of children' has been incorporated into the framework to underscore the importance of understanding how adults perceive children and how these perceptions can be translated into practice.

Additionally in Wales, there was a particular emphasis on the importance of 'choices' which has been incorporated into the framework in connection with children's rights and empowerment. In England and Northern Ireland, the vignettes and data demonstrated an appreciation of emotions and nature. Hence, 'emotions' has been added in connection with 'empathy', where

'resilience & courage' have been added in relation to 'nature'. Lastly, in Scotland there was a heavy emphasis on children being positioned as problem solvers and effective critical thinkers. As such, 'problem solving' has been added into the framework in relation to critical thinking.

In reinforcing previous points discussed in Chapter 4 under the conceptual framework (4.2), Aniere (2018) strengthens the necessity of these concepts (nature and emotions). Specifically, when exploring Indigenous beliefs time spent in nature can enhance positive connections and emotions towards the environment. This solidifies the value of children experiencing learning that is rooted in nature. As the conceptual framework is presented below, the relationship between the themes that emerged from the vignettes / data and the developing concepts throughout the thesis will be summarised in section 6.2.4 of the following Chapter (6), where any overlaps between themes and concepts will be outlined and finalised.

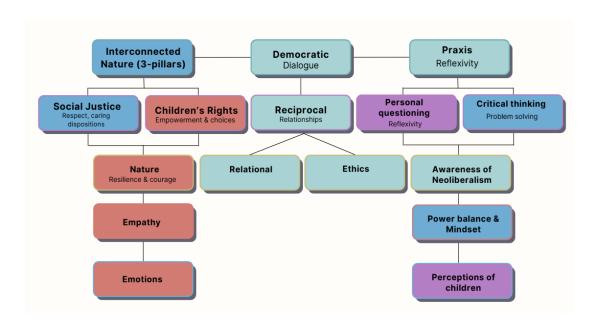


Figure 5.5: Conceptual Framework: Vignettes (Author's own work)

Chapter 6 will present the final conceptual framework and highlight the answers to the research questions before outlining the recommendations and implications for the key stakeholders in Gibraltar. The researcher's personal and professional development is also discussed and lastly, ideas for future research are presented.

Chapter 6: Conclusion

6.1 Introduction

This final Chapter highlights recommendations regarding professional development for key stakeholders in Gibraltar, focusing on Education for Sustainability (EfS), including policy makers, educators and children. It addresses themes derived from the analysis of vignettes and data presented in Chapters (4) and (5). Next, the limitations of the research design are explored and personal and professional development, are reflected upon. The Chapter concludes with considerations for potential future research in the field. Connections to the final conceptual framework are referred to throughout to demonstrate the research as a whole.

6.2 Summary of Answers to the Research Questions

This study aimed to explore sustainability across the UK and Gibraltar to inform policy and practice in the latter country.

The results indicate that overall, participants in Gibraltar would benefit from engaging in personal questioning in relation to the purpose of education and its relationship with sustainability in the context of wider neoliberal pressures to appreciate their interconnected relationship. Moreover, the results suggest that there is a need for open communication between education stakeholders in Gibraltar as there appear to be contradictions when exploring understandings, interpretations and barriers concerning Education for Sustainability (EfS).

Central to this, the findings suggest there is a need for children to have a voice and the role of empathy to be valued within sustainability discourse, research and practice for a participatory and eco-lens perspective to flourish.

Overall findings pertinent to each research question are presented in the following section.

6.2.1 RQ1: How do early years educators, children and policy makers understand sustainability in the early years in UK and Gibraltar?

The Gibraltar vignettes and data extracts demonstrated how a range of participants tend to understand sustainability through an environmental lens. While there was some awareness of the social and economic pillar, the interconnected nature and the importance of empathy were not explicit or identified as priorities; thus, implying there is not an interconnected appreciation of sustainability. The nature of empathy in the context of sustainability is essential for understanding human and non-human relations. When asked to provide examples of activities, most of the responses involved environmental priorities such as:

- Recycling
- Switching off lights
- Collecting litter from local beaches
- Planting flowers
- Printing and using less paper and or sustainable resources

On the other hand, some of the examples from the UK demonstrated interconnected understandings of EfS and an appreciation of the interconnected nature of all three pillars and the UN Sustainable Development Goals (SDGs) (UNESCO, 2020). This was prompted through

personal self-awareness and questioning, and a connection with how children are viewed.

For example, the England vignettes featured an example of an educator questioning her own values in order to reflect in relation to her teaching. This included placing a value on sustainability, the outdoors and viewing children as agents of change. Additionally, there was a focus on 'empathy' throughout the vignettes in England as children were encouraged to think 'relationally' and view the world through an eco-lens, as advocated by Walsh, Bohme and Wamsler, (2020).

In Wales, the vignettes demonstrated children's interconnected understanding of sustainability in the way they referred to taking care of the world around them and caring for nature and wildlife. The Northern-Ireland vignettes demonstrated a 'resistance' by the educators to wider neoliberal pressures in order to facilitate children's independence and questioning and to make connections with sustainability. Similarly, in Scotland the educators understood sustainability as part of the Montessori method (Martalock, 2012) in which children are encouraged to think critically, develop inquiry-based learning and take risks.

6.2.2 RQ2: How is sustainability in the early years interpreted in practice?

In terms of interpretations of practice, in Gibraltar there appeared to be a focus on the educator as the authority figure and the children as needing protection as regulations and 'structures' were emphasised. It was also noted

how some settings in Gibraltar claimed that sustainable practice is something that happens during the summer months, which indicates sustainability is viewed as separate, rather than being a normalised and embedded part of daily learning.

Contrastingly, across the UK sustainability in the main involved the educator guiding and facilitating, offering space for children to make mistakes and see the consequences as part of taking responsibility and being independent. For instance, in the Scotland vignette, sustainability was interpreted by advocating the Montessori method as an alternative pedagogy that values democratic learning and involves open dialogue as part of learning between the educator and child.

Likewise in England, there was a focus on the children and educators as colearners, exploring the world together and encouraging active participation. In Wales the children provided an example of their own engagement with reflexivity in one of their activities in which they were able to consider an alternative perspective. In this example, they engaged in debate and critical thinking when offered the appropriate, stimulating environments.

Overall, the Northern Ireland vignettes indicated that sustainability was interpreted in practice through democratic, child-led learning while valuing nature environments.

6.2.3 RQ3: What are the potential barriers that hinder sustainability in the early years in the UK and in Gibraltar, and what are their implications?

In Gibraltar there was an emphasis on: "what has always been done" and being less open to welcoming change or considering alternative ways. Data from the Gibraltar (vignettes) indicates there may be a: "set mindset" or attitude which implies it can be challenging to see the relevance of EfS and try something new.

The Gibraltar vignettes also indicated concerns by early years educators regarding curriculum demands and wider neoliberal pressures (Cameron and Moss, 2020), as well as children being perceived as: "too young to understand sustainability". The prioritisation of outcomes by early years educators in Gibraltar is having a negative impact on valuing education as a process (UNESCO, 2020; Cameron and Moss, 2020). Thus, this indicates the need for considering perceptions of children.

Collectively, the examples of interconnected EfS practice from the UK demonstrate the need for reflexivity and personal questioning in order to be aware of wider pressures and take personal responsibility in the context of early childhood education (ECE). As discussed in Chapter 1, there are significant socio-cultural, political and environmental issues present in the world today (UNESCO, 2020) that require self-awareness in order for humans to be able to value other perspectives and show compassion in a relational way (Walsh, Bohme and Wamsler, 2020) so that change can be sustained. Thus, there is a need for educators and policy makers in Gibraltar

to reconsider the purpose of education in the 21st century, the relevance of EfS and the relationship with how children are viewed.

As McLeod and Anderson (2020) recommend, children's perspectives should be taken seriously and viewed as agents of change if there is to be any significant changes in the ECE systems and in combatting neoliberalism.

The following section will explore the relationship between the findings and the final conceptual framework.

6.2.4 Relationship between findings and the final conceptual framework

As a reminder, the final themes identified through the vignettes and data extracts are outlined below:

In England:

- Children as agents of change
- Empathy as crucial within sustainability
- Active resistance through reflexive personal questioning

In Northern Ireland:

- Resilience in sustainability
- A valuing of questioning / critical thinking
- Emotions as embedded
- An appreciation for outdoor / nature learning

In Wales:

- Children as reflective learners
- Sustainability as embedded in daily practice (with an emphasis on choices for children)
- Children's perspectives and voices valued

In Scotland:

- Children as problem solvers
 Participatory / democratic learning alternative

The following table outlines how each of the final themes is either displayed or integrated in previous parts of the framework.

Final themes that are identified as essential for sustainability		Conceptual Framework	
as esse	ential for sustainability		
Wales:		These themes reflect an integrated and essential part of 'Children's Rights' in the framework.	
-	Children's perceptions and voices valued	Theme is displayed in the framework as associated with 'Children's Right's' and as connected to 'Empowerment'. Correlation between educators providing choices for children and children feeling	
-	Choices for Children	empowered to participate.	
-	Children as reflective learners	Theme is integrated as part of 'Problem Solving' and 'Critical Thinking' concepts in the framework. Engaging in problem solving can inspire opportunities for reflection.	
Scotland:			
-	Children as problem solvers	This theme is reflected in the framework as part of 'Problem Solving' and 'Critical Thinking'.	
-	Democratic alternatives	Theme highlighted as 'Democratic' in the framework. Intended for educators and adults to consider their awareness of, and the value of democratic learning.	
Northe	Northern Ireland:		
14011116	iii ii olalla.		
-	Resilience	Displayed in the framework as connected to nature and courage. Resilience is essential when it comes to children experiencing and combating sustainable issues.	
-	Valuing critical thinking	Shown in the framework as 'Critical Thinking' – in connection with problem solving.	

-	Emotions	This theme is displayed as 'Emotions' and is also connected to 'Empathy' as being essential for an eco-lens perspective to blossom.
-	A value for nature and the outdoors.	Reflected in the 'Nature' concept of the framework.
Englan	d:	
-	Empathy	As mentioned above, empathy and emotions are connected.
-	Resistance through reflexivity and personal questioning	This is mirrored in the 'Personal Questioning' and 'Reflexivity' elements of the framework.
-	Children as agents of change	This theme is central, and is displayed as the collective outcome. If educators and adults are to value the concepts and themes outlined in the framework, then children can begin to be valued as agents of change.
Gibralta	ar:	
-	Challenge traditional views	Reflected in 'Mindset'. Ultimately, when educators and adults engage with 'Personal questioning' and 'Reflexivity', it can open up new ways of seeing.
-	Challenge the view of young children as vulnerable	This theme is mirrored in 'Perceptions of children'. Adults are encouraged to consider how they perceive children and why their perceptions are important and reflected in teaching practice.
-	Challenge environmental focused understandings	As a response to this theme, the '3-Pillars – Interconnected Nature' concept in the framework draws attention to the importance of adults understanding sustainability from a holistic perspective.

- Table 6.1: Conceptual Framework & Final Themes

The final themes outlined in table 6.1 are integrated parts of the conceptual framework displayed below.

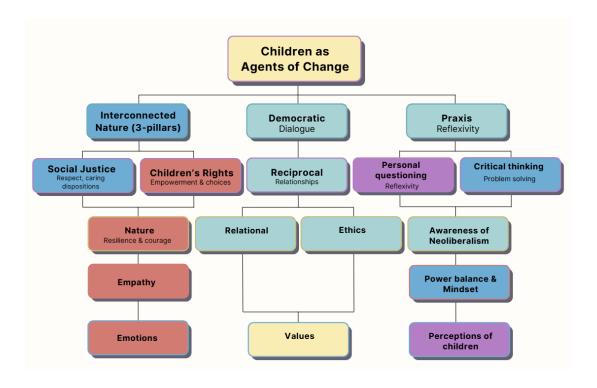


Figure 6.1: Final Conceptual Framework (Connections) (Author's own work)

A critical component of this research project, embedded within the framework's concept of 'Social Justice' is the engagement with Indigenous communities and the emphasis on decolonising curricula across educational contexts. Chapter 1 provided the foundational rationale for the study's focus on 'evaluation', specifically to explore sustainability through Indigenous perspectives centred on respect. In Indigenous paradigms, 'evaluation' is understood as a means to 'access what is valued'. Consequently, the final conceptual framework reflects key sustainability areas that merit attention and respect. To break this down further; Indigenous lenses of evaluation and sustainability have informed the final conceptual framework in capturing and drawing attention to areas of sustainability that must be valued.

This study proposes that when adults recognise, prioritise and value these concepts (as outlined in Figure 6.1), they can begin to see children as influential agents of change. Thus, 'Children as Agents of Change' is positioned at the top of the framework as the primary collective outcome. Additionally, 'values' is emphasised and incorporated as the final concept at the base of the framework in alignment with relational ethics, underscoring the on-going questioning of values / assumptions to foster effective and enduring Education for Sustainability (EfS) practices. This solidifies the extent to which Indigenous perspectives on sustainability and the significance of values have profoundly influenced both the development of this thesis and the resulting conceptual framework.

In highlighting an additional essential component of this project, the following section will address the links with the climate crisis.

Given the imperative need for change particularly with the climate crisis, when looking at the roles of 'resilience' and 'courage' in the context of sustainability, this study is in line with both Spiegal et al. (2014) and Boyd et al. (2021) who highlight the necessity for children as agents of change to foster resilience and courage in advocating for a sustainable future.

Particularly, an important link with SDG (13) – Climate Action, additionally emphasises the importance of resilient, motivated and courageous individuals in creating positive transformations (UNESCO, 2020).

Central to this discussion, Reibold (2023) stresses the role of children within ECE in addressing the climate crisis, emphasising the crucial need for a new generation of critical thinkers ready to create sustainable change. In order to facilitate this, Leon-Jimenez et al. (2020) urge educators to encourage environments that are both secure and stimulating, that foster emotional expression, empathy and connections with the natural world.

Ultimately, in response to the final themes for Gibraltar, the conceptual framework of this study responds to the challenges of perceiving children as vulnerable, holding environmentally focused understandings and keeping a traditional mindset by encouraging awareness of:

- Personal reflexive questioning
- How perceptions of children can influence practice
- Interconnected nature of sustainability (3-Pillars)

As a result, Moss (2017) calls attention to the significance of personal questioning that encourages adults to consider their values, to reflect on the purpose of education in the 21st century and deliberate on new ways of supporting children in their role as agents of change.

6.3 Recommendations

This section outlines the recommendations for different key stakeholders in Gibraltar, namely, educators, children and policy makers. This research has shown that for sustainability to be long term and to take effect, there is a need to start with personal awareness by all in a way that is participatory, respectful, safe and open. As such, a Department of Education member in Gibraltar expressed an interest in speaking with me and discussing the

findings of this study with ways of moving forward positively (interview can be found in Appendix XII).

Hence, the recommendations for this research are a set of prevocational prompts to encourage personal questions. They are designed as a starting point to see what emerges collectively as a way forward to inspire changes to practice. For this reason, the questions are very similar in the hope that dialogue between stakeholders in Gibraltar can take place to determine collective understandings and future pathways.

6.3.1 Policy Makers

Much of the debate throughout this thesis has explored the detrimental effect of neoliberalism on education systems. As Gawarikar and Xavier (2019) urge, governments and those in higher positions involved in local and national level need to adopt a reflexive thinking process that enables individuals to focus on what is truly important. Policy makers (ministers and department members) in Gibraltar sit at the top of the 'hierarchy' that often operates from the 'top-down' (McLeod and Giardiello, 2019). This research recommends professional development that can encourage a 'bottom-up' approach which challenges the current system and instead focuses on empowering educators and valuing respectful communication (McLeod, 2019). The following prompts are recommendations for policy makers.

Prompts:

- What are the problems faced in society?
- What characteristics are important / needed in the 21st century?
- What qualities / characteristics does society want children to have?

- What is the purpose of education and what is it for?
- How are children viewed in society and early education?
- Does anything need to change?

6.3.2 Educators

Results indicate it would be pragmatic to merge sustainability within teacher training and CPD (continuing professional development) areas so trainee teachers are actively questioning their views on the purpose of education. Such questions would focus on educators thinking about skills that contribute to agents of change, analysing their views on children's role in society and beginning to consider how their role currently influences children.

