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A Whole Story Perspective: Norwegian Youth reflections on Sustainable Development Goal 4.7

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Global Development Studies

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Norwegian Youth reflections on Sustainable Development Goal 4.7.

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Noragric
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Declaration

I, Beth Annwyl Roberts, declare that this thesis is a result of my research, investigation, and findings. Sources of information that are not my own have been acknowledged and a reference list has been appended. This work has not been previously submitted to any other university for an award of any type of degree.

Signature.....

Date.....

Abstract

Wrought with climate instability and social inequalities the future at times appears tenuous, but there is also hope. One aspect of this hope lies in the vision of the United Nations Sustainable Development Goals (SDGs) 2030 agenda, in particular goal SDG 4.7 and its core concepts of Education for Sustainable Development (ESD) and Global Citizenship Education (GCE). To ensure youth voices are both heard and utilised in future curriculum development and decision making, critical insight is needed as to how youth today perceive and reflect on the concepts of ESD and GCE. The aim of this thesis is to engage youth with a critical, integrated perspective of ESD and GCE in order to contribute both to pedagogical learning methods and curriculum development from the perspective of those who it is imparted on. Through aspects of Decolonial Theory and critical pedagogy this qualitative research engages with the ‘whole story perspective’ to mobilize youth to think outside the ‘box’ and move between marginalized and mainstream perspectives. Empirical data was collected through two interconnected workshops from three Norwegian Upper Secondary Schools involving a total of 42 students (average age 17). The findings show there is a strong sense from all the youth that a more critical, action-oriented perspective is needed and wanted. Many groups refer to critical thinking, problem solving directly and indirectly indicating the present competencies and approaches do not suffice. The results also reveal that the youth are aware that what they know is not sufficient to contribute to a sustainable and just world. While an awareness that there are other ways of seeing and acting, these are perceived as essentially beyond what they can envision and what their education provides. To conclude, this research calls for a more integrated, critical approach to the core concepts of SDG 4.7, ESD and GCE. The youth call for change, and this is where their hope lies.

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Table of Contents

| | |
|---|----|
| Declaration..... | 3 |
| Abstract..... | 4 |
| Acknowledgements..... | 5 |
| Table of Contents..... | 6 |
| List of abbreviations..... | 9 |
| List of Figures..... | 10 |
| Loci of Enunciation..... | 11 |
| 1 Introduction..... | 12 |
| 1.1 Thesis Research Topic and Rationale..... | 12 |
| 1.2 Research aims and questions..... | 15 |
| 2 Background..... | 16 |
| 2.1 Sustainable Development Goals..... | 16 |
| 2.2 SDG 4.7..... | 17 |
| 2.3 Education for Sustainable Development and Global Citizenship Education..... | 17 |
| 2.4 Key Pedagogical Approaches to SDG 4.7 (Education for Sustainable Development and Global Citizenship Education.)..... | 19 |
| 2.4.1 Learning Domains and Eight Core Competencies..... | 19 |
| 2.4.2 Pedagogical Approaches..... | 19 |
| 2.5 SDG 4.7: Norwegian Context..... | 21 |
| 3 Theoretical Framework..... | 24 |
| 3.1 Weak or Strong..... | 25 |
| 3.2 Integrated Approach..... | 26 |
| 3.3 Decolonial Theory..... | 27 |
| 3.3.1 HEADS UP..... | 29 |
| 3.4 ‘Spaces of Enunciation’ (Soft, Radical and Beyond Reform) and GCE approaches..... | 31 |
| 3.4.1 Soft reform; Neoliberal & Liberal..... | 32 |
| 3.4.2 Radical Reform: Critical GCE..... | 35 |
| 3.4.3 Beyond Reform: Post critical GCE..... | 37 |
| 3.5 Critical pedagogy..... | 38 |

| | | |
|-------|--|-----|
| 3.5.1 | Care Theory..... | 42 |
| 4 | Methodology..... | 43 |
| 4.1 | Data collection | 43 |
| 4.1.1 | Photo Elicitation | 45 |
| 4.1.2 | HEADS UP | 47 |
| 4.1.3 | Sample Units | 47 |
| 4.2 | Data analysis | 49 |
| 4.3 | Limitations and Ethical Considerations..... | 52 |
| 4.3.1 | Trustworthiness; credibility, transferability, dependability, and confirmability | 52 |
| 4.3.2 | Ethical considerations | 54 |
| 5 | Context and Dynamics of Analysis..... | 55 |
| 5.1 | Analytical Framework | 55 |
| 5.2 | Themes..... | 56 |
| 5.3 | Settings and Dynamics | 57 |
| 5.4 | Workshops | 59 |
| 5.4.1 | Workshop1..... | 59 |
| 5.4.2 | Workshop2..... | 62 |
| 5.5 | Reflections..... | 63 |
| 6 | Findings and Analysis: "The world is complicated"..... | 65 |
| 6.1 | Themes..... | 66 |
| 6.1.1 | Climate: " Okay, but it can also hurt them" | 66 |
| 6.1.2 | Money: "but that's just how it is" | 73 |
| 6.1.3 | People: " It can just depend on where you are from" | 76 |
| 6.1.4 | Power: "Change the System" | 79 |
| 6.2 | Competencies and Critical approach. " Talk about it...why is it important" | 82 |
| 7 | Conclusion..... | 88 |
| 8 | References | 90 |
| 9 | Appendix | 98 |
| | Appendix 1 Images..... | 98 |
| | Appendix 2 Teaching resource..... | 106 |
| | Appendix 3 Introductory email to Schools..... | 108 |
| | Appendix 4 Consent Letter | 109 |
| | Appendix 5 GCE and ESD full definitions | 112 |

| | |
|---|-----|
| Appendix 6 Workshop Lesson Plans | 113 |
| Appendix 7 Note taking sheet..... | 119 |
| Appendix 8 Final Posters..... | 121 |
| Appendix 9 Note taking sheet, connections between positive and negative. | 128 |
| Appendix 10 Final Mind Mapping worksheet | 129 |

List of abbreviations

| | |
|--------|--|
| CMP | Colonial Matrix of Power |
| EE | Environmental Education |
| ESD | Education for Sustainable Development |
| IESL | International service learning |
| GCE | Global Citizenship Education |
| GEFI | Global Education First Initiative |
| GESC | Global Education for Sustainability Citizenship |
| NMBU | Norwegian University of Life Sciences |
| NSD | Norwegian Centre for Research Data |
| OECD | Organization for Economic Co-operation and Development |
| SDG | Sustainable Development Goals. |
| PE | Photo Elicitation |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |
| WIA | Whole Institute Approach |