The following prompts are suggested to help guide this process. It is important to highlight a key implication from the findings pointed to the SDGs not being embedded in practice in Gibraltar. Thus, the final question is designed to prompt awareness on and encourage educators in Gibraltar to consider incorporating teaching that mirrors the SDGs in practice:

Prompts:

- What characteristics are important in the 21st century?
- What qualities and characteristics do we want to nurture in children?
- What is the purpose of education and what is it for?
- How do I view children's role in society and early education?
- What do my responses show me?
- What questions do I need to ask?
- How do I listen to children to show I value their voice and opinion?
- What is needed and what can I change?
- How could I merge the Sustainable Development Goals (SDGs) within my teaching practice?

6.3.3 Children

The recommendations for the children are formulated drawing on both the research findings and are in line with SDG 4.2 and quality education which recognises children as agents of change (UNESCO, 2020). The questions are as follows:

Prompts:

- What do you enjoy about school / nursery?
- How do you like to learn and play?
- What do you like best?
- Is there anything you are worried about at the moment?
- What stops you from learning?
- How are you listened to?
- What opportunities do you have to make decisions?

In summary, this study recommends that educators and adults in Gibraltar should consider the value of the prompts in order to nurture and inspire positive change. In addition, this study recommends that adults engage with the final conceptual framework (Figure 6.1) which can help promote awareness and understanding of essential elements of sustainability. These elements are necessary to encourage children to become agents of change and to help educators adopt the appropriate mindset.

6.4 Limitations

As discussed by Mwita (2022), there can be several limitations associated with qualitative research which for this study concerned an awareness of subjectivity and the impact of covid.

6.4.1 Researcher's Subjectivity

A pivotal element of this research study has been my own journey in acknowledging bias and engaging reflexivity throughout.

As Alase (2017) stipulates, when researchers engage in a state of self-reflection by exploring their views, beliefs and identify biases, they may develop a 'sense of self'. Although uncomfortable, it was crucial for me to go through this process. Nonetheless, bias can never fully be eliminated and for that reason, it has been an important limitation to highlight and discuss.

Section 6.5 (Professional and Personal Development) will expand on this section and demonstrate the learning I have taken from this journey.

6.4.2 Covid-19

As highlighted in Chapter 3 (section 3.5.2) the pandemic has had negative effects on this research project, for instance, there was less opportunities to visit settings and speak to participants. Additionally, it was difficult to travel on public transport as many journeys were cancelled on the daily.

The impact on sickness due to Covid-19 also took effect, as some settings were not able to follow through. It is undoubtable that these issues impacted the depth of discussion and quality of data. It is evident that this study would have further benefited from exploring EfS practice (for example observational data in Scotland) to enable further comparisons. Nonetheless, on the positive side, I was able to record conversations using video conferencing accurately.

6.5 Professional and Personal Development

This section discusses an awareness of bias which led me to make connections between all areas of this project and how they are interconnected. For example, I have noticed the correlation between 'professional' development and 'personal' development. They are not separate from each other but rather work together, simultaneously.

For instance, Figure 6.2 mirrors a key correlation between my own stance and an ethics of care the start of this study and themes (1) and (3) that were identified from the Gibraltar vignettes. This demonstrates how the themes from Gibraltar reflect my own personal and professional positionality at the start of this research four years ago.

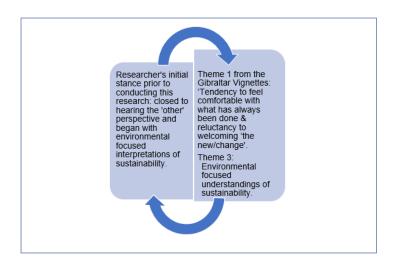


Figure 6.2: Correlation between themes and the researcher's initial positioning (Author's own work).

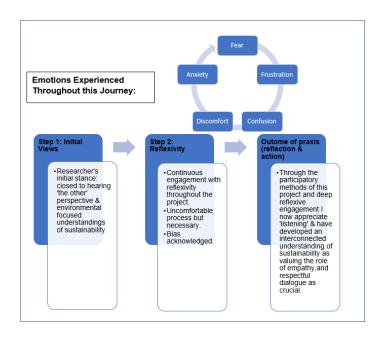


Figure 6.3: Outcome of the researcher's journey throughout the project (Author's own work).

Thus, Figure 6.3 builds on Figure 6.2 and shows how I have progressed and challenged my mindset through engagement with reflexivity, allowing me to consider new ways of 'being'. A fundamental connection with Pascal and Bertram's (2018) advocacy on praxeology is how my own developing values were identified through reflection and only then could be put into action. As they stress, it is essential for humans to engage in participatory practice in order to gain better understandings and ultimately transform them.

6.6 Future Research

Chapter 1 identified a gap in the literature and research on sustainability in early years education (ECE) in Gibraltar. Consequently, the findings and recommendations of this research offer insights into how sustainability is perceived and practiced, along with the associated barriers. This could be

built on to focus on children's views which was an aspect that was not as detailed as hoped due to the impact of covid-19.

This study focused on qualitative methods involving 'conversations' with the children, therefore other studies could consider engaging in more creative, artistic approaches with the children enabling deep insights. Additionally, a fundamental finding of this study suggests that children are not currently given many opportunities to connect with nature and develop caring dispositions, which potentially suggests research opportunities to explore and further investigate how adults understanding of eco-learning could be strengthened and prioritised within ECE.

6.7 Concluding Thoughts

Given the urgent need for positive change and intervention, particularly concerning the socio-cultural, political, and environmental challenges of today's world, the conceptual framework that emerged from this research identifies key elements for understanding and embedding sustainability as an interconnected concept in early years education (ECE). Along with the prevocational prompts (section 6.3), this framework is intended to support professional development for policymakers, educators, and children in the early years sector. Specifically, there is an urgent need to prioritise education for sustainability and the interconnected nature of the social, environmental, and economic domains and in doing so, encourage children as critical thinkers and agents of change.

References

Adams, E. (2010). The joys and challenges of semi-structured interviewing. Community Educator, 83(7).

Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, *5*(2).

Alexander, K. (1994). The Purpose of Education: peace, capitalism and nationalism. *Journal of Education Finance*, 19(4), 17-28.

Ang, L. (2014). Preschool or prep school? Rethinking the role of early years education. *Contemporary Issues in Early Childhood*, *15*(2).

Aniere, C. (2018). Millennium Kids – for young people who want to change their world. Retrieved 29 March 2021, from https://www.millenniumkids.com.au/.

Aniere, C., Wooltorton, S., & Boyd, D. (2022). Kids on Country: An Indigenous Programme in Australia In McLeod, N., Boyd, D., Garrison, D., & Effiong Okon, E. (2022). Global Perspectives of Early Childhood Education: Valuing Local Cultures. *Global Perspectives of Early Childhood Education*, (13-24)

Anteby, M., & Molnar, V. (2012). Collective memory meets organizational identity: Remembering to forget in a firm's rhetorical history. Academy of Management Journal, 55(3), 515-540.

Archer, E. G. (2013). Gibraltar, identity and empire. Routledge.

Aristotle. (1969) Aristotle on Education Extracts from the Ethics and Politics. Edited.

Ärlemalm-Hagsér, E., & Davis, E., (2020) Eds Researching Early Childhood Education for Sustainability Challenging Assumptions and Orthodoxies.

Ärlemalm-Hagsér, E., & Elliott, S. (2017). Contemporary research on early childhood education for sustainability.

Armon, J., Scoffham, S., & Armon, C. (Eds.). (2019). *Prioritizing Sustainability Education: A Comprehensive Approach*. Routledge.

Aspers, P., & Corte, U. (2019). What is Qualitative in Qualitative Research. Qualitative Sociology, 42(2), 139-160.

Azungah, T. (2018). Qualitative research: deductive and inductive approaches to data analysis. *Qualitative research journal*.

Ball, S. J. (2012). Politics and policy making in education: Explorations in sociology. Routledge.

Ball, S. (2017). *The Education Debate (Third Edition)*. 3rd ed. Bristol: Policy Press.

Bamber, P., Bullivant, A., Glover, A., King, B., & McCann, G. (2016). A comparative review of policy and practice for education for sustainable development/education for global citizenship (ESD/GC) in teacher education across the four nations of the UK. *Management in Education*, 30(3), 112-120.

Barblett, L. (2010). Why play-based learning?. Every Child, 16(3), 4-5.

Barrett, M. J., Harmin, M., Maracle, B., Patterson, M., Thomson, C., Flowers, M., & Bors, K. (2017). Shifting relations with the more-than-human: Six threshold concepts for transformative sustainability learning. *Environmental Education Research*, 23(1).

Barter, C., & Renold, E. (1999). The use of vignettes in qualitative research. *Social research update*, *25*(9), 1-6.

Bashan, B., & Holsblat, R. (2017). Reflective journals as a research tool: The case of student teachers' development of teamwork. *Cogent Education*, *4*(1).

Bass, R. V., & Good, J. W. (2004). Educare and educere: Is a balance possible in the educational system?. In *The educational forum* (Vol. 68, No. 2, pp. 161-168). Taylor & Francis Group.

Bastos, R. M. B. (2017). The surprising success of the Finnish educational system in a global scenario of commodified education. *Revista Brasileira de Educação*, 22(70).

Bauml, M. (2016). One size never fits all: Teachers' responses to standardized curriculum materials and implications for early childhood teacher educators. *Journal of Early Childhood Teacher Education*, 37(1).

Bennett, N. J., Blythe, J., Cisneros-Montemayor, A. M., Singh, G. G., & Sumaila, U. R. (2019). Just transformations to sustainability. *Sustainability*, *11*(14), 3881.

Berger, R. (2013). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. Qualitative Research, 15(2), 219–234. doi:10.1177/1468794112468475.

Berryman, D. R. (2019). Ontology, epistemology, methodology, and methods: Information for librarian researchers. *Medical reference services quarterly*, 38(3), 271-279.

Bertram, T., Formosinho, J., Gray, C., Pascal, C., & Whalley, M. (2016). EECERA ethical code for early childhood researchers. *European Early Childhood Education Research Journal*, 24(1).

Bertram, T., Pascal, C., & Rousse, L. (2019) Getting it Right in the Early Years Foundation Stage: A review of the evidence. Centre for Research in Early Childhood; London.

Bhambra, G. K., & Holmwood, J. (2021). *Colonialism and modern social theory*. John Wiley & Sons.

Biesta, G. J. (2015). Beautiful risk of education. Routledge.

Blackstone, A. (2018). Principles of sociological inquiry: Qualitative and quantitative methods.

Boland, N. (2015). The globalisation of Steiner education: Some considerations.

Bolea, P. (2020). The datafication of primary and early years education: playing with numbers: by A. Bradbury and G. Roberts-Holmes, London, Routledge.

Borg, F., & Gericke, N. (2019). Concrete Examples of Education for Sustainability Practices in Preschools in Sweden. In *ECER 2019, Hamburg'' Education in an Era of Risk-the Role of Educational Research for the Future''*, *Universität Hamburg*, 3-6 September 2019.

Bower, V. (Ed.). (2020). Debates in Primary Education. Routledge.

Bowman, S. (2017). In defence of neoliberalism. *Policy: A Journal of Public Policy and Ideas*, 33(3), 35-40.

Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input.

Boyd, D. (2018). Early childhood education for sustainability and the legacies of two pioneering giants. *Early Years*, 38(2), 200-239.

Boyd, D. (2020) EYFS Best Practice – All about Early Childhood Education for Sustainability. Available at:

https://www.nurseryworld.co.uk/features/article/eyfs-best-practice-all-about-early-childhood-education-for-sustainability.

Boyd, D., Hirst, N., & Siraj-Blatchford, J. (Eds.). (2017). *Understanding Sustainability in Early Childhood Education: Case studies and approaches from across the UK*. Routledge.

Boyd, D., King, J., Neame, J., Scollan, A., & McLeod, N. (2021). An Early Childhood Education for Sustainability resource that embeds the Sustainable Development Goals and STEM into pedagogical practice.

Brantmeier, E. J. (2013). Toward a critical peace education for sustainability. *Journal of peace education*, *10*(3), 242-258.

Braun, V. & Clarke, V., (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), pp.77–101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative research in sport, exercise and health*, *11*(4), 589-597.

Britto, P. (2015). Why early childhood development is the foundation for sustainable development. *UNICEF Connect. October*, 22, 2015.

Brogaard Clausen, S. (2015). Schoolification or early years democracy? A cross-curricular perspective from Denmark and England. *Contemporary Issues in Early Childhood*, 16(4), 355-373.

Brown, K., Adger, W. N., Devine-Wright, P., Anderies, J. M., Barr, S., Bousquet, F.,& Quinn, T. (2019). Empathy, place and identity interactions for sustainability. *Global environmental change*, *56*, 11-17.

Brundtland, G. (1987). Report of the World Commission on Environment and Development: Our Common Future. United Nations General Assembly document A/42/427.

Buckley, P. J. (2016). Historical research approaches to the analysis of internationalisation. *Management International Review*, *56*(6).

Burnet, J., (2017). *Aristotle On Education*. CreateSpace Independent Publishing Platform.

Burton, I. (1987). Report on reports: Our common future: The world commission on environment and development. *Environment: Science and Policy for Sustainable Development*, 29(5), 1-29.

Busetto, L., Wick, W., & Gumbinger, C. (2020). How to use and assess qualitative research methods. *Neurological Research and practice*, 2, 1-10.

Caine, V., Chung, S., Steeves, P., & Clandinin, D. J. (2020). The necessity of a relational ethics alongside Noddings' ethics of care in narrative inquiry. *Qualitative Research*, 20(3).

Callanan, M., & NatCen Social Research. (2017). Study of early education and development: Good practice in early education. London, UK: Department for Education.

Camara, C., Drape, K., & Krishnan, K. (2020). The co-production of research with children and young people. *British Journal of Nursing*, *29*(12), 674-676.

Cameron, C., & Moss, P. (Eds.). (2020). Transforming Early Childhood in England:: Towards a Democratic Education. UCL Press.

Campbell, Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, *25*(8), 652–661. https://doi.org/10.1177/1744987120927206.

CCEA, (2007). Understanding The Foundation Stage. Belfast.

Celinska, A. (2021) Shocking Documents on Early Years Underfunding. EYE.

Christie, B., & Higgins, P. (2020). The Educational Outcomes of Learning for Sustainability: A Brief Review of Literature.

Chalkley, B., Haigh, M. J., & Higgitt, D. (Eds.). (2008). *Education for Sustainable Development*. Routledge.

Chrost, M. (2017). Reflectivity in education. The process of knowing yourself. *Studies of Paedagogica Ignatiana*, 20 (2).

Clark, A. (2017). Listening to young children, expanded third edition: A guide to understanding and using the mosaic approach. Jessica Kingsley Publishers.

Clarke, V, & Braun, V. (2017) Thematic analysis, The Journal of Positive Psychology, 12:3, 297-298, DOI: <u>10.1080/17439760.2016.1262613.</u>

Coalition of Early Years Sector Organisations (2020) Statement on the new non-statutory guidance for the EYFS.

Cook, T., Brandon, T., Zonouzi, M., & Thomson, L. (2019). Destabilising equilibriums: Harnessing the power of disruption in Participatory Action Research. *Educational Action Research*, *27*(3).

Cormier, P. N. (2017). British colonialism and indigenous peoples: The law of resistance–response–change. *Peace Research*, 39-60.

Correia, N., Camilo, C., Aguiar, C., & Amaro, F. (2019). Children's right to participate in early childhood education settings: A systematic review. *Children and Youth Services Review*, 100.

Costa, P., Cruz, A. C., Alves, A., Rodrigues, M. C., & Ferguson, R. (2022). The impact of the COVID-19 pandemic on young children and their caregivers. *Child: care, health and development, 48*(6), 1001-1007.

Cottle, M., & Alexander, E. (2012). Quality in early years settings: Government, research and educators' perspectives. *British Educational Research Journal*, 38(4).

Craft, M. (1984). Education for diversity. In Education and cultural pluralism, ed. M. Craft, 5–26. London and Philadelphia: Falmer Press.

Crawford, H. (2021). The revised EYFS Framework–exploring 'Past and Present'. *Primary History*, *87*, 8-10.

Crisostomo, A. T., & Reinertsen, A. B. (2021). Becoming Child and Sustainability—The Kindergarten Teacher as Agency Mobiliser for Sustainability Through Keeping the Concept of the Child in Play. *Sustainability*, *13*(10), 5588.

Darder, A. (2017). Reinventing Paulo Freire: A pedagogy of love. Taylor & Francis.

Darrah, P. (2019). HOW DOES QUALITY EDUCATION FACTOR INTO SUSTAINABLE DEVELOPMENT? [Blog]. Retrieved from https://www.gvi.co.uk/blog/how-does-quality-education-factor-into-sustainable-development/.

Davis, J., Elliott, S. (Eds). (2014). Research in early childhood education for sustainability: International perspectives and provocations. London and New York, NY: Routledge.

Dei, G. J. S. (2019). Neoliberalism as a new form of colonialism in education. In *Confronting educational policy in neoliberal times* (pp. 40-58). Routledge.

DeMarco, C. (2020). LibGuides: Section 1: Conceptual Framework.

Department for Education (2017) Statutory Framework for the Early Years Foundation Stage. Available

at: https://www.gov.uk/government/publications/early-years-foundation-stage-framework--2 (Accessed: 18 March 2021).

Department for Education. (2021) Statutory framework for the early years foundation Stage: Setting the standards for learning, development and care for children from birth to five. London: DfE.

Department for Education. (2023) Early Years Foundation Stage Profile: 2024 Handbook. London: DfE.

Department for Education (2020) *Early Years Foundation Stage Reforms*. Available at: https://consult.education.gov.uk/early-years-quality-outcomes/early-years-foundation-stage-reforms/supporting_documents/EYFS%20reforms%20consultation.pdf (Accessed: 3 April 2020).

Department for Education (2023) Sustainability and climate change: A strategy for the education and children's Services Systems, GOV.UK. Available at: https://www.gov.uk/government/publications/sustainability-and-climate-change-a-strategy/sustainability-and-climate-change-a-strategy-for-the-education-and-childrens-services-systems (Accessed: 16 August 2023).

Department for Education (DfE). (2021). Sustainability & Climate Change a Draft Strategy for the Education & Children's Services Systems.

Department for Education. (2014). Promoting fundamental British values as part of SMSC in schools: Departmental advice for maintained schools.

Dernbach, J. C., & Cheever, F. (2015). Sustainable development and its discontents. *Transnational Environmental Law*, *4*(2), 247-287.

Dewey, J. (1916). Democracy and education: An introduction to the philosophy of education. New York: MacMillan.

Dittmer, J. (2021). Putting geopolitics in its place: Gibraltar and the emergence of strategic locations. *Political Geography*, 88, 102405.

Dooks, T. C. (2022). COP27: Key outcomes and next steps for the UK-December 2022.

Duckworth, C. (2008). Maria Montessori and peace education. *Encyclopedia of peace education*, 33-37.

Dunlop, A. W. (2016). A view from Scotland: early years policy in the four nations: common challenges, diverse solutions. *Early Education Journal*, 78(Spring).

Dwyer, S. C., & Buckle, J. L. (2009). The space between: On being an insider-outsider in qualitative research. *International journal of qualitative methods*, 8(1), 54-63.

Dybdahl, R., & Lien, L. (2017). Mental health is an integral part of the sustainable development goals. *Prev Med Commun Health*, 1(1), 1-3.

Early Years Education (2021) Birth to 5 Matters: Non-statutory guidance for the Early Years Foundation Stage. Available at: https://birthto5matters.org.uk/wp-content/uploads/2021/04/Birthto5Matters-download.pdf (Accessed: 24 March 2022).

Edmunds, F. (2013). *An introduction to anthroposophy: Rudolf Steiner's world view.* Rudolf Steiner Press.

Ellis, C. (2016). Compassionate research: Interviewing and storytelling from a relational ethics of care. In *The Routledge international handbook on narrative and life history* (pp. 441-455). Routledge.

Engdahl, I. (2015). Early childhood education for sustainability: The OMEP world project. *International Journal of Early Childhood*, *47*(3).

Eriksen, E. (2018). Democratic participation in early childhood education and care-serving the best interests of the child. *Tidsskrift for Nordisk barnehageforskning*, 17(1).

ESCAP, U. (2019). Asia and the Pacific SDG Progress Report 2019.

Esin, C. (2011). Narrative analysis approaches. *Qualitative research methods in psychology*, *1*, 92-118.

Faul, M. V., & Welply, O. (2021). Decolonising education.

Fea, J. (2013). Why Study History?: Reflecting on the Importance of the Past. Baker Academic.

Feliu-Torruella, M., Fernández-Santín, M., & Atenas, J. (2021). Building Relationships between Museums and Schools: Reggio Emilia as a Bridge to Educate Children about Heritage. *Sustainability*, *13*(7), 3713.

Ferguson, J. (2022) Why are Early Years Practitioners not talking to young children about racism? HFL-Education. Available at: https://www.hfleducation.org/blog/why-are-early-years-practitioners-not-talking-young-children-about-racism (Accessed: 15 July 2023).

Fielding, M., & Moss, P. (2012). Radical democratic education. In 2012 Annual Meeting Theme: 107th ASA Annual Meeting. ASA (pp. 1-37).

Finlay, L. (2008). Reflecting on 'Reflective practice'. Practice-based Professional Learning Paper 52, The Open University.

Fleming, J. (2018). Recognising and Resolving the Challenges of Being an Insider Researcher in Work-Integrated Learning. *International Journal of Work-Integrated Learning*, 19(3).

Flick, U. (Ed.). (2017). The Sage handbook of qualitative data collection. Sage.

Flores Pérez, F. (2015). Comparative study between United Kingdom education system and Spain education system.

Font, X., Garay, L., & Jones, S. (2016). A social cognitive theory of sustainability empathy. *Annals of Tourism Research*, *58*, 65-80.

Food and Agriculture Organisation (2019). *The State Of The World's Biodiversity For Food And Agriculture*. Rome: Food & Agriculture Org.

Freeman, M. (Ed.). (2018). *Children's rights: New issues, new themes, new perspectives*. BRILL.

Freire P (1992) Pedagogy of Hope. New York: Continuum (Reprinted 2009).

Freire P (1998) Extensión o Comunicación? La concientización en el medio rural. Siglo Veintinuno Editores.

Freire, P. (1970). Pedagogy of the Oppressed. New York: Seabury Press.

Froebel, F. & Jarvis, J. (1899) Friedrich Froebel's Education by development. New York, D. Appleton and company. [Pdf] Retrieved from the Library of Congress, https://www.loc.gov/item/99001290/.

Gallagher, C. A. (2019). White racial formation: Into the twenty-first century. In *Race and ethnic conflict* (pp. 24-29). Routledge.

Gaunt, C (2020) Sustainability missing from EYFS reforms; Available at: Gaunt, C., 2020. Sustainability Missing From EYFS Reforms. [online] Nursery World. Available at:

https://www.nurseryworld.co.uk/news/article/sustainability-missing-from-eyfs-reforms> [Accessed 14 September 2020].

Gawarikar, V., & Xavier, P. V. (2019). Critical Thinking: An Indispensable Dimension In The Course Of Sustainable Development.

Geiger, N., & Swim, J. K. (2021). A balance theory perspective into lay perceptions of the three pillars of sustainability. *The Sustainability Communication Reader: A Reflective Compendium*.

Giardiello, P. (2013). The roots and legacies of four key women pioneers in early childhood ecucation. Sheffield: Taylor and Francis.

Gibbs, G., (1988). Learning by Doing: A Guide to Teaching and Learning Methods.

Gibraltar Socialist Liberal Party, (2019). GSLP Liberals Manifesto 2019. Gibraltar: GSLP.

Gibraltar Socialist Liberal Party, (2023). GSLP Liberals Manifesto 2019. Gibraltar: GSLP.

Gill, S. L. (2020). Qualitative sampling methods. *Journal of Human Lactation*, *36*(4), 579-581.

Glazzard, J., & Rose, A. (2019). The impact of teacher well-being and mental health on pupil progress in primary schools. *Journal of Public Mental Health*.

Gobena, G. A. (2020). Factors Influencing Participation in Early Childhood Education: Its Implication to Quality-Education. *International Online Journal of Education and Teaching*, 7(1).

Gopnik, A., Griffiths, T. L., & Lucas, C. G. (2015). When younger learners can be better (or at least more open-minded) than older ones. *Current Directions in Psychological Science*, *24*(2).

Gov.Scot. (2020). *Building Standards: Building Regulations - Gov.Scot.* [online] Available at: https://www.gov.scot/policies/building-standards/monitoring-improving-building-regulations/ [Accessed 30 July 2020].

Government of Gibraltar (2020). *Department Of Education*. [online] Available at: https://www.gibraltar.gov.gi/education> [Accessed 3 September 2020].

Gray, D., Royall, B., & Malson, H. (2017). Hypothetically Speaking: Vignettes as a Stand-alone Qualitative Method. In . Collecting qualitative data: A practical guide to textual, media and virtual techniques. Cambridge University Press.

Grenier, J. (2019) What happened to curriculum in the early years?. *Profession*, 18, 19.

Grenier, J., & Vollans, C. (Eds.). (2022). *Putting the EYFS Curriculum Into Practice*. SAGE.

Hall, K., Cunneen, M., Horgan, M., Cunningham, D., Murphy, R., & Ridgway, A. (2014). *Loris Malaguzzi and the Reggio Emilia experience*. Bloomsbury Publishing.

Hammond, C., (2019) Folds, Fractals and Bricolages for hope, in Gibbs, P and Peterson, A: Higher Education and Hope. Palgrave Macmillan.

Handl, G. (2012). Declaration of the United Nations conference on the human environment (Stockholm Declaration), 1972 and the Rio Declaration on Environment and Development, 1992. *United Nations Audiovisual Library of International Law*, 11.

Hannah, D. R., & Lautsch, B. A. (2011). Counting in qualitative research: Why to conduct it, when to avoid it, and when to closet it. *Journal of Management Inquiry*, 20(1), 14-22.

Harper, N. J. (2017). Outdoor risky play and healthy child development in the shadow of the "risk society": A forest and nature school perspective. *Child & Youth Services*, *38*(4), 318-334.

Hastings, M. (2019). Neoliberalism and Education. In *Oxford Research Encyclopedia of Education*.

Hellawell, D. (2006). <u>Inside-out: Analysis of the insider-outsider concept as a heuristic device to develop reflexivity in students doing qualitative research.</u> *Teaching in Higher Education, 11*(4), 483–494. doi:10.1080/13562510600874292.

Henty, N. (2021) Reception Year: The Birth to Five Matters. MA Education Limited.

Holmberg, A., & Alvinius, A. (2020). Children's protest in relation to the climate emergency: A qualitative study on a new form of resistance promoting political and social change. *Childhood*, *27*(1), 78-92.

Holmes, A. G. D. (2020). Researcher Positionality--A Consideration of Its Influence and Place in Qualitative Research--A New Researcher Guide. Shanlax International Journal of Education, 8(4), 1-10.

Horsthemke, K. (2020). Non-Human Animals and Educational Policy: Philosophical Post-humanism, Critical Pedagogy, and Ecopedagogy. *Journal of philosophy of education*, *54*(4), 900-915.

Hunter, T., & Walsh, G. (2014). From policy to practice?: the reality of play in primary school classes in Northern Ireland. *International Journal of Early Years Education*, 22(1).

Imenda, S. (2014). Is there a conceptual difference between theoretical and conceptual frameworks?. *Journal of social sciences*, *38*(2), 185-195.

Isaacs, B. (2018). *Understanding the Montessori approach: Early years education in practice*. Routledge.

Janesick, V. J. (1998). Journal Writing as a Qualitative Research Technique: History, Issues, and Reflections.

Janghorban, R., Latifnejad Roudsari, R., & Taghipour, A. (2014). Pilot study in qualitative research: The roles and values. *Journal of hayat*, 19(4), 1-5.

Jansen, J. C., Osterhammel, J., & Riemer, J. (2017). *Decolonization: A Short History*. Princeton University Press. https://doi.org/10.2307/j.ctvc77drk

Jarke, J., & Breiter, A. (2019). the datafication of education. *Learning, Media and Technology*, *44*(1), 1-6.

Jarvis, P., Swiniarski, L., & Holland, W. (2016). *Early Years Pioneers in Context: Their lives, lasting influence and impact on practice today.* Taylor & Francis.

Jones, L., Osgood, J., Holmes, R., & Urban, M. (2016). Reimagining quality in early childhood.

Kangas, J. (2016). Enhancing children's participation in early childhood education through participatory pedagogy. *Helsinki: University of Helsinki. Viitattu*, *8*, 2017.

Kaufman, M. J., Kaufman, S. R., & Nelson, E. C. (2015). Learning together: The law, politics, economics, pedagogy, and neuroscience of early childhood education. Rowman & Littlefield Publishers, Incorporated. Created from Ijmu on 2023-11-29 23:52:22.

Kawakami, A. J., Aton, K., Cram, F., Lai, M. K., & Porima, L. (2007). Improving the practice of evaluation through indigenous values and methods: Decolonizing evaluation practice—Returning the gaze from Hawai'i and Aotearoa. *Fundamental issues in evaluation*, 219-242.

Kessler, S. A., & Swadener, B. B. (Eds.). (2019). *Educating for Social Justice in Early Childhood*. Routledge.

Kiger, M, & Varpio, L. (2020): Thematic analysis of qualitative data: AMEE Guide No. 131, Medical Teacher, DOI: 10.1080/0142159X.2020.1755030.

Kopecký. (2011). Foucault, Governmentality, Neoliberalism and Adult Education - Perspective on the Normalization of Social Risks. *Journal of Pedagogy (Warsaw)*, 2(2), 246–262. https://doi.org/10.2478/v10159-011-0012-2.

Kopnina, H. (2020). Education for the future? Critical evaluation of education for sustainable development goals. *The Journal of Environmental Education*, *51*(4), 280-291.

Ladkin, S. (2017). Exploring unequal power relations within schools: The authenticity of the student voice.

Lambert, M. (2019). Grounded theory. *Practical Research Methods in Education: An Early Researcher's Critical Guide*.

Lambert, S. (2020). The implementation of sustainable leadership in general further education colleges.

Leicht, A., Heiss, J. and Byun, J., (2018). *Issues And Trends In Education For Sustainable Development*. France: UNESCO.

León-Jiménez, S., Villarejo-Carballido, B., López de Aguileta, G., & Puigvert, L. (2020). Propelling children's empathy and friendship. *Sustainability*, *12*(18), 7288.

Lewis, E. (2012). *Impact of education for sustainability at a Montessori primary school: From silos to systems thinking* (Doctoral dissertation, Murdoch University).

Liebovich, B. (2019). Margaret McMillan's Contributions to Cultures of Childhood. *Genealogy*, *3*(3), 43.

- Liehr P, & Smith MJ (1999). Middle range theory: Spinning research and practice to create knowledge for the new millennium. Advances in Nursing Science, 21(4): 81-91.
- Lincoln, Y. S., & Guba, E. G. (1982). Establishing dependability and confirmability in naturalistic inquiry through an audit.
- Lindon, J., & Trodd, L. (2016). *Reflective Practice and Early Years Professionalism 3rd Edition: Linking Theory and Practice*. Hachette UK.
- Linnér, B. O., & Selin, H. (2013). The United Nations Conference on Sustainable Development: forty years in the making. *Environment and Planning C: Government and Policy*, 31(6).
- Little, B. (2023) How Scotland, Wales and Northern Ireland became a part of the U.K., History.com. Available at: https://www.history.com/news/united-kingdom-scotland-northern-ireland-wales (Accessed: 13 July 2023).
- Lloyd, A., Truong, S., & Gray, T. (2018). Place-based outdoor learning: More than a drag and drop approach. *Journal of Outdoor and Environmental Education*, *21*(1).
- Lowe, K., Backhaus, V., Yunkaporta, T., Brown, L., & Loynes, S. (2014). Winanga-y Bagay Gaay: Know the river's story. *Curriculum Perspectives*, *34*(3), 59-91.
- Luff, P. (2018). Early childhood education for sustainability: origins and inspirations in the work of John Dewey. *Education 3-13*, *46*(4).
- Maguire, M., & Delahunt, B. (2017). Doing a thematic analysis: A practical, step-by-step guide for learning and teaching scholars. *All Ireland Journal of Higher Education*, 9(3).
- Maguire, S., & Hardy, C. (2013). Organizing processes and the construction of risk: A discursive approach. Academy of Management Journal, 56(1), 231-255.
- Malaguzzi, L. (1990). The hundred languages of children [Speech]. Exhibition event,
- Malaguzzi, L. (1993). For an education based on relationships. *Young children*, 49(1), 9-12.
- Malmqvist, J., Hellberg, K., Möllås, G., Rose, R., & Shevlin, M. (2019). Conducting the Pilot Study: A Neglected Part of the Research Process? Methodological Findings Supporting the Importance of Piloting in Qualitative Research Studies. *International Journal of Qualitative Methods*. https://doi.org/10.1177/1609406919878341.