List of Figures

| | |
|--|----|
| Figure 1 Understanding ESD and GCED (UNESCO, 2019, p,10) | 17 |
| Figure 2 ' Weak Sustainability' (Berglund & Gericke, 2022) | 25 |
| Figure 3 ' Strong Sustainability' (Berglund& Gericke, 2022) | 26 |
| Figure 4 HEADS UP (Andreotti et., al 2018 as cited Andreotti 2012) | 30 |
| Figure 5 HEADS UP (Andreotti et., al 2018 as cited Andreotti 2012) | 30 |
| Figure 6 Spaces of Enunciation, Modernity's Shine & Shadow, GCE approaches..... | 32 |
| Figure 7 "Schools in action. Global citizens for Sustainable development. Student guide" (UNESCO, 2016, p.10) | 46 |
| Figure 8 Sample Unit Breakdown | 49 |
| Figure 9 Thematic Analysis. Coding and themes | 51 |
| Figure 10 Analytical Framework | 56 |
| Figure 11 Themes | 57 |
| Figure 12 GoPro Unit1B | 57 |
| Figure 13 Photo Elicitation Activity, Unit1B | 60 |
| Figure 14 Outline of brainstorming activity on poster boards | 62 |
| Figure 15 Final hard copy didactic material | 62 |
| Figure 16 Whole Story Mind mapping activity | 62 |
| Figure 17 Workshop2 Direction Slide. Whole story reflection points | 63 |
| Figure 18 Robotic hand holding the earth (Dreamstime, 2021) | 66 |
| Figure 19 'Solar Panels' (PracticalAction, n.d.) | 67 |
| Figure 20 'Mines' (Butler, n.d) | 70 |
| Figure 21 'Hands holding plants in earth' (CreativeLives, 2021) | 72 |
| Figure 22 ' Smokestack' (Lam, 2021) | 72 |
| Figure 23 'Two individuals fishing' (Scoullos et al., 2013) | 72 |
| Figure 24 'Fair trade' (Powell, 2014) | 74 |
| Figure 25 'Youth on Tree' (Abraham 2021) | 76 |
| Figure 26 'Refugee Camp' (Brighton, n.d) | 76 |
| Figure 27 'Polar bear on ice' (FutureLearn, 2021) | 78 |
| Figure 28 'COP26' (Usher, 2021) | 79 |
| Figure 29 'Activists' (McCarthy, 2021) | 80 |

Loci of Enunciation

“My life has evolved within a mosaic of different ‘worlds’. I am a mature Caucasian student of middle-class background. I hold British (Welsh), Canadian, and Mexican nationalities. I was born in the UK, was a Canadian immigrant through childhood, and, in choosing a small community on the Oaxacan coast as my heart home, became Mexican in adulthood. I grew up with stories of the silencing of the Welsh language, like a slate hung around students’ necks for speaking it at school, and the need to drop or hide a Welsh accent in order to be ‘successful’. As a Canadian, my education taught me little of the First Nations given Christopher Columbus’s ‘discovery’ of ‘the new world’. Today, I watch the Truth and Reconciliation Commission play out from afar and for the first time see many Canadian Academic institutions taking initial steps towards some inclusion of First Nations Peoples and Knowledges within their walls. In Mexico, where great wealth and poverty live blatantly side by side, my path began in Cuernavaca, Morelos, a rich colonial city, and ended at my heart home in the second poorest state, Oaxaca. I have worked in education for more than half my life within all these spheres, from teaching the ‘social elite’ to the most ‘marginalized’, within the walls of academia, both public and private schools, to establishing a small grassroots non-profit alternative educational centre on the coast of Oaxaca, Mexico. At present, I re-turn, once again a student, this time in Norway. Within the first weeks of my MA, ‘decoloniality’ began to whisper about and elucidate struggles I have had throughout my life as a student, a teacher and as simply myself. The process is one of not only decolonizing my teaching practice and how I approach academia, but also an inner personal journey of how world(s) can be re-visioned through a wheel of praxis—of closures and openings of reflection, biases/privilege, confrontation, self-limitations, and change”¹

¹ The above represents the loci of enunciation written from previous academic work, “ Inside, Outside, In between Decolonial Seeds in Education” (Roberts, 2022).

1 Introduction

1.1 Thesis Research Topic and Rationale

Wrought with climate instability and social inequalities the future at times appears tenuous. But there is also hope. One aspect of this hope lies in the vision of the United Nations Sustainable Development Goals (SDGs) 2030 agenda, in particular SDG 4-Quality Education. Here education is seen as one of the main drivers of development with SDG 4, ‘Quality Education’, considered as a key pillar towards the success of all the SDGs (Poek & Östman, 2020; UNESCO, 2017a; UNESCO et al., 2015). The foundation of SDG 4, The Incheon Declaration, also known as *Education 2030* (UNESCO et al., 2015), sets five priority actions the fourth of which specifically highlights the need for active involvement of youth and recognizes “...young people as key actors in addressing sustainability challenges and the associated decision-making processes” (UNESCO, 2020a, p.3)². Research also shows that only ‘learning’ about climate issues and social injustice is not effective and can lead to apathy and/or climate anxiety (Christie-Blick, 2021; Pihkala, 2020). Therefore, a participatory, engaged and proactive approach is needed. To ensure youth voices are both heard and utilised in future curriculum development and decision making, critical insight is needed as to how youth today perceive and reflect on SDG 4 related topics.

According to United Nations Educational, Scientific and Cultural Organization (UNESCO), SDG 4 embodies an inspirational, innovative and transformative approach to education that is “...holistic, ambitious, aspirational and universal, and inspired by a vision of education that transforms the lives of individuals, communities and societies, leaving no one

² The five priorities are as follows: “For priority action area 1 on policy, ESD must be integrated in global, regional and national and local policies related to education and sustainable development. For priority action area 2 on education and training settings, attention is required to promote the whole-institution approach to ensure we learn what we live and live what we learn. In priority action area 3 on building capacities of educators, the focus is on empowering educators with the knowledge, skills, values and attitudes needed for the transition to sustainability. priority action area 4 on youth must recognize young people as key actors in addressing sustainability challenges and the associated decision-making processes. Priority action area 5 on local level action emphasizes the importance of actions in the communities as they are where meaningful transformative actions are most likely to occur.”(UNESCO, 2020a, p.3)

behind...” (UNESCO et al., 2015, p.24). Its most transformative component is widely cited as goal SDG 4.7:

By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development...through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture’s contribution to sustainable development (UN, 2015, p.17).

SDG 4.7 is regarded as encompassing the interconnected concepts of Education for Sustainable Development (ESD) and Global Citizenship Education (GCE) (UNESCO, 2017b; UNESCO, 2020a). Although ESD and GCE are seen as interconnected, a critical integrated approach is not often seen in practice, for example ESD is often focused predominantly on the ecological aspects of sustainability and in GCE societal issues (economic, political and cultural) often dominate educational content (Berglund & Gericke, 2022). In addition, they are both primarily localized through a mainstream, predominantly neoliberal, development framework that disregards present and historic influences that hinders any truly transformative change (Berglund & Gericke, 2022; Bourn, 2021a; Pashby & Sund, 2020a; Pirbhai-Illich et al., 2017). Due to this there is a call for a more integrated approach to the ESD and GCE that confronts systemic interconnected structures that impede sustainability and social justice (Andreotti, 2014c; Berglund & Gericke, 2022; Goris, 2021; Huckle & Wals, 2015; Jenkins, 2021; Pashby et al., 2020).