Malone, K. (2016). Reconsidering children's encounters with nature and place using posthumanism. *Australian Journal of Environmental Education*, 32(1).

Martalock, P. L. (2012). "What is a wheel?" The Image of the Child: Traditional, Project Approach, and Reggio Emilia Perspectives. *Dimensions of Early Childhood*, *40*(3), 3-12.

McAllum, K., Fox, S., Simpson, M., & Unson, C. (2019). A comparative tale of two methods: How thematic and narrative analyses author the data story differently. *Communication Research and Practice*, *5*(4), 358-375.

McDonnell, J. E., Abelvik-Lawson, H., & Short, D. (2020). A paradox of 'sustainable development': A critique of the ecological order of capitalism. In *The Emerald Handbook of Crime, Justice and Sustainable Development*. Emerald Publishing Limited.

McIlwaine, P. (2014). ABC: Promoting an Anti-Bias Approach to Education in Northern Ireland. *Northern Ireland Council for Integrated Education*.

McLeod, N. (2019) Chapter 2 'The Reflexive Educator' in McLeod, N. and Giardiello, P. (Eds) (2019) *Empowering Early Childhood Educators: International Pedagogies as Provocation.* Abingdon: Routledge.

McLeod, N., & Anderson, B. (2020). Towards an understanding of 'school'readiness: collective interpretations and priorities. *Educational Action Research*, 28(5).

McLeod, N., & Giardiello, P. (Eds.). (2019). *Empowering Early Childhood Educators: International Pedagogies as Provocation*. Routledge.

McLeod, N., Wright, D., McCall, K., & Fujii, M. (2017). Visual rhythms: facilitating young children's creative engagement at Tate Liverpool. *European Early Childhood Education Research Journal*, *25*(6), 930-944.

McMillan, M. (1919). The Nursery School. London: J. M. Dent & Sons, Ltd.

Meehan, C. (2011). Belonging, being and becoming: The importance of understanding beliefs and practices in the teaching of religious education in the early years. *Journal of Religious Education*, *59*(3), 36-49.

Mérida-Serrano, R., González-Alfaya, M. E., Olivares-García, M. A., Rodríguez-Carrillo, J., & Muñoz-Moya, M. (2020). Sustainable Development Goals in Early Childhood Education. Empowering Young Girls to Bridge the Gender Gap in Science. *Sustainability*, 12(22), 9312.

Methot, S. (2023) Killing the Wittigo: Indigenous culture-based approaches to waking up, taking action, and doing the work of healing: A book for young adults. Toronto: ECW Press.

Middleton, R. (2017). Critical reflection: the struggle of a practice developer.

Miller, T., Velleman, R., Rigby, K., Orford, J., Tod, A., Copello, A., & Bennett, G. (2013). The use of vignettes in the analysis of interview data: relatives of people with drug problems. In *Doing qualitative analysis in psychology* (pp. 201-225). Psychology Press.

Mitchell, L. (2018). Democratic Policies and Practices in Early Childhood Education: An Aotearoa New Zealand Case Study (Vol. 24). Springer.

Moncrieffe, M., Race, R., Harris, R., Chetty, D., Riaz, N., Ayling, P.,& Steinburg, S. (2020). Decolonising the curriculum. *Research Intelligence*, *142*(9).

Montessori, M., & Livingston, A. (1917). *The Montessori elementary material*. Schocken Books.

Moon, K., & Blackman, D. (2017). A guide to ontology, epistemology, and philosophical perspectives for interdisciplinary researchers. *Integration and Implementation Insights. Canberra, Australia: i2Insights. https://i2insights.org/2017/05/02/philosophy-for-interdisciplinarity.*

Mooney, C. G. (2013). Theories of Childhood: An Introduction to Dewey, Montessori, Erikson, Piaget & Vygotsky. Redleaf Press.

Moss, P. (2016). Why can't we get beyond quality?. *Contemporary issues in early childhood*, *17*(1), 1-15.

Moss, P. (2017). Power and resistance in early childhood education: From dominant discourse to democratic experimentalism. *Journal of Pedagogy*, 8(1), 1-32.

Moss, P. (2019). Alternative Narratives in Early Childhood, Or Why Contest Early Childhood?. *Innovations in Early Education: The International Reggio Emilia Exchange*, 26(1), 12-21.

Murphy, A. E. (2013). The Ethical Philosophy of Emmanuel Levinas: A Phenomenological Approach to Cormac McCarthy's The Road.

Mwita, K. (2022). Strengths and weaknesses of qualitative research in social science studies. *International Journal of Research in Business and Social Science* (2147-4478), 11(6), 618-625.

National Implementation Group. (2016). *Vision 2030: Concluding report of the Learning for Sustainability National Implementation Group*. Scotland. Retrieved from https://education.gov.scot/media/ulodcmfl/res1-vision-2030.pdf.

Nenes (2016) Teachers' Impact on Child Development. Available at: https://www.linkedin.com/pulse/teachers-impact-children-development-alexandre-trespach-nenes.

Noddings, N. (2013). *Caring: A relational approach to ethics and moral education*. Uni of California Press.

Nordén, B., & Anderberg, E. (2012). Sustainable development through global learning and teaching. In *Handbook of Sustainability Management* (pp. 379-401).

Ntinda, K. (2019). Narrative research. *Handbook of Research Methods in Health Social Sciences, Singapore: Springer Nature Singapore Pte Ltd*, 412.

Nutov, L. (2017). Researcher emotions as data, a tool and a factor in professional development. *The Qualitative Report*, 22(12), 3260-3267.

O'Grady, E. (2016). Research as a respectful practice: an exploration of the practice of respect in qualitative research. Qualitative Research in Education, 5(3).

Okeke, C. I., & Mtyuda, P. N. (2017). Teacher job dissatisfaction: Implications for teacher sustainability and social transformation. *Journal of Teacher Education for Sustainability*, 19(1).

Oton, A. (2020) Going to school in Gibraltar: The education system explained, School in Gibraltar: The Education System - Europe Emirates Group. Available at: https://uae-eu.com/blog/schooling-gibraltar.html (Accessed: 16 August 2023).

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful Sampling for Qualitative Data Collection and Analysis in Mixed Method Implementation Research. *Administration and policy in mental health*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y.

Pascal, C., & Bertram, T. (2012). Praxis, ethics and power: developing praxeology as a participatory paradigm for early childhood research. *European Early Childhood Education Research Journal*, 20(4).

Pascal, C., & Bertram, T. (2018). Effective early learning: A praxeological and participatory approach to evaluating and improving quality in early childhood education. *Revista da FAEEBA-Educação e Contemporaneidade*, 27(51).

Peck, J. (2023). Explaining (with) neoliberalism. In *Neoliberalism and Education* (pp. 17-42). Routledge.

Penney, S. C., Young, G., Butler, E., Maich, K., & Philpott, D. F. (2019). The role of quality ECE in facilitating mental health and well-being in children. *Exceptionality Education International*, *29*(3), 57-76.

Phillips, D., (2014). *Encyclopaedia Of Educational Theory And Philosophy*. SAGE.

Powney, J., & Watts, M. (2018). *Interviewing in educational research*. Routledge.

Pratt. (2016). Neoliberalism and the (internal) marketisation of primary school assessment in England. *British Educational Research Journal*, *42*(5), 890–905. https://doi.org/10.1002/berj.3233.

Price, A. W. (2011). *Virtue and reason in Plato and Aristotle*. Oxford University Press.

Purvis, B., Mao, Y., & Robinson, D. (2019). Three pillars of sustainability: in search of conceptual origins. *Sustainability Science*, *14*(3).

Rager, K. B. (2005). Compassion stress and the qualitative researcher. *Qualitative Health Research*, *15*(3), 423-430.

Råheim, M., Magnussen, L., Sekse, R., Lunde, &., Jacobsen, T., & Blystad, A. (2016). Researcher-researched relationship in qualitative research: Shifts in positions and researcher vulnerability. *International Journal of Qualitative Studies on Health and Well-being*, 11(1), 30996-12.

Reay, T., Zafar, A., Monteiro, P., & Glaser, V. (2019). Presenting findings from qualitative research: One size does not fit all!. In *The production of managerial knowledge and organizational theory: New approaches to writing, producing and consuming theory* (pp. 201-216). Emerald Publishing Limited.

Recio, E., & Hestad, D. (2022). Indigenous Peoples: Defending an Environment for All. *Policy Brief*, *36*.

Regmi, K. D. (2022). The enduring effects of colonialism on education: three praxes for decolonizing educational leadership. *International Journal of Leadership in Education*, 1-19.

Reibold, K. (2023). Settler colonialism, decolonization, and climate change. *Journal of Applied Philosophy*.

Rieckmann, M. (2017). Education for sustainable development goals: Learning objectives. UNESCO Publishing.

Rinaldi, C. (2006). *In dialogue with Reggio Emilia: Listening, researching and learning.* Psychology Press.

Roberts-Holmes, G., & Moss, P. (2021). *Neoliberalism and early childhood education: Markets, imaginaries and governance.* Routledge.

Ross, L. E. (2017). An account from the inside: Examining the emotional impact of qualitative research through the lens of "insider" research. *Qualitative Psychology*, *4*(3), 326.

Rousell, D., & Cutter-Mackenzie-Knowles, A. (2020). A systematic review of climate change education: Giving children and young people a 'voice' and a 'hand'in redressing climate change. *Children's Geographies*, 18(2), 191-208.

Rowlands, J. (2021). Interviewee transcript review as a tool to improve data quality and participant confidence in sensitive research. *International Journal of Qualitative Methods*, *20*, 16094069211066170.

Rushton, E. A., Dunlop, L., & Atkinson, L. (2024). Fostering teacher agency in school-based climate change education in England, UK. *The Curriculum Journal*.

Salamzadeh, A. (2020). Five approaches toward presenting qualitative findings. *Journal of the International Academy for Case Studies*, 26(3), 1-2.

Samuelsson, I. P., Li, M., & Hu, A. (2019). Early childhood education for sustainability: A driver for quality.

Sanders, K. (2020). A critique of Paulo Freire's perspective on human nature to inform the construction of theoretical underpinnings for research. *Nursing Philosophy*, *21*(3), E12300-N/a.

Santiago, M. F. (2021). Gooseman by MG Sanchez. *Journal of Mediterranean Studies*, *30*(1), 127-128.

Schön, D. A. (2003). The reflective educator: How professionals think in action. Routledge.

Sharma, G. (2017). Pros and cons of different sampling techniques. *International journal of applied research*, *3*(7), 749-752.

Sims, M. (2017). Neoliberalism and early childhood. *Cogent Education*, *4*(1), 1365411.

Siraj-Blatchford, J., Smith, K. C., & Samuelsson, I. P. (2010). *Education for sustainable development in the early years*. OMEP, World Organization for Early Childhood Education.

Skinner, B., Leavey, G., & Rothi, D. (2018). Managerialism and teacher professional identity: Impact on well-being among teachers in the UK. *Educational Review*, 1-16.

Slettebø, T. (2020). Participant validation: Exploring a contested tool in qualitative research. *Qualitative Social Work*, 1473325020968189.

Smith, C., Fitzallen, N., Watson, J., & Wright, S. (2019). The practice of statistics for STEM: Primary students and pre-service primary teachers exploring variation in seed dispersal. *Teaching Science*, *65*(1).

Smith, M. (2019). Research methods in accounting. Sage.

Smith, M., & Walden, T. (1999). Understanding feelings and coping with emotional situations: A comparison of maltreated and nonmaltreated preschoolers. *Social Development*, 8(1), 93-116.

Smith, L., (1999) Decolonizing Methodologies: Research and Indigenous Peoples. New York: Zed Books Ltd., 1999.

Sneddon, C., Howarth, R. B., & Norgaard, R. B. (2006). Sustainable development in a post-Brundtland world. *Ecological economics*, *57*(2), 253-268.

Somerville, M. (2020). Posthuman theory and practice in early years learning. Research handbook on childhoodnature: Assemblages of childhood and nature research.

Spiegal, B., Gill, T. R., Harbottle, H., & Ball, D. J. (2014). Children's play space and safety management: Rethinking the role of play equipment standards. *SAGE Open*, *4*(1-10), 2158244014522075.

Ssossé, Q., Wagner, J., & Hopper, C. (2021). Assessing the Impact of ESD: Methods, Challenges, Results. *Sustainability*, *13*(5), 2854.

Streefkerk, R. (2022) Inductive vs Deductive Research Approach (With Examples). Available at: <u>Inductive vs. Deductive Research Approach (with Examples) (scribbr.com)</u>: Accessed 8/3/22.

Steiner, R. (1996). The education of the child and early lectures on education (Vol. 25). SteinerBooks.

Sterling S. (2010). Learning for resilience, or the resilient learner? Towards a necessary reconciliation in a paradigm of sustainable education. Environmental Education Research, 16, 511-528. 10.1080/13504622.2010.505427.

Stocker, L., Collard, L., & Rooney, A. (2016). Aboriginal world views and colonisation: implications for coastal sustainability. *Local Environment*, *21*(7), 844-865.

Strachan, A.L. (2021) Impact of Covid-19 on Research Methods and Approaches, Covid Collective Helpdesk Report 2, Brighton: Institute of Development Studies, DOI: 10.19088/CC.2021.002.

Sulzby, E., & Teale, W. (1991). Emergent literacy. *Handbook of reading research*, 2, 727-757.

Swain, R. B. (2018). A critical analysis of the sustainable development goals. In *Handbook of sustainability science and research* (pp. 341-355). Springer, Cham.

Tawil, S., & Locatelli, R. (2015). Rethinking education: Towards a global comon good. *Dostupné z https://www. norrag. org/rethinkingeducation-towardsa-global-common-good.*

Tarrant, & Thiele, L. P. (2016). Practice makes pedagogy – John Dewey and skills-based sustainability education. *International Journal of Sustainability in Higher Education*, *17*(1), 54–67. https://doi.org/10.1108/IJSHE-09-2014-0127.

Taylor, C., Rhys, M., & Waldron, S. (2016). Implementing curriculum reform in Wales: the case of the Foundation Phase. *Oxford Review of Education*, *42*(3), 299-315.

Taylor, J., & Townsend, M. (2016). Childhood Friendship: Its Importance and the Educator's Role. *Kairaranga*, *17*(1), 19-25.

The Global Goals. (2020). *Goal 4: Quality Education*. [online] Available at: https://www.globalgoals.org/4-quality-education [Accessed 3 September 2020].

The Scottish Government (2008) *The Early Years Framework*. Available at: Webarchive.org.uk. 2008. [online] Available at: https://www2.gov.scot/resource/doc/257007/0076309.pdf [Accessed 30 May 2020].

The United Nations Secretary-General (2019). *Progress Towards The Sustainable Development Goals*. [online] Available at: tion.pdf> [Accessed 13 September 2020].

Theobald, M. (2019). UN Convention on the Rights of the Child: "Where are we at in recognising children's rights in early childhood, three decades on...?". *International Journal of Early Childhood*, *51*(3), 251-257.

Theodotou, E. (2014). Early years education: are young students intrinsically or extrinsically motivated towards school activities? A discussion about the effects of rewards on young children's learning. Research in Teacher Education, 4(1).

Thomas, C., & Sharp, V. (2013). Understanding the normalisation of recycling behaviour and its implications for other pro-environmental behaviours: A review of social norms and recycling. *Resources, Conservation and Recycling*, 79, 11-20.

Together Gibraltar. (2020). *Education* — *Together Gibraltar*. [online] Available at: https://www.togethergibraltar.com/manifesto2019/education [Accessed 29 August 2020].

Torres, C. A. (Ed.). (2019). *The Wiley handbook of Paulo Freire*. John Wiley & Sons.

Tovey, H. (2016). Bringing the Froebel approach to your early years practice. Routledge.

UNESCO (2020) Global Education Meeting. Available at: https://en.unesco.org/sites/default/files/gem2020-extraordinary-session-background-document-en.pdf [Accessed 3 March 2020].

UNESCO (2020) *UNESCO and the Sustainable Development Goals*. Available at: <u>UNESCO and Sustainable Development Goals</u> [Accessed 2 3 2021].

UNESCO. (2017). UNESCO moving forward the 2030 Agenda for Sustainable Development.

UNICEF UK. (2020). *UN Convention On The Rights Of The Child (UNCRC) - Unicef UK*. [online] Available at: https://www.unicef.org.uk/what-we-do/unconvention-child-rights/ [Accessed 12 September 2020].

United Nations (UN). (2015) Transforming Our World: The 2030 Agenda for Sustainable Development. Available online:

https://sustainabledevelopment.un.org/content/documents/21252030%20Age nda%20for%20Sustainable%20Development% 20web.pdf (accessed on 08 January 2023).

UNICEF. (2023). The climate-changed child: a children's climate risk index supplement.

Urban, M., Cardini, A., Guevara, J., Okengo, L., & Flórez Romero, R. (2019). Early childhood development education and care: The future is what we build today.

UN General Assembly, (1972) *United Nations Conference on the Human Environment*, A/RES/2994, UN General Assembly,

https://www.refworld.org/legal/resolution/unga/1972/en/9934 [accessed 20 June 2023]

UN General Assembly (1989), *Convention on the Rights of the Child*, United Nations, Treaty Series, vol. 1577, p. 3, 20 November 1989, https://www.refworld.org/legal/agreements/unga/1989/en/18815 [accessed 22 December 2023]

Vanderstoep, S., & Johnston, D. (2009). Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches.

Vincent, C. (2017). 'The children have only got one education and you have to make sure it's a good one': parenting and parent–school relations in a neoliberal age. *Gender and Education*, 29(5).

Walsh, Z., Böhme, J., & Wamsler, C. (2020). Towards a relational paradigm in sustainability research, practice, and education. *Ambio*,.

Wanzer, D. L. (2021). What Is evaluation?: Perspectives of how evaluation differs (or not) from research. *American Journal of Evaluation*, 42(1), 28-46.

Watts, M. (2022). Friedrich Froebel: interpolation, extrapolation. In *The Influence of Theorists and Pioneers on Early Childhood Education* (pp. 201-210). Routledge.

Welsh Government (2015) Foundation Phase Framework. Available at: Gov.wales. 2020. [online] Available at: https://gov.wales/sites/default/files/publications/2018-02/foundation-phase-framework-revised-2015.pdf [Accessed 29 July 2020].

Wilkinson, C. (2020). Imposter syndrome and the accidental academic: An autoethnographic account. *International Journal for Academic Development*, *25*(4), 363-374.

Wolf, J., & Moser, S. C. (2011). Individual understandings, perceptions, and engagement with climate change: insights from in-depth studies across the world. *Wiley Interdisciplinary Reviews: Climate Change*, *2*(4), 547-569.

Wood, E. (2020). Learning, development and the early childhood curriculum: A critical discourse analysis of the Early Years Foundation Stage in England. *Journal of Early Childhood Research*, *18*(3), 321-336.

Wood, E., & Hedges, H. (2016). Curriculum in early childhood education: Critical questions about content, coherence, and control. *The curriculum journal*, *27*(3).

Woodhead, M. (2016). Early childhood development in the SDGs.

Woods, H. A. (2019) Examining the Implications of Insider-Outsider Positioning.

Wooltorton, S., Collard, L., Horwitz, P., Poelina, A., & Palmer, D. (2020). Sharing a place-based indigenous methodology and learnings. *Environmental Education Research*, *26*(7), 917-934.

World Health Organisation. (2020). WHO | Millennium Development Goals (Mdgs). [online] Available at: https://www.who.int/topics/millennium_development_goals/about/en/ [Accessed 5 September 2020].

World Press (2020) *Love Living Goals*. Available at: <u>Love Living Goals- What you need to know – never too small (wordpress.com)</u> Accessed [15 3 21].

Xu, W., & Zammit, K. (2020). Applying thematic analysis to education: A hybrid approach to interpreting data in educator research. *International Journal of Qualitative Methods*, *19*, 1609406920918810.

Ye, F., (2018) Three Challenges of the Sustainable Development Goals Available at: Project, B., Three Challenges Of The Sustainable Development Goals | The Borgen Project. [online] The Borgen Project. Available at: https://borgenproject.org/three-challenges-of-the-sustainable-development-goals/ [Accessed 14 September 2020].

Zulfikar, T., & Mujiburrahman. (2018). Understanding own teaching: becoming reflective teachers through reflective journals. *Reflective Practice*, 19(1), 1.

Appendices

Appendix I: Ethics Approval Covering Letter

Dear Deinah

Thank you for registering your study as minimal risk.

UREC opinion: Favourable ethical opinion

UREC reference: 20/EDN/018

Deinah Enrile

Evaluating Early Years Education for Sustainability in the in the UK to inform Education for Sustainability in Gibraltar (Naomi McLeod)

Conditions of the favourable opinion

Prior to the start of the study.

 Covid-19. Studies that involve face-to-face activity – you must ensure participant facing documents explain the potential risks of participating in the study which are associated with Covid-19, how the risks will be mitigated and managed.

After ethical review.

- · The study is conducted in accordance with the Minimal Ethical Risk Guiding Principles
- You must ensure the information included in the participant facing documents are always current and informed by ongoing risk assessments and any changes to current practices.
- · Where any substantive amendments are proposed to the protocol or study procedures further ethical opinion must be sought (https://www.ljmu.ac.uk/ris/research-ethics-and-governance/research-ethics/university-research-ethics-committee-urec/amendments)
- Any adverse reactions/events which take place during the course of the project are reported to the Committee immediately by emailing <u>FullReviewUREC@ljmu.ac.uk</u>
- Any unforeseen ethical issues arising during the course of the project will be reported to the Committee immediately emailing <u>FullReviewUREC@ljmu.ac.uk</u>

Please note that favourable ethics opinion is given for a period of five years. An application for extension of the ethical opinion must be submitted if the project continues after this date. **Research Governance Approval.**

This email also constitutes LJMU Research Governance Approval of the above referenced study on the basis described in the minimal risk registration form, supporting documentation and any clarifications received, subject to the conditions specified below.

Conditions of Approval

- Compliance with <u>LJMU Health and Safety Codes of practice and risk assessment policy and procedures</u> and <u>LJMU Code of Practice for Research</u>
- Ensure the study is covered by UMAL
- Covid-19. Compliance with LJMU's travel restrictions
- Covid-19. Studies that involve any face-to-face research activity have the appropriate risk assessment in place – the risk assessment is signed by the school Director or nominated other, revised, resigned and reissued when required and sent to the Safety, Health and Environment Department by email to SHE@ljmu.ac.uk
- Covid-19. Studies that involve any face-to-face research activity meet Covid-19 practices which are current at the time the research activity takes place.
- Where relevant, appropriate gatekeeper / management permission is obtained at the study site concerned.
- The LJMU logo is used for all documentation relating to participant recruitment and participation e.g. poster, information sheets, consent forms, questionnaires.
- The study consent forms, study data/information, all documents related to the study etc. will be accessible on request to a student's supervisory team and/or to responsible members of Liverpool John Moores University for monitoring, auditing and data authenticity purposes.

Yours sincerely

Mandy Williams, Research Support Officer (Research Ethics and Governance) Research and Innovation Services

Appendix II: Semi-Structured Interview Participant Information Sheet



PARTICIPANT INFORMATION SHEET [EARLY YEARS EDUCATORS/EDUCATORS/TEACHERS]

Title of Study: Evaluating Sustainability in the Early Years in the UK and Gibraltar to inform future policy and practice in Gibraltar

You are being invited to take part in a research study. You do not have to take part if you do not want to. Please read this information, which will help you decide.

1. What is the purpose of the study?

This study explores how sustainability in the early years is interpreted and taught in different settings across the UK and in Gibraltar and how this can inform policy and practice in Gibraltar. The research involves including the voice of educators/educators and children in early years settings in the UK and Gibraltar. The research also involves gaining the perspectives of a key policy maker in Gibraltar, the Minister of Education, during the period that the research is being conducted.

The research involves observing educators/educators and children in their day to day learning environment with a focus on sustainability in the early years. In addition, this will involve engaging in interviews with teachers and informal conversations with children about sustainability. Settings that have been identified as having an interest in sustainability in the early years will be invited to participate.

The purpose of the project is to evaluate how is sustainability viewed and understood in the early years across the UK and in Gibraltar. Specifically, the research questions for the study are:

- 1. How do early years educators, children and one policy maker understand sustainability in the early years in UK and Gibraltar?
- 2. How is sustainability in the early years interpreted in practice?
- 3. Are there any potential barriers that may hinder sustainability in the early years in the UK and in Gibraltar, and if so what are the implications?

This study is funded by the Gibraltar Government (Department of Education) Discretionary Awards. The scholarship award was approved and granted in 2019, to commence Jan 2020 for the period of 3 years.

2. Why have I been invited to participate?

You have been invited because your views and understandings about sustainability in the early years are valued as part of this research study and because your setting has shown an interest in sustainability.

3. Do I have to take part?

No. You can ask questions about the research before deciding whether to take part. If you do not want to take part that is OK. I will ask you to sign a consent form and will give you a copy for you to keep.

You can stop being part of the study at any time, without giving a reason. You may withdraw from the study at any time by contacting the investigator, Deinah Enrile, (D.M.Enrile@ljmu.2020.ac.uk).

4. What will happen to me if I take part?

If you decide to take part, you will engage in an interview with myself about sustainability in the early years. For example, you will be asked about your understandings and views on sustainability and why this is important in the early years. The interview will take place in your setting and should last between an estimated 10-30 minutes. You will also be observed in your day to day practice, where I will be looking out for key themes of sustainability, during this time, I will be taking notes of what I observe. You can also ask to pause or stop the interview at any time. Please remember, you have the right to decline to answer any questions if you do not want to.

5. Will I be photographed or video/audio recorded and how will the recorded media be used?

If you agree, the interview will be audio recorded using a password protected device and notes will be taken. This is to assist the investigator in the writing up of notes for the research. Audio recordings will be stored on a password protected server and will be destroyed after transcripts are taken. Transcripts will also be kept on a password protected server. Audio recordings will not be used in the final report. You are free to decline to be audio recorded. You should be comfortable with the investigator audio recording process and you are free to stop the recording at any time whilst continuing to participate in the study. The audio recordings of your interview made during this study will be used only for analysis. With your consent, transcripts of quotes from audio recordings may be used in the final report and any further outputs. No other use will be made of them without your written permission.

6. Are there any potential risks in taking part?

Participating in the research is not anticipated to cause you any disadvantages or discomfort.

7. Are there any benefits in taking part?

There will be no personal benefit to you from taking part in this study. However, it is hoped that the research findings will be useful in informing future policy and practice and promote sustainability in the Early Years in Gibraltar.

8. Payments, reimbursements of expenses or any other benefit or incentive for taking part

There will be no payment or any benefit or incentive for taking part in this study. Any expenses you have incurred cannot be reimbursed.

9. What will happen to information/data provided?

The information you will provide as part of the study is the study data (interview transcripts). Any study data from which you can be identified (e.g. from identifiers such as your name, date of birth, audio recording etc.), is known as personal data. Your participation in this study will involve the collection/use of personal data. This data will be anonymised, and pseudonyms will be used so you will not be identifiable but please note that confidentiality may not be guaranteed; for example, due to the limited size of the participant sample, the position of the participant or information included in reports, participants might be indirectly identifiable in transcripts and reports. I will work with you in an attempt to minimise and manage the potential for indirect identification.

In certain exceptional circumstances where you or others may be at significant risk of harm, the investigator may need to report this to an appropriate authority. This would usually be discussed with you first. Examples of those exceptional circumstances when confidential information may have to be disclosed are:

- o The investigator suspects a child may be at risk of harm.
- o As a statutory requirement e.g. safeguarding policies.
- o Under a court order requiring the University to divulge information.

10. Who is organising and who is funding/commissioning the study?

This study is organised by Liverpool John Moores University and is funded by the Gibraltar Government (Department of Education) Discretionary Awards. The scholarship award was

approved and granted in 2019, to commence Jan 2020 for the period of 3 years.

11. Whom do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this study, please contact Deinah Enrile (D.M.Enrile@ljmu.2020.ac.uk) and we will do our best to answer your query. You should expect a reply within 10 working days. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Research Ethics Committee at Liverpool John Moores University who will seek to resolve the matter as soon as possible:

Chair, Liverpool John Moores University Research Ethics Committee; Email: FullReviewUREC@ljmu.ac.uk; Tel: 0151 231 2121; Research Innovation Services, Liverpool John Moores University, Exchange Station, Liverpool L2 2QP

12. Data Protection

Liverpool John Moores University is the data controller with respect to your personal data. Information about your rights with respect to your personal data is available from:

https://www.ljmu.ac.uk/legal/privacy-and-cookies/external-stakeholders-privacy-policy/research-participants-privacy-notice

13. Contact details

Principal Investigator: Deinah Enrile

LJMU postgraduate research student

LJMU Email address: D.M.Enrile@ljmu.2020.ac.uk

LJMU School of Education/Faculty of Arts, Professional and Social Sciences

LJMU Central telephone number: 0151 231 2121

Supervisor Name: Dr Naomi McLeod

LJMU Email address: n.j.mcleod@ljmu.ac.uk A copy of the participant information sheet should be retained by the participant.

Appendix III: Semi Structured Interview Participant Consent Form



PARTICIPANT CONSENT FORM [EARLY YEARS EDUCATORS/EDUCATORS/TEACHERS]

Study title: : Evaluating Sustainability in the Early Years in the UK and Gibraltar to inform future policy and practice in Gibraltar

Research Ethics Committee Reference Number: 20/EDN/018

Principal Investigator: Deinah Enrile

LJMU postgraduate research student

LJMU Email address: D.M.Enrile@ljmu.2020.ac.uk

LJMU School of Education/Faculty of Arts, Professional and Social Sciences

LJMU Central telephone number: 0151 231 2121

Supervisor Name: Dr Naomi McLeod

LJMU Email address: n.j.mcleod@ljmu.ac.uk

If you are happy to participate, please complete and sign the consent form below

		Pleas	-				
1.	I confirm that I have read the information sheet dated () for the above		•				
	study, or it has been read to me. I have had the opportunity to consider the						
2.	information, ask questions and have had these answered satisfactorily. I understand what taking part in the study involves						
۷.	Tunderstand what taking part in the study involves						
3.	I consent voluntarily to be a participant in this study and understand that I can refuse to answer questions I can withdraw from the study at any time, without giving a reason and without penalty or my legal rights being affected.						
4.	I have been advised about potential risks associated with taking part in this study and have taken these into consideration before consenting to participate						
5.	I agree that audio recordings can be taken of me during the study. (Participants are free at any time to decline to be audio recorded whilst continuing to participate in the study)	YES	NO				
6.	I understand who access to personal data will have provided, how the data will be stored and what will happen to the data at the end of the project.						
7.	I understand that my information may be subject to review by responsible individuals from Liverpool John Moores University for monitoring and audit purposes						
8.	I agree for my contact details to be stored for the purpose of contacting me about future studies and I understand that agreeing to be contacted does not oblige me to participate in any further studies	YES	NO				
9.	I understand that personal data will remain confidential and that all efforts will be made to ensure I cannot be identified in reports or any further outputs						
10.	I understand that parts of our conversation will be used verbatim in future publications or presentations and that all efforts will be made to ensure I cannot be identified in reports or any further outputs						
11.	I understand that even though all efforts will be made to ensure I cannot be identified, I may be indirectly identifiable when the study findings are disseminated.						
12.	I agree to take part in this study						
Data Protection . Any personal information we collect and use to conduct this study will be processed in accordance with data protection law as explained in the Participant Information Sheet and the Privacy Notice for Research Participants .							
Nam	e of Participant Date Signa	ture					

For participants unable to sign their name, mark the box instead of signing

Name of Investigator	Date	Signature
The investigator AND the participant should each reta	ain a copy of the signed part	ticipant consent form.