If the hope in the SDG’s is to be realised and incite transformative change, a critical, multifaceted, proactive, holistic engagement is required; a ‘whole story perspective’. This is to ensure the complexities and tensions derived from present and past environmental, social and economic perspectives are addressed. A ‘whole story perspective’ reflects an engagement with Decolonial Theory. It entails examining these complexities and tensions from within present and historic perspectives resulting from colonialism on a local, to the national and global level. Decolonial Theory is set on the premise of colonialisms’ continued influence on present day power structures; the colonial matrix of power (CMP)³ (Dei, 2016; Mignolo & Walsh, 2018; Pirbhai-Illich et al., 2017; SAIH, 2020; Zavala, 2016). The work of Selby (2002) can be seen to broach this within the concept of the ‘signature of the whole’. It moves away from the inherent

³ Though often in literature the colonial matrix of power is abbreviated to CMP, for the ease of the reader I have maintained its full written form.

Western⁴ approach of compartmentalization and to that of radical interconnectedness (Selby, 2002). He writes of the intrinsic connection of the ‘near and far’, how a part of a whole reverberates to affect the whole; “...different global issues - such as environment, development, health, peace, human rights are interconnected... past, present, and future are interwoven, co-evolving and co-creating elements of time” (Selby, 2002, p.25). Within SDG 4.7 a critical engagement from a ‘whole story perspective’ can be envisioned as mobilizing transformative change from a structural, historical understanding of education, sustainability and global citizenship. To ensure SDG 4.7 related education is inspirational, innovative and transformative, gaining insight into how youth critically reflect on these topics is key (Darder, 2020). As Freire contests, teachers “... need to know the universe of their (students) dreams, the language with which they skillfully defend themselves from the aggressiveness of their world, what they know independently of the school, and how they know it” (Darder, 2020, p.506 as cited Freire, 1998). This highlights the need for youth voices to be heard and acted upon in future curriculum development and decision making. While research exists on youth perspectives on ESD and GCE there is a lack that does so from a critical, integrative ‘whole story perspective’; an engagement with Decolonial theory (Menon et al., 2021; Sund & Pashby, 2020).

Though, decolonial research does exist within educational contexts, the breadth of engagement is still seen as lacking (Menon et al., 2021; Sund & Pashby, 2020). As Sund & Pashby (2020) contest there is a lack of from within classroom practice and dynamic. There is the call for the mobilization of “...critical-decolonial and transgressive praxis to think and learn” (Khoo & Jørgensen, 2021, p.476) about ones place within the colonial matrix of power from teachers, and in turn learners (Pashby & Sund, 2020a). This is highlighted within a ‘Global North’ context due to the stance that approaches to ESD and GCE often replicate the colonial matrix power and do not profoundly “...consider ethical concerns around responsibilities related to who contributes to and who is most negatively impacted by global issues” (Pashby & Sund, 2020a, p.67). Within the Norwegian context, the 2020 curriculum renewal (LK2020), underscores the importance of critical thinking and ethical awareness in conjunction with in-depth learning (European Commission, 2022; Jónsson et al., 2021; UDIR, n.d.,a). These key

⁴ The terminologies of Global North, South and the concepts of West(ern) is based on, as per Pashby & Sund (2020a), “epistemological, economic, and political privilege within the current geopolitical configurations” (Pashby & Sund, 2020a, p.68) rather than a geographical divide.

dimensions, alongside current academic research in Norwegian curriculum and pedagogical development, such as the NMBU '*Education for Sustainable Development in Practice*'⁵, represents an opening for critical, integrated research on sustainability and social justice within the Norwegian context.

1.2 Research aims and questions

The research aims to contribute both to pedagogical learning methods and curriculum development from the perspective of those who it is imparted on, the students themselves. Through a critical and integrative perspective, the objective of this research explores how Norwegian youth critically reflect on core concepts of SDG 4.7 – sustainability (ESD), and social justice (GCE). Through aspects of decolonial and critical pedagogy, this research engages Norwegian youth with the 'whole story perspective', to mobilize them to think outside the 'box' and move between marginalized and mainstream perspectives of sustainability and social justice. The research methods used are qualitative. Empirical data was collected from three Norwegian Upper Secondary Schools involving 42 youth (average age 17) and 3 teachers.⁶ Data was collected in the form of a two-part interactive educational workshop. The focus of the workshops was to listen to the voices of Norwegian Youth and open the space for them to critically engage with the 'whole story perspective'; to incite an engagement with not only the integration of sustainability and social justice, but also explore how the youth envision pedagogical approaches that are conducive to doing so. In essence, the workshops explored where their hope lays. The above aims of this research is reflected in the following research questions:

Main research question

In the context of the 'whole story perspective', how do Norwegian youth critically reflect on the concepts of sustainability and social justice within SDG 4.7, Education for Sustainable Development and Global Citizenship Education?

⁵ This is run by the Educational Sciences Department, at the Norwegian University of Life Sciences (NMBU). For more information on this project see <https://www.nmbu.no/prosjekter/node/35461>

⁶ Due to the limitations of a 30credit Masters thesis, the data from the teachers has not been incorporated into this thesis. This also substantiated due to the core premise of this research to focus on student voice.

Sub questions

1. How do Norwegian youth respond to a method built on a critical, integrative approach to the core concepts of SDG 4.7, Education for Sustainable Development and Global Citizenship Education?
2. How do Norwegian youth deliberate on the competencies that they identify as needed for the core concepts of SDG 4.7, Education for Sustainable Development and Global Citizenship Education?

2 Background

This chapter will present an overview on the SDGs, SDG 4.7, ESD and GCE, and the key pedagogical approaches cited. It will conclude with background on the Norwegian context.

2.1 Sustainable Development Goals

In 2015, the 193 UN member states voiced a commitment towards the 17 goals and 168 targets of the Sustainable Development Goals (SDGs) 2030 (UN, 2015). The Brundtland Report (1987) is cited as being the core source of how sustainable development is defined today (UNESCO, 2020a). The overriding message is for a form of “...development that meets the needs of the present without comprising the ability of future generations to meet their own needs.” (Brundtland, 1987, p.41). The SDGs represent a central starting point for both bilateral and multilateral action (Haslam et al., 2017). They represent a new path of development, envisioning the process as global rather than the Global South as the traditional center (Haslam et al., 2017). The SDGs influence policy making, on both a national and global level, and act as a framework for actors from both the conventional and non-conventional world stage of development (Sachs, 2012). Though not constituting a legally binding agreement between nations, establishing national policies and frameworks conducive to their success is a high expectation (UN, 2015). The SDGs embrace the social, environmental and economic spheres of development and encompass a “plan of action for people, planet and prosperity” (UN, 2015-preamble) with the slogan of “leave no one behind” and “transforming our world” (UN, 2015-preamble). Throughout the SDGs there is a strong emphasis on the concepts of human rights, gender equality and sustainable development (UN, 2015). A key pillar towards the success of the SDGs is SDG 4- Quality Education (UNESCO et al., 2015). SDG 4 goals and targets represent a move away from a emphasis on *access to education* to that of *quality education* (Bamber et al., 2018).

The possibility of its transformative influence on education policy globally is widely recognized (Moriarty, 2019; UNESCO et al., 2015). SDG 4 includes 10 targets and 11 indicators; the most transformative of which is SDG 4.7 (UNESCO et al., 2015).

2.2 SDG 4.7

SDG 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development...through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development (UN, 2015, p.17)

SDG 4.7 is represented by the two overarching themes of ESD and GCE (UNESCO, 2020a). ESD and GCE are seen as crucial for preparing learners for the 21st century and its connected challenges of climate change and globalization (Bamber et al., 2018; Jónsson et al., 2021; UNESCO, 2014; UNESCO, 2019). ESD and GCE encompass the pressing issue for a transformative approach to education that directly engages learners with the concepts of sustainability and global justice (Gallwey, 2016; Goris, 2021). Figure 1 represents the understanding of ESD and GCE⁷ from within a UNESCO context. Citing UNESCO (2019), "ESD and GCE empowers learners to develop the knowledge, skills, values and attitudes they need to contribute to a more inclusive, just, peaceful and sustainable world" (UNESCO, 2019-foreword).

Figure 1. Understanding ESD and GCED (UNESCO, 2019, p,10)

Understanding ESD and GCED

To help countries take forward Target 4.7, UNESCO works on the basis of the following understandings of ESD and GCED, while recognizing the connection and overlap between the two.

- *Education for Sustainable Development (ESD)* empowers everyone to make informed decisions for environmental integrity, economic viability and a just society for present and future generations, while respecting cultural diversity (UNESCO 2014, p. 20).
- *Global Citizenship Education (GCED)* aims to empower learners of all ages to assume active roles, both locally and globally, in building more peaceful, tolerant, inclusive and secure societies (UNESCO 2015, p.14). It seeks to engender 'a sense of belonging to a broader community and common humanity, which emphasizes political, economic, social and cultural interdependence and interconnectedness between the local, the national and the global' (UNESCO 2015, p.14).

2.3 Education for Sustainable Development and Global Citizenship Education

ESD has been present within national curriculums during and prior to the 2005- 2014 United Nations Decade of Education for Sustainable Development (UNESCO, 2019). ESD represents a main policy concept, that is also linked to and referred to in a variety of ways, depending on the

⁷ GCE and GCED both refer to Global Citizenship Education.

context and tradition, such as Environmental Education, Sustainable Education and Education in Sustainability. ESD is often rooted within the ecological sphere in context of promoting environmentally sustainable lifestyles in context of consumption and production (UNESCO, 2019) with a focus on technological solutions (Khoo & Jørgensen, 2021). This reflects the premise that mainstream ESD approaches are based predominantly on behaviour modification and do not engage with overarching systemic structures (Jickle & Wals 2008 as cited in Pashby & Sund 2020a). ESD, and Sustainable Development, seeks to find an equilibrium between environmental, societal and economic in the present that does not jeopardize the future (UNESCO, 2016b). This ideal of an equilibrium between the three dimensions will be addressed in chapter 3, 'Theoretical Framework'.

GCE was first incorporated into the international sphere in 2012 in the Global Education First Initiative (GEFI) (UNESCO, 2019) with present day core concepts of GCE, such as human rights and peace, present within curriculums also prior (UNESCO, 2019). According to UNESCO (2019), GCE "...empowers learners of all ages to assume active roles, both locally and globally, in building more peaceful, tolerant, inclusive and secure societies globally (UNESCO, 2019, p.14). GCE encompasses the notion interconnectedness within economic, social, political and cultural spheres (Elkorghli, 2021). Outside the global policy agenda there are four main approaches to GCE cited within academic literature; neoliberal, liberal, critical and post-critical (Oxley & Morris, 2013; Pashby et al., 2020). The neoliberal is centered on the development of specific skills to be able to compete within the global arena and where education, knowledge, is a commodity and very much quantifiable (Brissett & Mitter, 2017; Roberts, 2020). The liberal approach views education as supporting learner towards their full potential and is referred to as the human rights base approach (Brissett & Mitter, 2017). Within the critical approach, it mobilizes learners towards an understanding of the social and economic constructs that sustain inequalities (Andreotti, 2011; Pashby & Sund, 2020b). The post-critical questions development and progress being based on socio-economic life and the geographic separation with nation states (Giraud, 2020). The above approaches are not seen as fixed, but rather can overlap and dependent on the educational policy in place (Franch, 2020; Goren & Yemini, 2017; Guajardo & Reiser, 2016; Misiaszek, 2015; Oxley & Morris, 2013; Pashby et al., 2020; Suša, 2019;

UNESCO, 2013). These approaches will be further expanded upon in chapter.3 ‘Theoretical Framework’.

2.4 Key Pedagogical Approaches to SDG 4.7 (Education for Sustainable Development and Global Citizenship Education.)

Though incorporation of ESD and GCE into educational policy and curriculums across countries can differentiate there are three main domains of learning and eight core competencies cited within SDG 4.7. They are often presented as overlapping, with the strength of each dependent on national educational policy in place (Jónsson et al., 2021). All of the above is underscored by a transformative pedagogical approach that includes a learner centred approach, action orientated learning and transformative learning (UNESCO, 2017b).

2.4.1 Learning Domains and Eight Core Competencies.

The three main domains cited are the cognitive, social emotional and behavioral (Asci et al., n.d; Jónsson et al., 2021; UNESCO, 2019). The cognitive examines the knowledge and interconnected systemic understanding of the world (Asci et al., n.d; Jónsson et al., 2021; UNESCO, 2019). The social-emotional revolves around the feeling of a common sense of responsibility and engagement from both personal and broader perspectives (Asci et al., n.d; Jónsson et al., 2021; UNESCO, 2019). The behavioural incorporates active participation, locally, nationally and globally, that promotes sustainability and ‘peace’(Asci et al., n.d; Jónsson et al., 2021; UNESCO, 2019). According to UNESCO (2020b), the three domains work in conjunction with eight core competencies; systems thinking, anticipatory, normative, strategic, collaboration, critical thinking, self-awareness and integrated problem-solving competencies (UNESCO, 2020b, p.8).

2.4.2 Pedagogical Approaches.

This section will present the three pedagogical approaches cited for SDG 4.7; a learner centred approach, action orientated learning and transformative learning (UNESCO, 2017b). There is a definitive thread between these three pedagogical approaches and the learning domains above. To encompass these three pedagogical approaches UNESCO (2017b) promotes a Whole Institute Approach (WIA).

A Learner Centred Approach values and incorporates the learners prior knowledge and promotes reflection upon them (UNESCO, 2017b). It is characterized by active participation by the learner and moves away from the traditional passive method of learning where knowledge is simply imparted by the educator (UNESCO, 2017b).

Action-Oriented Learning, is as cited by UNESCO (2019), reflects Kolbs theory of experiential learning. Experiential learning involves the stage process of “doing, sensing, observing, reflecting, thinking and planning” (Sharlanova, 2004, p.36). It is centred on the premise of a holistic process where learning is experienced between the individual and the(ir) environment (Kolb & Kolb, 2009). According to UNESCO (2017b), it “... increases knowledge acquisition, competency development and values clarification by linking abstract concepts to personal experience and the learner’s life” (UNESCO, 2017, p.55).