Appendix IV: Parent/Guardian Information Sheet



PARENT/GUARDIAN INFORMATION SHEET

Research Ethics Committee Reference Number: 20/EDN/018

Title of Study: Evaluating Sustainability in the Early Years in the UK and Gibraltar to inform future policy and practice in Gibraltar. Your child is being invited to take part in a research study. They do not have to take part if you do not want them to, or they do not want to. Please read this information, which will help you decide. A child friendly information sheet is also available to help your child decide.

14. What is the purpose of the study?

This study explores how sustainability in the early years is interpreted and taught in different settings across the UK and in Gibraltar and how this can inform policy and practice in Gibraltar. The research involves including the voice of educators/educators and children in early years settings in the UK and Gibraltar. The research also involves gaining the perspectives of a key policy maker in Gibraltar, the Minister of Education, during the period that the research is being conducted.

The research involves observing educators/educators and children in their day to day learning environment with a focus on sustainability in the early years. In addition, this will involve engaging in interviews with teachers and informal conversations with children about sustainability. Settings that have been identified as having an interest in sustainability in the early years will be invited to participate.

The purpose of the project is to evaluate how is sustainability viewed and understood in the early years across the UK and in Gibraltar. Specifically, the research questions for the study are:

- 3. How do early years educators, children and one policy maker understand sustainability in the early years in UK and Gibraltar?
- 4. How is sustainability in the early years interpreted in practice?
- 3. Are there any potential barriers that may hinder sustainability in the early years in the UK and in Gibraltar, and if so what are the implications?

This study is funded by the Gibraltar Government (Department of Education) Discretionary Awards. The scholarship award was approved and granted in 2019, to commence Jan 2020 for the period of 3 years.

15. Why has my child been invited to participate?

Your child has been invited to participate because their views about their learning are valued as part of this research study and because their setting has shown an interest in sustainability.

16. Does my child have to take part?

You and your child can ask questions about the research before deciding whether to take part. If you do not agree to their involvement or if your child does not want to take part, that is OK. We will ask you to sign a consent form, and your child to complete an assent form and will give you a copy for you to keep.

Your child can stop being part of the study at any time, without giving a reason, but we will keep information about them that we already have. You may withdraw your child, or your child may withdraw, from the study by letting me know.

17. What will happen to my child if they take part?

If your child takes part, they will engage in a casual conversation with myself about their learning. For example, they will be asked about what they enjoy learning about and why it is important to them. The conversation will take place in their setting with their educator present and should last between an estimated 10-30 minutes. Depending on the flow of each setting, conversations between myself and your child could take place as a one to one chat or in small groups (3 children and myself). Your child will also be observed in their day to day practice, where I will be looking out for key themes of sustainability, during this time, I will be taking notes of what I observe. Your child will be offered regular breaks as necessary. They can also ask to pause or stop the conversation at any time. Please remember, they have the right to decline to answer any questions they do not want to.

18. Will my child be photographed or video/audio recorded and how will the recorded media be used?

If you agree, the interview will be audio recorded using a password protected device and notes will be taken. This is to assist the investigator in the writing up of notes for the research. Audio recordings will be stored on a password protected server and will be destroyed after transcripts are taken. Transcripts will also be kept on a password protected server. Audio recordings will not be used in the final report. You are free to decline for your child to be audio recorded. You and your child should be comfortable with the investigator audio recording process and your child will be free to stop the recording at any time whilst continuing to participate in the study. The audio recordings of your child's conversation made during this study will be used only for analysis. With you and your child's consent, transcripts of quotes from audio recordings may be used in the final report and any further outputs. No other use will be made of them without your written permission.

19. Are there any potential risks in taking part?

Participating in the research is not anticipated to cause your child any disadvantages or discomfort.

20. Are there any benefits in taking part?

There will be no personal benefit to you from taking part in this study. However, it is hoped that the research findings will be useful in informing future policy and practice and promote sustainability in the Early Years in Gibraltar.

21. Payments, reimbursements of expenses or any other benefit or incentive for taking part
There will be no payment or any benefit or incentive for taking part in this study. Any expenses you
have incurred cannot be reimbursed.

22. What will happen to information/data provided?

The information your child will provide as part of the study is the study data (conversation transcripts). Any study data from which your child can be identified (e.g. from identifiers such as their name, date of birth, audio recording etc.), is known as personal data. Your child's participation in this study will involve the collection/use of personal data. This data will be anonymised and pseudonyms will be used so your child will not be identifiable but please note that confidentiality may not be guaranteed; for example, due to the limited size of the participant sample, the position of your child or information included in reports, participants might be indirectly identifiable in transcripts and reports. The investigator will work with your child in an attempt to minimise and manage the potential for indirect identification.

In certain exceptional circumstances where your child or others may be at significant risk of harm, the investigator may need to report this to an appropriate authority. This would usually be discussed with you first. Examples of those exceptional circumstances when confidential information may have to be disclosed are:

- o The investigator suspects a child may be at risk of harm.
- o As a statutory requirement e.g. safeguarding policies.
- o Under a court order requiring the University to divulge information.

23. Who is organising and who is funding/commissioning the study?

This study is organised by Liverpool John Moores University and is funded by the Gibraltar Government (Department of Education) Discretionary Awards. The scholarship award was approved and granted in 2019, to commence Jan 2020 for the period of 3 years.

24. Whom do I contact if I have a concern about the study or I wish to complain?

If you have a concern about any aspect of this study, please contact Deinah Enrile (D.M.Enrile@ljmu.2020.ac.uk) and we will do our best to answer your query. You should expect a reply within 10 working days. If you remain unhappy or wish to make a formal complaint, please contact the Chair of the Research Ethics Committee at Liverpool John Moores University who will seek to resolve the matter as soon as possible:

Chair, Liverpool John Moores University Research Ethics Committee; Email: FullReviewUREC@ljmu.ac.uk; Tel: 0151 231 2121; Research Innovation Services, Liverpool John Moores University, Exchange Station, Liverpool L2 2QP

25. Data Protection

Liverpool John Moores University is the data controller with respect to your personal data. Information about your rights with respect to your personal data is available from:

• https://www.ljmu.ac.uk/legal/privacy-and-cookies/external-stakeholders-privacy-policy/research-participants-privacy-notice

26. Contact details

Principal Investigator: Deinah Enrile

LJMU postgraduate research student

LJMU Email address: D.M.Enrile@ljmu.2020.ac.uk

LJMU School of Education/Faculty of Arts, Professional and Social Sciences

LJMU Central telephone number: 0151 231 2121

Supervisor Name: Dr Naomi McLeod

LJMU Email address: n.j.mcleod@ljmu.ac.uk

A copy of the parent/guardian information sheet should be retained by the participant.

Appendix V: Parent/Guardian Consent Form



PARENT/GUARDIAN CONSENT FORM

Research Ethics Committee Reference Number: 20/EDN/018

Study title: Evaluating Sustainability in the Early Years in the UK and Gibraltar to inform future policy and practice in Gibraltar

Principal Investigator: Deinah Enrile LJMU postgraduate research student

LJMU Email address: D.M.Enrile@ljmu.2020.ac.uk

LJMU School of Education/Faculty of Arts, Professional and Social Sciences

LJMU Central telephone number: 0151 231 2121

Supervisor Name: Dr Naomi McLeod

 $LJMU\ Email\ address:\ n.j.mcleod@ljmu.ac.uk$

If you are happy for your child to participate, please complete and sign the consent form below

		Please initial
13.	I confirm that I have read the information sheet dated () for the above study, or it has been read to me. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
14.	I understand what taking part in the study is involved for my child	
15.	I consent voluntarily for my child to be a participant in this study (if they assent to their participation) and understand that I and they can refuse to answer questions, I and they can withdraw from the study at any time, without giving a reason and without penalty or my child's legal rights being affected.	

Name Name	cordance with data protection law as explained in the Participant Information Sheet cy Notice for Research Participants. e of Parent/Guardian Date Signat e of Child participants unable to sign their name, mark the box instead of signing							
<u>Priva</u>	e of Parent/Guardian Date Signat							
<u>Priva</u>	cy Notice for Research Participants.							
<u>Priva</u>	cy Notice for Research Participants.							
		and the						
in ac	cordance with data protection law as explained in the Participant Information Sheet	and the						
Data Protection . Any personal information we collect and use to conduct this study will be processed in accordance with data protection law as explained in the Participant Information Sheet and the								
25.	disseminated. I give permission for my child to take part in this study							
24.	future publications or presentations and that all efforts will be made to ensure they cannot be identified in reports or any further outputs I understand that even though all efforts will be made to ensure my child cannot be identified, they may be indirectly identifiable when the study findings are							
23.	made to ensure my child cannot be identified in reports or any further outputs. I understand that parts of the conversation with my child will be used verbatim in							
22.	about future studies and I understand that agreeing to be contacted does not oblige me to participate in any further studies	_						
21.	individuals from Liverpool John Moores University for monitoring and audit purposes I agree for my contact details to be stored for the purpose of contacting me	YES	NO					
19.	(Parents/guardians are free at any time to decide that their child must not be audio recorded and the child can continue to participate in the study). I understand who will have access to personal data provided, how the data will be stored and what will happen to the data at the end of the project. I understand that my child's information may be subject to review by responsible							
	I understand that the study involves taking audio recordings of my child and I am happy to proceed. I agree that the audio recordings can be taken of my child during the study.	YES	NO					
17.								

Name of Person taking consent	
-------------------------------	--

Date

Signature

(if different from investigator)

The investigator AND the parent/guardian should each retain a copy of the signed participant consent form.

Appendix VI: Child Information and Assent Form



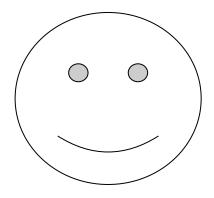
INFORMATION AND ASSENT FOR CHILDREN

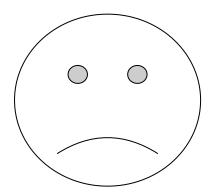
Research Ethics Committee Reference Number: 20/EDN/018

Title of Study: Evaluating Sustainability in the Early Years in the UK and Gibraltar to inform future policy and practice in Gibraltar

Information to be read out to children:

My name is Deinah, I am a student at Liverpool John Moores University. My research is about finding out about what matters to you. I would like to talk to you about what you enjoy about your learning. If you are happy to take part can you show me by colouring in the smiley face? If you don't want to take part that is fine too!





Child's name:

Date:

Appendix VII: Semi Structured Interview Extract Example

Interviewer: So, you know how you mentioned earlier about how you incorporate sustainability into music with the children? Could you explain what is involved in this?

Educator: Usually they learn a song, for example there is a song called 'I am the earth' which talks about the environment, and because they are very young, we try to basically, sing the songs as a group and then the children suggest ways of protecting the environment and animals in particular, it tends to be something they like a lot.

Interviewer: Ah right so you ask them to suggest ideas?

Educator: Yes, so I ask them what it means to protect the environment and they give me examples, this is after the songs are sang, usually they suggest things like 'giving love' and 'care'

Interviewer: And do you notice the children are engaged when participating?

Educator: Yes, they love it, they even talk about going to the beach and they tell me they recycle and pick up litter

Interviewer: and can you tell me how you view children?

Educator: I think not everyone has creative ideas but definitely a few will have ideas and they tell me what they've done and then others will follow, they learn from each other

Interviewer: Interesting, and if I asked what you're personal understanding of sustainability is, what would it be?

Educator: Well, I will say, to keep the earth clean and beautiful, I'm sure we are already slowly destroying it so the next generation need to start young and change human behaviour

Interviewer: That brings me onto the next question, why do you think sustainability is relevant to the early years?

Educator: I think it's best to learn when you're young, the sooner the better and they will take it home to their parents too

Interviewer: And in terms of skills, which do you think are important for children to learn in the 21st century?

Educator: I think to learn how to be resilient for sure

Interviewer: And is there any challenges that make teaching sustainability difficult?

Educator: In this school no, we are quite free and have flexibility, I follow the book but I adapt topics and songs especially with what I choose

Interviewer: Ah ok, so the environmental songs are not part of the early years framework?

Educator: No, I chose to incorporate them

Interviewer: ok great, thank you

Appendix VIII: Classroom Observation Extract Sample

Setting: Northwest England			
Date 12.4.21			
Set of Observation Prompts:			
• How the children and educator converse/interact (look for signs of SDG 4 Quality/ democratic learning) in relation to sustainability. This means looking out for signs of life-long learning (are opportunities given so the children can build resilience, independence and confidence in their abilities to participate and make choices). The children and educator began to interact in the morning where I noticed the educator was firm in getting the children to sit down and begin phonics. The children were constantly asking if they could go outside to play for 'break play '. The educator said not yet, they continued with their phonics lesson.			
No observation noted relating to the following:			
 Life-long learning opportunities Resilience Independence Confidence Choices 			
After an hour, the children made their way outside to the play area which consisted of a playground with slides, swings and climbing frames. I noticed the children were being told not to run, and often got 'whistled' by the staff member on care if they run or skipped.			
No evidence was observed of EfS throughout the afternoon where the children had a similar morning, but instead doing numbers in their booklets and using colour coins to count.			
Prompt 2:			
 Ways in which sustainability is reflected in practice (environment, socio-cultural awareness, political/economic awareness, nature, children's rights, decision making, agency social justice, participation, empowerment and reflective elements). 			
There was no evidence in this observation of sustainability. Some evidence of empathy was observed from the children interacting with each-other in the playground and being kind to one another, sharing toys and helping one another on the climbing frame.			

Appendix IX: Example Reflective Journal Extract

- Extract taken from the 20.6.21

"Today I have started to reflect on my first few visits as a researcher and I feel a little overwhelmed. I am realising I am not as confident as I would like to be when entering a setting and conducting the interview/conversations with children. I am thinking a lot about my position as an 'outsider' coming into the schools and how this plays out in the coming visits, and in Gibraltar where my position will be different (being a Gibraltarian myself). I wonder what emotions I will feel. I needed to write this down today to bring it to my attention and keep it in mind when making further visits.

I also feel some positives when reflecting today. I am excited about the data still to collect and about this research in general. Although Covid is having negative effects on the data collection, I am determined to keep trying to do what I can to collect enough data. Although I am nervous, I feel ready to learn and grow as a researcher."