Transformative Learning is cited as a crucial component of sustainability learning (Boström et al., 2018; Sterling, 2007). It shifts the role of the educator to that of facilitator (UNESCO, 2019). It inspires learners to expand and critically reflect on their worldviews and is highlighted by a student centred approach. (UNESCO, 2019 as in cited Slavich & Zimnbardo, 2012; Mezirow, 2020). It is only through seeing the world through a different lens that enables one, and those around us, to understand the world differently (Peters & Wals, 2016). Wals (2011) writes of its connection with Social Learning: whereby reflecting and sharing ones “...ideas, views, values and perspectives” promotes “...pluralism and heterogeneity” in solutions (Wals, 2011, p.181). Closely connected to Transformative Learning is Transgressive Learning (UNESCO, 2019). Transgressive Learning is paramount to a truly critical approach to SDG 4.7. It “... underlines that learning in ESD has to overcome the status quo and prepare the learner for disruptive thinking and the co-creation of new knowledge” (UNESCO, 2019, p.55). It is about questioning the dominant systemic structures that presently guide what is considered progress and development.

As stated above, UNESCO (2017b) promotes the core learning strategies with a Whole Institute Approach. A Whole Institute Approach encompasses assimilating sustainability into all aspects of an educational institution such as curriculums, daily institutional administrative and maintenance practices, teaching and integrating the local community (UNESCO, 2017b). It involves envisioning “...the school as a ‘living laboratory’ for experimenting with healthy,

equitable, democratic, and ecologically sustainable living” (Mathie & Wals, 2022, preamble). A Whole Institute Approach promotes a holistic approach to education that emphasizes the importance of “living what we learn” (UNESCO, 2017b, p.53) in order to nourish learners to engage with present and future sustainability challenges .

2.5 SDG 4.7: Norwegian Context.

Norway is recognized as one of the member states best positioned to realize the SDG 2030 in practice and presently ranks fourth in their progress globally (Sachs et al., 2022). Norway is renowned for one of the best social systems in the world and as such characterized by a strong social democracy. Norway also demonstrates its commitment to education with one of the highest percentage GDP invested in primary to tertiary education amongst OECD countries (NCES, 2022). Norway’s national mandated curriculum is divided into three core stages; primary (for 6 to 13), lower secondary (ages 13 to 16), and upper secondary (ages 16 to 19) (NCES, 2022). School is mandatory till 16. When entering upper secondary, students can choose programmes based on either vocational skills or more general studies (NCES, 2022). Schools based on alternative pedagogies such as Montessori and Steiner, are also ‘relatively’ economically accessible in that they receive large government subsidies (Mathie & Wals, 2022).

Though not explicitly mentioned in the more recent 2020 curriculum renewal, LK2020, Norway has actively included the SDGs (Jónsson et al., 2021). Key components of LK2020 are the three interdisciplinary topics of health and life skills, democracy and citizenship and sustainability (Jónsson et al., 2021; UDIR, n.d.,b). These interdisciplinary topics relate to “...prevailing societal challenges which demand engagement and effort from individuals and local communities, nationally and globally... they must learn about the relationship between actions and consequences” (UDIR, n.d.,b, p.14). These topics are integrated into the competency goals throughout a broad selection of relevant curriculum subjects (UDIR, n.d.,b). The renewal emphasizes a more practical and exploratory approach to learning than before, with critical thinking and ethical awareness underlined in conjunction with in-depth learning (European Commission, 2022; Jónsson et al., 2021; UDIR, n.d.,a). The renewal also intends to decrease

curriculum overload⁸ but has also bolstered the importance of digital skills, programming and technology (European Commission, 2022). In short the renewal appears to lend itself to a critical systemic approach that supports a Whole Institute Approach advocated by UNESCO, however it remains to be seen if this will happen in practice (Mathie, 2019). What also remains to be seen is to what depth these interdisciplinary topics will be utilized, however, it is clear there is active engagement towards supporting SDG 4.7 integration on a national level.

Norway has a long history of Environmental Education being incorporated into its national curriculum since the 1970's (Jónsson et al., 2021). The Brundtland report (1987) was influential in deepening the integration of sustainability, and the economic and social characteristics thereof, into Norwegian curriculums (Mathie, 2019 as in cited Sinnes & Straume, 2017). Concepts of ESD were further introduced, in the Norwegian context, in 1992 preceding the UN conference on Environment and Development in Rio de Janeiro (Jónsson et al., 2021). While Jónsson et al.,(2021) note that during the 2006 'Knowledge Promotion' curriculum, Sustainable Development was incorporated into only a few subjects, in particular the Natural Science and Social Sciences in connection to consumer education, the LK2020 renewal highlights Sustainable Development and is defined as:

Sustainable development refers to protecting life on earth and providing for the needs of people who live here now without destroying the possibilities for future generations to fill their needs. Sustainable development is based on the understanding that social, economic and environmental conditions are interconnected (Jónsson et al., 2021, p.28).

Norway is taking steps towards, at least present in curriculum and professional development, of focusing efforts to incorporate the core concepts of SDG 4.7 set out by UNESCO. Yet the engagement with sustainable development has ebbed and flowed throughout time both nationally

⁸ The Organization for Economic Co-operation and Development (OECD) defines curriculum overload within the four following dimensions : "1. **Curriculum expansion** refers to the tendency to include new content items in the curriculum in response to new societal demands without appropriately considering what items need to be removed. 2. **Content overload** refers to the actual dimension of curriculum overload, rather than as it perceived or experienced (i.e. the excessive amount of content to be taught and learned in relation to the time available for instruction). 3. **Perceived overload** refers to the perceived or experienced dimension of overload, as reported by teachers and students. 4. **Curriculum imbalance** refers to disproportionate attention given to certain areas of the curriculum at the expense of others without appropriate adjustments in the low priority areas." (OECDiLibrary, 2022, box 1)

and international (Kvamme et al., 2019), so to what degree of implementation and more importantly student competency acquisition remains to be seen.

Though the specific term of GCE is not present within past and present Norwegian curriculums, the concept of instilling the notion of democratic citizenship has long been a principle aim within Norwegian Education. Norway's Education Act describes a democratic citizen as "citizens who can communicate with others, understand other people's perspectives and think critically" (Stray & Sætra, 2017, p.2). This is reflected in democracy and citizenship inclusion as one of the three interdisciplinary topics in the 2020 curriculum renewal (Stray & Sætra, 2017). Stray & Sætra (2017) discuss the 2020 curriculum renewal and highlight recommendations as the core competencies of a democratic education being "communicative, interactive and participatory" (Stray & Sætra, 2017, p.2). They continue to describe the inclusion of core concepts mirroring that of UNESCO's GCE such as human rights and the notions of inclusiveness and intercultural understanding (Stray & Sætra, 2017).

However, there are concerns in reference to neoliberalism⁹ within the Norwegian context. Past research on Norwegian curriculums revealed a concern of increasing neoliberal influences that could affect its democratic principles, specifically Stray (2013) noted a shift in curriculums policies in 2006 away from "the long held commitment to unity, (social) democracy, and the promotion of a clear, social democratic vision" (Stray, 2013, p.166). It is important to note, especially in context of the premise of this thesis, that within Norwegian context the need to engage with decolonial concepts have been considered, by some, as mute and void as it does not have a history of colonialism per se (Eriksen, 2018 as cited in Mikander, 2015; Eidsvik, 2012; Tvedt, 2003). This negates not only the historical forced assimilation and continued marginalization of the Sámi people¹⁰ (SAIH, 2020) but also Norway's mobilization with globalization (Eriksen, 2018 as cited in Mikander, 2015; Eidsvik, 2012; Tvedt, 2003). Globalization, within the sphere of decolonialism and the colonial matrix of power as presented in the introduction, refers to the Western dominion over political and economic institutions and

⁹ Though neoliberalism will be further defined at another juncture, for the moment I will give a brief overview of how this concept is being addressed in this research. Neoliberalism is underpinned by the notion of free markets, privatization, entrepreneurship spanning from the individual level outwards, a top down approach in which wealth trickles down, and globalization (Haslam et al., 2017)

¹⁰ The Sámi are the indigenous people of Scandinavia and Russia.

the ensuing unjust power dynamics for those marginalized within this construct (Henriksen et al., 2019). Eriksen (2018 as cited in Sinnes & Straume, 2017; Eriksen, 2017), critiques that the incorporation of global structures is not prevalent within the Norwegian educational context and in turn the new curriculum emphasizes technological optimism (Eriksen, 2018 as cited Sinnes & Straume, 2017). Technological optimism envelops the notion that present sustainability challenges, or better said crisis, can be solved through technological innovation (Basiago, 1994). More recently, research by Elkorghli (2021) observed that the depoliticization of teacher education within Norway promotes a false, "neoliberal political harmony" (Elkorghli, 2021, p.611) that negates the effect of systemic structures on sustainability and social justice (Elkorghli, 2021). This also connects to both Elkorghli (2021) and Stray & Sætre (2017) inference of the lack of confidence nor preparation of Norwegian teachers to impart the topic of democracy and citizenship in the classroom. Stray & Sætre (2017) note that this could be due to a "gap between policy, theory and practice" (Stray & Sætre, 2017, p.3). This concept of theory is also broached by Elkorghli (2021) that though as of 2019 teacher training has been extended to five years, with the inclusion of a Masters degree it is usually confined to a singular discipline without the explicit requirement for teachers being versed in political theory and/or critical pedagogy. He continues by citing earlier critics of teacher curriculums having a focus on "teaching techniques and educational psychology" (Elkorghli, 2021, p.619) and not more well rounded with the inclusion of the above (Elkorghli, 2021). Elkorghli (2021) also stresses, citing Pashby et al., (2020) the importance of education emphasising on critical post colonial principles in teacher training. The post colonial principles bring forth the decolonial aspects of thinking differently, or better said, the inclusion of other ways of thinking.

3 Theoretical Framework

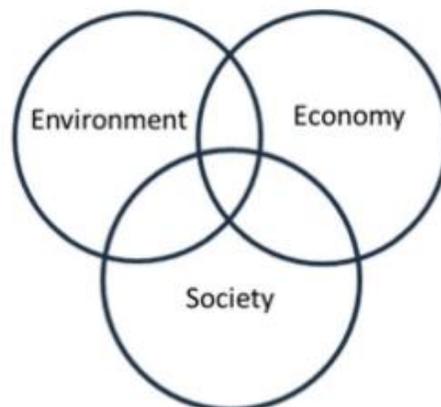
Although hope for the future lies in the SDGs, and in connection SDG 4.7, neither do not come without criticism. Though the formation of the SDG's are considered to have been inclusive in their formation through the participation of NGO's and civil society, there is a strong critic that the SDGs do not move away from conventional frameworks that impede transformative change (Briant Carant, 2017). In this chapter I will briefly outline the main critic of the emphasis on the economic sphere of development and the related overarching hegemonic, universal ideal of the

SDGs themselves (3.1). This leads for a call for an integrated approach to GCE and ESD that engages with the systemic structures that impede a transformative change (3.2). This organically leads to Decolonial Theory (3.3) and an analytical and pedagogical tool, *HEADS UP* (Andreotti, 2016), that nourishes a critical awareness of how development initiatives can lead to reproducing historical socio-environmental oppressions (3.3.1). We then engage with the concept of hope with the three spaces of enunciation in hope for reform/change (soft, radical and beyond) and their relation with key decolonial concepts of the shine and shadow of modernity (Andreotti et al., 2015). These are then echoed in their reflections with the four GCE approaches found in academic literature referred to in the background chapter; neoliberal, liberal, critical and post critical (3.4). A core base cited as crucial for a critical educational initiative is the work of Paulo Freire and critical pedagogy (3.5) (Bourn, 2021b; Elkorghli, 2021; Misiaszek, 2015). Freire's pedagogy brings forth the concepts of hope and love through critical consciousness (Freire, 1970) and dialogical approach. This chapter also briefly introduces '*Ecological Global citizenship*' (Jenkins, 2015) that directly mobilizes critical pedagogy and integration of GCE and ESD. Jenkins inclusion of care theory, (3.5.1), acts as a point of departure for the affective/emotive that is often not addressed in educational initiatives for sustainability (Jimenez & Moorhead, 2021 as cited Pihkala, 2017; Ojala, 2013; Schneider-Mayerson, 2021).

3.1 Weak or Strong

There is an overriding consensus that the SDGs have not confronted the neoliberal influences on (un)sustainable development (Bourn, 2021b; Holden et al., 2017; Huckle & Wals, 2015; Sachs, 2012). A starting point of this is within conventional sustainable development frameworks social, economic and environmental dimensions are given equal value (Holden et al., 2017; Sachs, 2012). Berglund & Gericke (2022) reference the common image of three circles that illustrate the three dimensions as overlapping (Figure 2). This is related

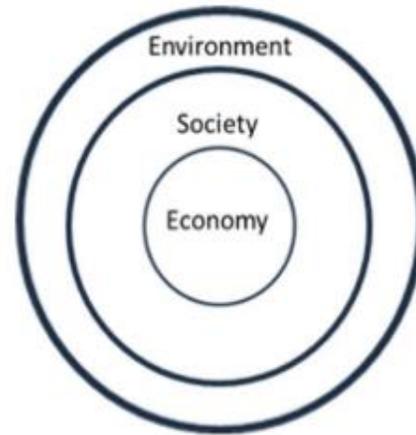
Figure 2 'Weak Sustainability' (Berglund & Gericke (2022) as cited adapted from Sustainable development Dréo, 2019)



to as 'weak' sustainability (Berglund & Gericke, 2022 as cited Daly, Jacobs, and Skolimowski

1995; Neumayer 2003), and lies on the premise that “human and built capital can substitute for natural capital” (Berglund & Gericke, 2022, p.3). Such a framing allows for ‘trade offs’ to be made between them, which is overwhelmingly applied to the societal and the environmental but not the economic (Berglund & Gericke, 2022; Holden et al., 2017; Sachs, 2012). This differs with ‘strong’ sustainability in which “... human and natural capital as non-substitutable” (Berglund & Gericke, 2022, p.3). The image representing ‘strong’ sustainability is a nested model (Figure 3) that places economy at the centre,

Figure 3 'Strong Sustainability' (Berglund & Gericke, 2022 cited as adapted from Nested sustainability-v2 by lacchus 2019)



then society and as the final, environment (Berglund & Gericke, 2022 as cited Daly, Jacobs, and Skolimowski 1995; Neumayer 2003). This representation places the environment as the overriding dimension; economy cannot exist without society and society without the environment (Berglund & Gericke, 2022). Citing Berglund & Gericke (2022), “...all human activities must take place within this in order to be sustainable over time” (Berglund & Gericke, 2022, p.3). The SDGs, and its connection with ‘weak’ sustainability, infer towards a hegemonic ideal of sustainability with mainstream policy envisioning them as “uncontested and universal” (Pirbhai-Illich et al., 2017, p.21). It leads to the underlining premise of an approach to development of changing the way ‘others’ live, rather than the way ‘we’ live.¹¹ This not only negates that ‘others’ may envision differently but also disregards the underlining power dynamics within development initiatives (Pirbhai-Illich et al., 2017). The above leads to an emphasis for the need of an implicit, critical integration of ESD and GCE that confronts the mainstream notions of development within curriculum and pedagogical practices.