Appendix X: Positionality Statement

I have very fond memories of my early years of education and what I would consider play-based learning. We would engage in a lot of art-work and play. My experiences changed once I entered middle school, and in secondary school I struggled greatly with the sudden change of intensity and pressure required to excel in core subjects. I found it hard to focus on subjects I did not enjoy, particularly maths and science. I was a bright student but began to have difficulties with mathematics and I remember feeling scared of not doing well in the subject. I disliked it but still felt this immense stress to keep up standards and a pressure from my teachers to obtain sufficient grades I needed to pass my exams, to allow me to take my A-levels, and be accepted into a university. Around age 15 I became more interested in politics (that is, the governance of a particular area and the decisions made which affects the whole community such as how decisions have a cascading impact). Moss, (2017) describes this governance as a regime of truth that seeks and expects to exercise power over our thoughts and actions, directing and governing what we see as the 'truth' and how we construct our world. My friends and I began to discuss politics more often in school, and I remember during break times, that we would debate the current issues at the time, such as, the re-election of government in 2016. We would discuss who our families supported rather than discussing our own personal views. Thus, I remember being directly influenced by my family's opinions (such as wanting more green spaces, pollution worries from the refinery). I began to think about why decisions were made in specific areas and how they could be done better or more democratically, such as asking local communities what their views were and consulting openly with stakeholders before implementing new policies. My family never pushed me to support specific areas of politics, but rather, encouraged me to explore what areas I felt passionate about and decide for myself, which is what I did when I went to university. I began to explore different political party manifestos and policies both in Gibraltar and the UK and listened to views which did and did not correlate with my own, and tried to understand them; for example, some of my university friends and close circle had their doubts with climate change and I listened to their reasonings, and we debated the issue in a friendly, respectful manner. Consequently, I chose to study philosophy at A-level, where I feel my thinking processes began to grow, and it was here that I learnt how to be 'reflexive' and question everything around me and about myself, such as evaluating my own beliefs. I began to question my morals, what I believed in and why I was not fighting for them more (mental health, climate change, better education for all). Regarding climate change and better education opportunities, in the summer of 2019 I travelled to Fiji, to volunteer to work with the community in achieving the Sustainable Development Goals. My role was to work with the women in the community to devise new ideas collectively and to widen opportunities in their existing education

system by teaching basic health/early childhood aspects. I also engaged in a recycling programme with local villages building recycling posts. I learnt that there is no 'one-way goes', meaning, one opinion does not necessarily mean it's the right opinion and it can be damaging to not listen to other people's point of views, no matter how assertive you are of your own opinion. It marked a distinctive moment in my life in terms of being more open. I began to value creativity more and was introduced to a new world of questioning, and a new way of seeing. So I valued the voices of others such as those who have different opinions to mine. More so, looking back now I see the value of appreciating their perspective, their views and stories they would share with us. On this point, Murphy (2013) points out how Emmanuel Levinas' philosophy explores ethics in relation to the 'other' meaning, the other human being. His theory emphasises the importance of valuing, respecting and listening to 'other' in order to see a new way of being. He argues that in order to appreciate the 'other' you must begin with yourself, reflect and explore your own personal values, beliefs, and biases. This has been reflected in exploration of my own personal views with Gibraltar and Spain, and my own views of my childhood; it has been necessary to unpick my values and biases in order to appreciate and respect those of others and fundamentally the participants in this research project. This research involves listening and valuing the stories of other people, to which requires respect and attention which tells me it is important for future practice to be self-aware of assumptions and biases (Berger, 2013). My personal view is that although Gibraltar once belonged to Spain, I have grown up and spent my entire life with Gibraltar being British and recognising myself as a British citizen. Spain is also a part of Gibraltar's history but remains a separate entity with its own unique politics, education systems and culture. I enjoy visiting Spain for holidays as it is a beautiful country, and I am extremely lucky to be in a position where I am able to enter the country after only a short car drive. I would love to see tensions between both Gibraltar and Spain begin to ease in the near future, and for both countries to develop mutual respect. This is important to me as it would ease tensions not only politically but also socially, enabling both sides to listen to each other and respect one other. I have seen this happen with Gibraltar and La Línea (a small Spanish town nearest to Gibraltar) showing empathy for each other. Consequently, there have been many incidents where Gibraltarians have actively helped La Línea (offering thousands of jobs for La Línea residents in Gibraltar and La Línea residents never hesitating to offer a lending hand, when necessary, for example in medical assistance). In my experience, the tensions between Gibraltar and Spain fluctuate but remain unresolved politically. As a Gibraltarian myself I understand and am aware of the hardships facing Gibraltarians, but I lack understanding of what it feels like as a Spanish person or how they have experienced political tensions. Thus, I am able to talk about my personal perspective but am aware of my personal bias and tendencies to side with Gibraltar which is where the relevance and importance of reflexivity comes into practice. The politics of Malaguzzi

stresses the early emergence of an education system that is focused on peace (Duckworth, 2008). For instance, adults' model peaceful and respectful behaviour and the children are encouraged to resolve conflicts through communication. The importance of listening to each other's stories (Duckworth, 2008) is reflected in discourses of sustainability in educational settings where respectful and reciprocal relations are primary.

Appendix XI: Three Examples of the Researcher's Engagement with

Reflexivity

Example 1: Researcher's engagement with the 9 Rs (insider / outsider)

Recognise personal: views, biases, assumptions, understandings/ emotions	During one of the visits in the settings in Gibraltar, the educators prepared a presentation of the tasks the school sets the children regarding working towards a sustainable future. During this time, I realised I was not engaging in many of the things they highlighted. For example, recycling and making sure plugs are turned off. I recognised I had stopped recycling at home in recent months and had stopped worrying about plastic consumption. I feel like this is because of the workload and stresses I have been under, which have taken away time from being able to focus on important sustainability related tasks. It also got me questioning the way I view 'acting' and 'behaving' sustainably as 'tasks' rather than aspects that become part of my daily routine and should be 'the norm'. This got me questioning my own actions, I felt like a hypocrite, and I could not remove this from my mind during the whole interview/presentation process.
Reflect from another perspective:	From the educator's perspective, I imagine they would have been disappointed in my position given I am researching sustainability and not putting into practice what I'm advocating. I did not disclose this with them but as part of their presentation they emphasised the need for everyone to participate, including adults.
Review together:	I spoke about this with a friend upon returning home from the visit, to which she told me my intentions are in the right place and it is ok to lose track sometimes. After the discussion, while we agreed that I am under a lot of commitment with the PhD demands to be perfectly on point with recycling and plastic consumption all the time. Yet, we also noted the importance of starting this again, and attempting to make this part of my daily routine rather than viewing it as something 'extra' to do. This conversation made me feel emotionally better.
Relate to reading/ research:	Sharp and Thomas (2013) argue for the need for individuals to normalise recycling as daily behaviour. They stress that once individuals get into the habit of recycling it not only has a positive effect on the environment but also on the individual.
Re-appraise the relevance and implications for own practice:	This reflection is relevant as it highlights a contradiction, of trying to promote a basic value of sustainability (environmentally) yet not partaking in essential contributions; recycling and having an awareness of plastic consumption. It also mirrors a perfect example of the power of reflection, self-awareness through this acknowledgement I have now got back to actively engaging with recycling/buying less food and items packaged in plastic. More so, it has also made me aware of the need for balance between PhD and other daily activities, not becoming so emersed that I lose engagement with other important things.
Respond with appropriate change:	I began to prioritise recycling again and made sure to get back into the habit of being consciously aware of the packaging of the food and items I purchase. I have also re-assessed my priorities and reminded myself of the need for balance. Environmentally, I will now be engaging in basic actions that fall under the environmental pillar. Economically, I will be more cautious of unnecessary electricity I am wasting in my day-to-day life.
Remember the benefits for sustainable reflexivity:	What to remember: Refection can sometimes bring out negative aspects of yourself, in this instance, relating to feelings of guilt. This is not a bad thing and should be used as a tool to generate change.

Example 2: Further example of reflection (interview process)

Critical Incident:	During one of the first couple of early visits, I was extremely nervous prior to the interview stages. With one participant, I could hear myself stuttering whilst asking the questions and potentially went too quickly without asking follow-up questions to allow expansion. I remember saying 'erm' and 'excuse me sorry give me a minute' quite a few times which made me feel anxious.
Recognise personal: views, biases, assumptions, understandings	I automatically assumed the participant was picking up on my own anxiety and felt uncomfortable. I felt like they were staring at me and thinking how unprofessional I was speaking.
Reflect from another perspective:	From the participants perspective, I felt they noticed I was nervous but that does not mean their responses were altered by this. I was also cautious as it was their lunch break and I felt like I was taking time away from their free time, so the participant may have thought I was wasting their time.
Review together:	As I reflected on this with my critical friend, they told me I was right to identify the nerves as detrimental, but I was 'overthinking' and to not worry so much as it is a 'normal' part of beginning the research phase. This did not really seem to help at the time. I do realise that I need to work on my nerves. I seem to lack confidence in myself, and I have noticed this before, it is a re-curing theme. For myself and my methodology, including the participants, it could cause both hesitance, awkwardness and even a lack of full depth in the interviews. This could be linked to my position as having outsider perspective, I felt less connected to the participant/environment.
Relate to reading/ research:	Wilkinson's (2020) paper on imposter syndrome, about how nerves are normal and ok to experience in practice if you are honest and reflexive about your emotions/feelings.
Re-appraise the relevance and implications for own practice:	This incident influenced me feeling insecure as a researcher, it has made me aware of the need of continuous reflection. By that I am referring to the use of different frameworks such as the 9 R's and the use of journaling and additionally, the importance of not being so harsh on myself although I do feel that my reflection was accurate. I do need to work on my nerves though to prevent them from affecting the research methods, I cannot expect participants to feel comfortable with me if I do not feel comfortable with myself as the researcher. In terms of working through my nerves, I am going to do more trials before conducting more interviews. In addition, I am going to implement a breathing technique, counting to 10 before I go into any further interviews. I am also aware that the process of interviewing and carrying out research to this extent is quite new to me.
Respond with appropriate change:	From this point, I have started to consider self-confidence tools such as meditation and breathing prior to an interview, and the use of reading academic articles to support me in this field such as the one above by Wilkinson (2020). I will use this opportunity to note how I feel and work towards gaining more confidence. I will also develop my understanding of methodology as I feel this will help.
Remember the benefits for sustainable reflexivity:	What to remember before engaging in another interview: Breathe and count to 10 Remember you have practiced

- Example 3: Reflection on the value of learning from participants

(part 1: 9 R's reflection)

^{*}John granted full consent to include his name in this study*

Recognise personal views, biases, assumptions, understanding/emotions	During my interview with John, particularly with regard to one question relating to 'emergent learning' that he brought up during our discussion, I felt anxious and worried that I was not understanding his explanations. This made me feel further emotions of annoyance and panic, assuming that I should have already recognised and understood such terms, as the researcher of this study. I recognised immediately that I assumed that I 'had' to understand the terms fully, as I did not wish to come across as unable to hold a discussion with John. I did not want him to question my ability to conduct this research. I assumed that he would automatically think negatively of me. The emotions felt at this time, and the following days were mostly: Frustration Anxiety Worry
Reflect from another	From John's perspective, he did not give me any real indication that he
perspective	was thinking less of me at any point during the interview. Rather, he kindly explained whenever I asked for clarification.
Review together	When I emailed John and was honest about not understanding one of his responses, he responded warmly, not only breaking it down but also providing further links to reading to support my understanding. I thanked him and realised my anxiety at times takes over and makes me think the worst.
Relate to reading/research	Schön (2003):
	The importance of learning 'with' others and the idea that we are all learners, and just because you are a researcher in a particular field does not mean you are unable to learn from the participants.
Re-appraise the	This reflection is relevant as it highlights two fundamental areas. Firstly, it
relevance and	sheds light on how anxiety and emotions can interfere with the reality of
implications for own	a situation. It can cloud researchers' interpretations and prohibit asking for clarity when there is confusion. Secondly, it reinforces the importance
practice	of involving participants in the analysis. Had I not asked John for clarity I would not have been in a position to interpret his words accurately.
Respond with	This was the second time I had experienced interview anxiety (the first
appropriate change	time was with the Minister in Gibraltar). I decided that I had to now accept how my emotions can interfere with my interpretation and consider journaling both before and after an interview rather than only after. This helped me to identify how I felt before and after, and how I understood or interpreted the participants' stories of EfS. I made it a point to engage with this throughout the research.
Remember the	What to remember:
benefits for	
sustainable reflexivity	Emotions can sometimes cloud my ability to interpret the participants' words accurately, especially when anxiety is involved. It is important to ask the participants for clarity and be honest about not fully understanding the connections, in order to more accurately understand their stories.

- Example 3: (part 2) Reflection post interview:

Following John's response, I researched the references he quoted and expanded my understanding further, discovering that emergent education is a process which encourages children to draw attention to their values and encourages adults to model the values they place on their own actions (Sulzby and Teale, 1991). This is strongly linked to EfS, as it encourages a curriculum that prioritises children developing positive attitudes to learning. For example, emergent education relates to hands-on learning experiences that develop positive dispositions in the learning area, which in turn motivates children to participate and develop a love for learning (Sulzby and Teale, 1991). Subsequently, upon reflection, this respectful, open form of communication between myself and John enabled the process of 'convergence of meaning' (Schön, 2003) to unfold. This meant that I was able to acquire a deeper level of understanding by breaking down meaning and learning together with the 'teacher' (Schönn, 2003) which, in this instant, was John. This reflects Emmanuel Levinas' philosophy, which promotes ethics within relationships (see section 3.2) (Murphy, 2013). It is a prime example of how I constantly engaged in reflexivity throughout the research process and mirrors how the roles of 'researcher' and 'participant' are not bound by a hierarchy of power and knowledge, as I learnt a lot from the participants. Ultimately, I learnt that experiencing emotions is part of the researcher's journey and monitoring emotions throughout has been important within this research.

Appendix XII: Gibraltar Key Interview Transcripts (in connection with the

Gibraltar vignettes)

28/07/21

Interview with the Minister of Education Gibraltar, John Cortes

Deinah: Can you tell me what your understanding of **sustainability** is / what it means to you in relation to early years education / children's learning /what words come to mind?

Minister: Well the 3 pillars come to mind straight away, creating a better future and working towards SDGS. There needs to be a clean slate and we are trying very hard to introduce the whole concept of sustainability and the goals, I do not think people in Gibraltar quite understand what is involved, very often it is a trendy word and they confuse sustainability with parts of what sustainable is as relating to the environment, we really need quite a broad approach in getting people to understand the concept in terms of the goals.

Deinah: Can you tell me what your view is about the purpose of early years education?

Minister: Well, to focus on the society we are living in, crisis going on I strongly believe children are the hope for the future and they should be given opportunity to learn from their young years about issues that will and can affect them.

Deinah: So is there anything that makes it challenging to focus on what you think is important? In relation to what you just said about the crisis we are in.

Minister: Well sustainability is an overriding concept in education, for example hard – science, environment are heavily focused on, there needs to be a much wider message that needs to get across to society as a whole particularly in education, not all educators get it, they need support.

Deinah: Could you describe how you see / view children as part of their learning?

Minister: I see children as receptive and ready to learn and make change.

Deinah: So what would your understanding of learner voice/participation be?

Minister: definitely involving children in the process towards SDGs.

Deinah: What would you describe as possible barriers to teaching sustainability in the early years? Minister: There aren't any political in Gibraltar, self-imposed curriculum change does not like to move out of comfort zone, most people don't like change, anything that is going to change – may be met with resistance from set in their ways, young and more open to developing (less of a problem now).

Deinah: Ok thank you so much for your time. I really appreciate it.

Minister: No problem, this is vitally important and I am very encouraged by our conversation, keep me informed.

Follow up / checking for accuracy : Second Transcript with Minister of Education for Gibraltar. John Cortes :

1/12/21

Deinah: Could you tell me what you understand by the term Sustainability?

Minister: it's a term that in modern day usage has become quite closely related to largely environment considerations with the term sustainable development goals which are world known er even though they are more broader than the environment most people at the moment link to the environment but essentially it is the process by which whatever actions we take today do not in themselves stop or prevent the actions or similar actions of that being taken in the future, in other words that we don't do something now that which means that we can't do the same thing that we want to do in the future because we have exhausted the resources that we need in order to do it.

Deinah: Thank you, so expanding on that what would you describe as any barriers in the early years education to teaching sustainability?

Minister: Barriers would be probably those that the teachers might want to impose on themselves by way of, I wouldn't call it a barrier as such but by way of what children can understand, children of primary school age particularly the smaller ones may not see the world in quite the same way as the grown-ups teaching them do, although a good teacher will understand that and be able to relate to that and put it across in a way that they will understand. So I think it's the ability of young children to understand the long termism that sustainability by definition erm is, erm I think that there are not going to be any barriers imposed by education policy here, or by teachers personal beliefs or anything like that, in other cases teachers personal beliefs may come into it, there may some of that but I think increasingly people know that sustainability is a national requirement is our species is going to carry on in existence and therefore I think there aren't many other barriers other than the children absorbing it so it should be put in a way that they should be able to understand and respond.

Deinah: Thank you, what characteristics and skills do you think are important for children to develop in the 21st century, so why are they particularly important now?