3.2 Integrated Approach

Though ESD and GCE within policy are seen as interconnected, a critical integrated approach from within a ‘whole story perspective’ is not often seen in practice; with the focus in ESD on

¹¹ ‘We’ represents those in the ‘Global North’, and ‘other’ those that live outside it.

ecological and GCE on social-societal issues and both within a mainstream, predominantly neoliberal, development framework (Pirbhai-Illich et al., 2017). Sterling (2021), a prominent scholar within sustainability education, refers to UNESCO simply adding to existing concepts without critically engaging with what is presently in place. This coincides with those within academia involved with critical perspectives of ESD and GCE calling for a more integrated approach that confronts systemic interconnected issues that sustain inequalities and ecological degradation and the connected hegemonic, universal ideal of progress the SDGs portray (Andreotti, 2014b; Bourn, 2021a; Goris, 2021; Huckle & Wals, 2015; Jenkins, 2021; Misiaszek, 2015; Pashby et al., 2020; Pashby & Sund, 2020b; Pirbhai-Illich et al., 2017; Sterling, 2021). This brings forth the question of what is a global citizen, or better yet who really has the capacity to be a global citizen and access to an education that would give the power to instill transformative change? (Gallwey, 2016; Huckle & Wals, 2015; Jenkins, 2021; Suša, 2019). As Huckle & Wals (2015) point out the UN is an “assembly of nation states, not an assembly of world’s citizens” (Huckle & Wals, 2015, p.496) and as Gallwey (2016) cites Dower (2008), “Are we all global citizens, or are just some of us global citizens?” (Gallwey, 2016, p.122). Intertwined with this is the forementioned focus on technological solutions towards the sustainability crisis, in context of both climate and social (in)justice (Eriksen, 2017 as cited in Hellberg and Knutsson, 2018, Knutsson, 2018), that disregards not only the inequity of access and geographical ecological degradation but also the hegemonic, capitalistic driven, ideal of technology itself. The above represent just a cusp of the need for a deeper engagement with the ‘whole story perspective’ that meets the historical perspectives that still influence present day social inequities (Briant Carant, 2017; Kothari et al., 2019; Pashby et al., 2020; Pirbhai-Illich et al., 2017). Educational practices must foster students’ engagement with the systemic structures and to consider radical solutions towards sustainability within the confines of both environment and development; a critical approach to confront the “...the global crisis which is also a crisis of education” (Huckle & Wals, 2015, p.493). An intrinsic springboard towards is an engagement with Decolonial Theory, in turn decolonial pedagogy, and the work of Paulo Freire.

3.3 Decolonial Theory

Decolonial theory, and in turn decolonial pedagogy, can open the space for teachers and students to unpack and critic the prevailing ideals of the concepts behind SDG 4.7 (Menon et al., 2021)

and opens spaces to hear ‘other’ voices (De Lissovoy, 2010). Decolonial Theory is set on the premise of colonialisms’ continued influence on present day power structures; the colonial matrix of power (Dei, 2016; Mignolo & Walsh, 2018; Pirbhai-Ilich et al., 2017; SAIH, 2020; Zavala, 2016). The colonial matrix of power encompasses the hegemonic placement of Eurocentric knowledge within the global sphere and its ensuing social injustices (Andreotti et al., 2015; Mignolo & Walsh, 2018; SAIH, 2020). It holds within this premise only knowledge that stems from within this confine represents the archetypal ideal of progress (de Sousa Santos, 2015). This creates a divide on what knowledge, ontological and in turn epistemic¹² ways of being, are considered valid and leads to what de Sousa Santos (2015) terms ‘epistemicide’. Knowledge, ways of being, created outside this sphere is relegated as the ‘other’ and less valid; validation only coming through recognition from the colonial matrix of power. It entails the dominion colonialism has had on “...economy (land appropriation, exploitation of labor, control of natural resources); control of authority (institution, army); control of gender and sexuality (family, education) and control of subjectivity and knowledge (epistemology, education and formation of subjectivity)...” (Mignolo, 2007b, p.156). Mignolo (2007a) discusses this in context of modernity and coloniality as ‘two sides of the same coin’ (Mignolo, 2007a, p.464). He expands on this within the concept of the shine and shadow of modernity.

The ‘shine’ of modernity represents the influence colonialism has had on creating a mainstream, hegemonic, notion of development, growth and a linear ideal of progress (Andreotti et al., 2015 as cited Mignolo, 2011). The ‘shine’ of modernity disregards the ‘shadow’ it creates; the ‘shine’ only possible due to past and present injustices of colonialism (Andreotti et al., 2015). Andreotti further develops on Mignolo’s work with the concept of ‘modernity’s trick’ (Andreotti, 2014a). ‘Modernity’s trick’ encompasses the perceived altruistic endeavours to help ‘others’ enter the unquestionable shine (Andreotti, 2014a). Both stress that the shine of modernity, mainstream notions of development, and in turn approaches to sustainability and citizenship, are only possible due to the shadow, i.e., suffering and exploitation of ‘others’ (Andreotti et al., 2015). Research has revealed that many educational initiatives, such as

¹² Epistemology encompasses the theory of knowledge and ontology the nature of reality and being. Within the Eurocentric Knowledge system there is the premise of a universe, one reality, that negates multiple ways of knowing (DeLissovoy, 2010). Decoloniality moves the idea of a singularity of a world to that of multiple worlds; from a universe to pluriverse (Blaser, 2013) and the acceptance of multiple ontologies (Law, 2015) and in turn knowledges.

ESD and GCE, reflect the colonial matrix of power within the context of how those in the Global North can ‘help’ those from the south (Pashby & Sund, 2020a). Pashby & Sund (2020a) envision an “ethical global issues pedagogy” which addresses “issues of power and coloniality” (Pashby & Sund, 2020a, p.67). Decolonial pedagogy creates a movement towards a critical awareness of the colonial matrix of power and ones connections to it (Menon et al., 2021).

A decolonial pedagogical methodology to a critical, integrated approach to GCE and ESD can mobilize one to learn how to unlearn ones ethnocentric ideals towards development (Tlostanova & Mignolo, 2012). To learn to unlearn is to move away from hegemonic notion of valid knowledge. This returns to de Sousa Santos (2015) idea of the episteme and the archetypal placement of ‘western’ knowledge being (uni)versal, whereas knowledge outside that sphere is only valid in its location of origin. HEADS UP (Andreotti, 2016) is an analytical and pedagogical tool that mobilizes the above and empowers students and educators alike to ‘unlearn’ (Pashby & Sund, 2020a).