Minister: I think probably the same skills are important now as were important when we were living in the savannas or In caves, the ability to understand your environment, to interpret your environment erm to live with your environment, to use it er in a sustainable way. I think probably the skills that we

need to nurture now are those that our primate ancestors had as society became more complex and

sophisticated, I think we forgot that, we lost contact with the environment, we stopped our sustainable

way of life, erm man made a lot of its prey species extinct in a lot of the parts of the planet and so that,

er in a way is a (big pause) in way in which man negated sustainability, so I think the skills that young

children need now is to be able to understand long termism, that our actions now can have effects

which will be significant in the future but also that they have to relate to the environment and

understand it.

Deinah: Thank you, on that, what you mention about children would you say that there is a link

between children's engagement and participation in sustainability?

Minister: Well if children don't engage, they are not going to participate in sustainability and in

understanding, so yes there is clearly a link.

There are many more sustainable practices in early years education than ever before, thanks to

teachers being very aware and introducing them into their teaching. I will always welcome

improvements to this.

Deinah: Ok thank you.

372

Interview with Education Department Member in Gibraltar

This interview was conducted via telephone on 1/12/21, where I typed out notes from the conversation. I then sent this to the participant, to check for accuracy where the participant revised/ added a few points on 24/02/22 which are highlighted in red text

- Works as a representative for the Department of Education. Works as an educational adviser
 in the department of education and originally represented the dept on the Gibraltar CLIMACT
 committee- an initiative which was a European funded project which aimed to reduce the
 carbon footprint in schools in Europe. Through the project Gibraltar connected with other
 schools globally: France Portugal Spain Andorra where they discuss and share ideas through
 annual conferences/workshops. http://www.climact.net
- The Gibraltar ClimAct committee set up a structure -
 - core committee (reps from dept of environment, university of Gibraltar, dept education, lower primary sector, upper primary sector, secondary sector
 - working party (Minimum of one representative from school but as many representatives as wanted to attend welcomed
 - NGO forum
 - Eco committee- school based
- Participant noticed that schools used to depend on a particular individual in a school to focus
 or emphasise sustainability, so the team wanted to embed this into schools to prevent the
 essence of sustainability leaving the school when the individual leaves, so It is continued
- Developed an award scheme but this still needs to be embedded
- They engage in regular meetings with the working party where they share ideas and celebrate what is taking place community spirit
- Covid identified as barrier, regarding the effect on individuals becoming busier 'extra workload' funding was stopped/limited
- Participant was invited to speak in Brussels as a representative to demonstrate how their funding has been effective and had an impact on Gibraltar and the Education system
- They focused heavily on recycling for a while but noticed that this could have been counterproductive in some areas where individuals actually end up using more materials
- Focus on embedding environmental pillar in Gibraltar, participant expressed awareness for
 the social/economic pillar but explained that even with her herself, her understanding of
 sustainability has grown as a concept. It's a 'vast' area, and they felt they could not really look
 at all elements/pillars in worry of becoming overwhelmed, so instead they decided to focus on
 the environment pillar which they had sufficient knowledge on and could produce better
 outcomes
- Understanding of sustainability as 'living in a way today that we can sustain for future generations'
- Expressed an openness to develop deeper understandings and connections of sustainability

- Children do make connections but is more about focusing on an 'ethos' where sustainable practices become part of children's daily lives, routines
- Participant believes it is essential to change and challenge attitudes of adults, particularly in Gibraltar we live in a 'materialistic' and chaotic society, we have a long way to go
- As a representative of the Department of Education, participant feels they could always be doing more but the busy schedules mean there is less time, this sets a limitation to focusing on sustainability
- An example of an initiative they are currently doing with the children is offering the children opportunities to create short videos for their parents/careers/adults around them in attempts to educate them on sustainable themes, to share with them what they have learnt and are doing themselves in school, focus on civil service challenging parents on how much paper they use, printing, turning off lights
- Participant believes children do teach adults and they learn from each other
- An example of a community project: children from the schools gathered in Little Bay Gibraltar
 and joined with an adult to form part of a project to reduce plastic from the beaches. This
 involved dialogue and discussions where the children came up with ideas on how to reduce
 plastic
- Aim is to embed sustainability in schools, Participant explained that some teachers do
 prioritise sustainability while others do not, but they want to empower everyone, not
 disempower an example of this is not leading or telling them what to do but giving them
 opportunity to engage in sustainability themselves
- · Emphasis on locals coming into schools to speak with the children about sustainability
- Participant expressed an interest in me coming to speak with the sustainability group to discuss findings of where I am up too, openness to listen and engage in ways of moving forward positively

Appendix XIII: More Examples of Data with Children across the 4 Home

Nations & in Gibraltar

3 children in Gibraltar

Child 1:

Deinah: Can you tell me what your favourite thing about school/learning is?

Child: my favourite thing is the slime and playing

Deinah: and what does that mean to you, to come to school?

Child: well to have fun and play with the sand and slime

Deinah: that's wonderful, and what do you enjoy about playing with the sand and slime?

Child: making sandcastles and shapes

Deinah: great! I used to love playing with the castles too! Do you think, is there anything you don't like about learning?

Child: I don't like playing with the water because then it gets messy everywhere and we get told off

Deinah: oh, and do you choose what you learn? Do you make decisions about what to learn?

Child: no Mr does that

Deinah: and what would you want to learn about if you had the choice?

Child: more things about everything

Deinah: can you tell me a little more about those things?

Child: just different things

Deinah: Ok, and can you tell me do you think it's important to take care of our world?

Child: yes sometimes

Child 2:

Deinah: Do you think you can tell me what it is you enjoy about school?

Child: being outside

Deinah: and why do you like to learn outside? What do you learn outside?

Child: well we just play and we have so much fun

Deinah: what do you play?

Child: tag and pretend and lots of things

Deinah: wonderful, and what helps you learn?

Child: playing with my friends and when we are outside

Deinah: can you tell me why?

Child: because we help each other play

Child 3

Deinah: So, what is your favourite thing about learning?

Child: being with friends

Deinah: wonderful, and what do you like to learn about?

Child: erm learning about the letters sometimes

Deinah: and is there anything that stops you from learning?

Child: spelling and sometimes Mrs tells us to stop and stay in class

Deinah: Oh right.

Child asked to continue speaking after break

Deinah: Can you tell me why it's important to look after our world? Have a little think

Child: Well take care of everyone because we don't want to even hurt each other

Deinah: Ah fantastic. And is all your learning inside the class? Or outside?

Child: all the learning inside

Deinah: and would you like to learn outside?

Child: yes, because it makes me happier

Deinah: can you tell me why it makes you happy?

Child: because I can do all the activities and run around

Deinah: ah brilliant. Thank you for talking to me today!

- Group conversation with 3 children in England

Deinah: Can you tell me a little bit about what your favourite things to learn about are?

Child 1: I think the best thing I learn about is the animals and being with the animals everyday

Child 2: Yes, that's my best thing as well but I also love the beach and when we play at the beach

Child 3: My favourite is everything, I love learning about everything with Mrs because we have so much fun together

Deinah: I think that's wonderful. And how about learning about the world? Would you say that is important?

Child 3: Well, it is because we are inside the world so we have to learn about what it is

Child 2: Yes, because we take care of the world just like with the animals because if not that is not nice

Child 1: * smiles and nods head*

Deinah: Yes, I agree, I have another question now let's see who can think about something you do not

enjoy? Can you explain what and why?

Child 1: about being here?

Deinah: yes

Child 1: *pauses to think*

Child 1: No I cannot think of anything

Child 3: I don't like sometimes when we have to leave the beach

Deinah: Oh and how often do you go to the beach?

Child 3: A lot because we always tell Mrs we want go

Deinah: Oh right, and how about thinking about what helps you learn, and what gets in the way?

Child 2: Being together and with Mrs and always playing can help

Child 3: *nods head*

Deinah: Ok that's great, just before we go back to playing together, can you maybe think about something that may stop you from learning?

Child 3: When we have to go home or when we have nap time

- Conversation with one child in Wales

Deinah: Can you tell me what your favourite thing to learn about is? What do you enjoy the most

Child: I would say my favourite is to read the books about the insects and nature I do this everyday

Deinah: Oh is this the book you showed me earlier?

Child: yes, but I read a lot of different ones

Deinah: That's great, how do you think what you learn is useful to you?

Child: because it's good to learn about everything and Mrs lets me read when I want

Deinah: I was about to ask you how do you choose or make choices about what you learn about. Can you tell me how your teacher lets you choose?

Child: because every day when I want to read Mrs says it's ok and when we want to read outside that is ok as well and we all play with different things and Mrs lets us

Deinah: great, and how about learning outside, what is it like?

Child: *pauses* - it is special because we can choose different games and if we want to play together or alone or with Mrs and I can also read my books outside

Deinah: you really do enjoy your books, that's wonderful. How about having a think about what stops you from learning? Can you think of anything?

Child: not really

Deinah: Ok just one more question – I would love to know if you think learning about our world is important? If so, could you tell me why?

Child: yes of course because without the world we are nothing and cannot learn or I cannot read my books

Deniah: Could you tell me a little more about what you mean?

Child: I mean that in my books I also read about the world and the insects and this is how I learn

- Group conversation with 2 children in Northern Ireland

Deinah: Can you tell me what you enjoy about coming to school?

Child 1: That's easy I enjoy a lot of it because we play in the forest a lot

Child 2: yes, and we also play inside sometimes

Deinah: and do you prefer to learn inside or outside? Could you tell me why?

Child 1: I think I like outside more because in the forest we play in the trees and have more space to run

Child 2: yes, and everyone is smiling more

Deinah: that's lovely, and do you get to choose and make decisions about what you want to play and learn about?

Child 2: yes, we do

Child:1 * nods*

Deinah: can you think of an example to share with me?

Child 2: like before it was raining a lot but we wanted to stay longer so we asked Mrs and she said yes

Deinah: oh ok thank-you. How about telling me if you think it is important to look after the world?

Child 2: *yells*: yes!

Child 1: yes, we do this a lot

Deinah: can you tell me a little more about what you mean? Maybe tell me an example of how you do this?

Children look at each other and pause

Child 1: I think because we always pick up the rubbish and we also feed the animals and are kind to everyone because being not kind isn't good for the world

Child 2: I think so as well because Mrs tells us about being nice to everything and the world

Deinah: thank you for sharing that with me. One last question before we go back to the forest, how about something that stops you from learning? Can you think of anything?

Child 1: no

Child 2: I don't think I can think of something now

Appendix XIV: More Key Examples of Data with Educators across England

& in Gibraltar

 Educator and Childminder in England shares experiences teaching and home schooling her son.

*This was an early interview during Covid-19 peak, and was on the phone. I made notes during the call and sent them to the participant. Participant then added some extra points which are highlighted in red text at the end.

Main Points:

- Children are capable without adult leadership, allows her son to learn at his own pace
- Sustainability and respectful learning is part of their daily routine 'integrated'
- Value for democratic learning 'I always ask him if that's what he wants to do'
- Value for place-based learning evident, beach and park visits, nature/nurture education home groups once a week
- An example of the above is when participant takes son to Chester Zoo and they can learn about the 3 pillars of sustainability naturally
- Relating to the environmental pillar, son saves bees and snails and has learnt how to respect insects and animals and view the world through an 'eco-lens'
- Participant values 'reciprocal' learning 'I learn more from him than I ever learnt at school'
- Emphasis about learning more about the world together
- Holistic, happy education for her son where she asks if he is happy to make sure he is enjoying his learning
- Participant tries to teach her son about the economy when they are in shops together, for
 example asking him how much he thinks something will cost, or proposing the idea of having
 £5 to spend in the shop and allowing her son to work out what they can buy for that amount
 (we learn about the pillars naturally)

Challenges discussed

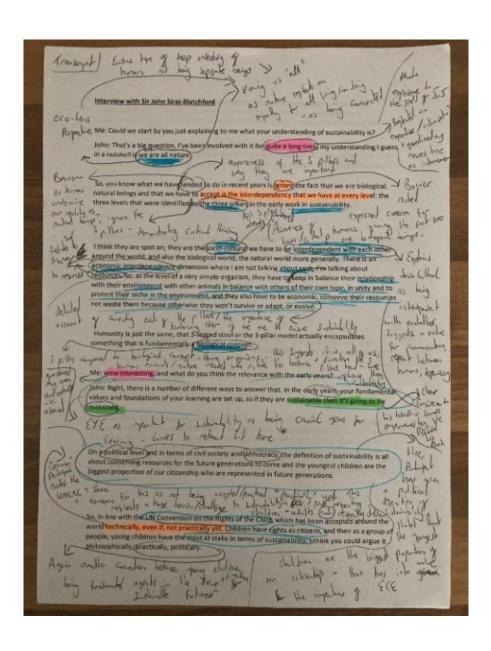
- Participant expressed difficulty in letting go of the curriculum and social norms, the element of control and having a set structure
- She had concerns around reading and writing 'do I need to do this every day'?
- She then started to realise that actually her son was starting to naturally pick things up and she dropped the idea of 'I should be reading or writing'
- If her son didn't want to engage in something, there was no pressure and it could come from him naturally when he changes his mind
- Stress on the fact that not everyone knows about home education and there have been concerns about socialising from others in her community, other people's perceptions and opinions can be judgemental
- Nonetheless, participant feels empowered and is able to voice that through reflection

Added points:

- 1. Children are capable to learn at their own pace when adults guide and facilitate. I have learnt that the more I structure my son's learning, the more resistance there is. However, not all children learn like this, I know some home educated families who do have structured learning because that is what works for their children. However, this isn't the case with my son, and he benefits from having the freedom to explore his interests/enjoy free time to relax and play.
- 2. My son now has his own spending money £10 per month. He is naturally learning what things costs and what is important to him. He recently bought himself a fish tank and tropical fish with his spending money. We integrate this into our learning journey and education for sustainability. Learning where the fish are from and how they are bred, choosing real plants rather than plastic plants etc.
- 3. We have come so far over the last year. The more I relax and let go of the need to follow a curriculum or to teach my son certain skills (ie maths and English) the more I am able to see what my son is learning in a broader sense. For instance, he naturally reads signs and enjoys learning timetables without forcing them. And on a broader sense he likes to learn about the history of things such as the invention of the telephone and cars/boats etc. We are lucky and able to delve into such things when these interests arise.
- 4. Sustainable practise on a daily basis; having regular discussions and involving him in daily decision making, such as choices when food shopping, days out. Today he wanted to visit my hometown on the bus, so we did, and we managed to visit the local museum. We learnt so much! Ensuring we follow a respectful way of life respecting our bodies, the environment, animals, other people. I also let him take risks and be responsible for things such as his own money and pets, to ensure he knows his own limits and to help him care for animals.
- 5. My understanding of sustainability is respect in every sense. To respect oneself, but to also respect everything else around you are including others, animals, insects, plants, trees, the earth and space. It's important for children to learn this so they will learn how to respect themselves and each another in the future, and how to look after the wider environment and also their finances.

- Example of edited Interview transcript which captures the messy process of thematic analysis. Transcript belongs to ECE author John in England

John provided full consent for his name to be included in this study



- Two further examples of interview extracts from educators in

Gibraltar that highlight an emphasis on the environmental pillar

Extract 1:

Deinah: Are you aware of the Sustainable Development Goals? / Which would you say are relevant to your role with children?

Educator: Not really but I have heard of them. I would say when it comes to sustainability my role with the children is ensuring they learn how to care for the environment

Deinah: Ok thank-you, and can you tell me what your understanding of sustainability is / what it means to you in relation to early years education / children's learning /what words come to mind?

Educator: My understanding is that sustainability is how we as a collective can work towards keeping our environment thriving and clean. In terms of the children's learning, we make sure to talk to them about the importance of this. We have our local trips where the children clean up parts of the beach and quarry.

Extract 2:

Deinah: Could you tell me what your understanding of sustainability is?

Educator: I would have to think about but right now on the spot I would say it is about the environment and how we take care of it

Deinah: and what would that mean in relation to the early years?

Educator: it would definitely stress how important it is to teach children about taking pride in their environment. As an example we recently took the children to the beach and had a talk on cleaning our seas

Deinah: thank-you. How about the Sustainable Development Goals, are you aware of them?

Educator: I cannot say I am no but I would assume they are related to what we are discussing today and about protecting our environment