3.3.1 HEADS UP

Andreotti’s work on critical approaches to GCE are widely referenced (Elkorghli, 2021; Nygren et al., 2020; Pashby & Sund, 2020a; Suša, 2019). HEADS UP is a means to engage with the post-colonial¹³ and decolonial theory within analytical and pedagogical practices (Andreotti, 2016). It engages with how one’s action towards transformative change can unintentionally lead to reproducing historical socio-environmental oppressions. HEADS UP is an acronym that stands for **H**egemony, **E**thnocentrism, **A**historism, **D**epoliticization, **S**elf-congratulatory, **U**ncomplicated solutions and **P**aternalism (Figure 4). Each represent seven questionable practices and forms in which global issues are broached, especially in context of those largely

¹³ It is not within the scope of this thesis to engage with the differences and commonalities of these two disciplines. For the purpose of simplification I will briefly quote Bhambra (2014) in that both postcolonial and the decolonial theory “challenge to the insularity of historical narratives and historiographical traditions emanating from Europe” (Bhambra, 2014p.116).

silenced within global discourse of development, (Andreotti et al., 2018; Pashby & Sund, 2020a). HEADS UP acts as a meditative tool to reflect deeper on the spaces in which one inhabits from an epistemological and to an extent ontological perspective (Pashby & Sund, 2020a).

It is set up as a series of questions (Figure 5) to incite reflection and with a focus on asking the right questions, without necessarily finding the answers (Andreotti, 2016; Pashby & Sund, 2020a). It lays on the premise that “approaches to ESD and GCE tend to reproduce colonial systems of power where “we” in the Global North can learn about and solve the problems of a “them” in the “Global South” (Pashby & Sund, p.67). The questions open space to visualize how problems are often approached from the perspective of a ‘single story’; how we are predominantly presented with a singular ideal of what transformation, development, can entail. It helps one engage with the deeper ethical issues of how solutions to problems can actually perpetuate the problem attempted to be solved (Andreotti, 2016). Pashby & Sund (2020a) cite it as means to “move beyond dominant narratives about

Figure 4. HEADS UP (Andreotti et., al 2018 as cited Andreotti 2012)

- Hegemonic practices (reinforcing and justifying the status quo)
- Ethnocentric projections (presenting one view as universal and superior)
- Ahistorical thinking (forgetting the role of historical legacies and complicities in shaping current problems)
- Depoliticised orientations (disregarding the impacts of power inequalities and delegitimising dissent)
- Self-serving motivations (invested in self-congratulatory heroism)
- Un-complicated solutions (offering ‘feel-good’ quick fixes that do not address root causes of problems)
- Paternalistic investments (seeking a ‘thank you’ from those who have been ‘helped’)

Figure 5 HEADS UP (Patterns and Questions) (Andreotti et al., 2018 as cited Andreotti 2012)

| | Whose idea of development/ education/the way forward? | Whose template for knowledge production? |
|--|---|---|
| Hegemony | What assumptions and imaginaries inform the ideal of development and education in this initiative? | Whose knowledge is perceived to have universal value? How come? How can this imbalance be addressed? |
| Ethnocentrism | What is being projected as ideal, normal, good, moral, natural or desirable? Where do these assumptions come from? | How is dissent addressed? How are dissenting groups framed and engaged with? |
| Ahistoricism | How is history, and its ongoing effects on social/political/economic relations, addressed (or not) in the formulation of problems and solutions? | How is the historical connection between dispensers and receivers of knowledge framed and addressed? |
| Depoliticisation | What analysis of power relations has been performed? Are power imbalances recognised, and if so, how are they either critiqued or rationalised? How are they addressed? | Do educators and students recognise themselves as culturally situated, ideologically motivated and potentially incapable of grasping important alternative views? |
| Self-congratulatory and Self-serving attitude | How are marginalised peoples represented? How are those students who intervene represented? How is the relationship between these two groups represented? | Is the epistemological and ontological violence of certain individuals being deemed dispensers of education, rights and help acknowledged as part of the problem? |

development evident in how global issues are taught in “Global North”” (Pashby & Sund, 2020 a, p.69). They envision HEADS UP as conducive to enabling teachers within a ‘Northern’ context to engage with the praxis of the shine and shadow, the mainstream and marginalized perspectives, within systemic structures (Pashby & Sund, 2020a). Key to this is an insight into how one localizes their present position and how they envision engagement with the concepts behind GCE and ESD.

A means towards this is through three points of enunciation towards reform, soft, radical and beyond that engages with the concept of the shine and shadow of modernity (Andreotti et al., 2015) and their correspondence with the main approaches to GCE cited within academic literature mentioned in chapter 2, ‘Background’; neoliberal, liberal, critical, and post-critical (Giraud, 2020; Johnson & Morris, 2010; Oxley & Morris, 2013; Pashby et al., 2020). The rationale towards the inclusion of the GCE approaches is, as established, due to their significant influence on sustainable development and as such ESD and vice versa (Misiaszek, 2015; Pashby & Sund, 2020a). The next sub section represents an integration of the three spaces of enunciation with the four GCE approaches.

3.4 ‘Spaces of Enunciation’ (Soft, Radical and Beyond Reform) and GCE approaches.

The ‘spaces of enunciation’ are based on the article “*Mapping interpretations of decolonization in the context of higher education*” (Andreotti et al., 2015). It represents a pedagogical tool that “offer(s) a visual representation of complex and juxtaposed spaces that we inhabit” (Andreotti et al., 2015, p.22). It aims to incite critical dialogue on the shine and shadow of modernity and the “...contradictory imaginaries, investments, desires, and foreclosures that arise in efforts to address modernity...” (Andreotti et al., 2015. p.23). The ‘spaces of enunciation’ can be seen to represent different modalities of hope and the different strategies one mobilizes for inciting change and their correlation with the shine and shadow of modernity (Andreotti et al., 2015). They represent stages of engagement with ‘the whole story perspective’ and where hope lies.

The three spaces of enunciation, shine and shadow of modernity, coincide with the liberal, critical and post-critical approaches of global citizenship (Figure 6)¹⁴. The neoliberal is

¹⁴ Adapted from “*Social cartography of general responses to modernity’s violence*” (Andreotti et al., 2015) & “*Soft, Radical and Beyond approaches to system reform*” (UBC, 2018)

set in brackets, due to its close relation with the liberal approach but however is seen, in context of the spaces of enunciation, as outside the spaces due to the neoliberal stance that any systemic issues are minor and in no need of great reform (Andreotti et al., 2015). Though neither the ‘spaces of enunciation’ nor the approaches should be viewed as fixed, as they can overlap and move within one another, for ease of the reader they have been presented as such (Andreotti et al., 2015; Oxley & Morris, 2013; Pashby et al., 2020). In the following section the points of enunciation will be presented and followed by an unpacking of the GCE approaches that it reflects.

Figure 6 Spaces of Enunciation, Modernity's Shine & Shadow, GCE approaches.

| Spaces of enunciation (adapted from Andreotti et al., 2015, Suša, 2019 & UBC, 2018) | | |
|--|---|--|
| Soft Reform | Radical Reform | Beyond Reform |
| To make the same system a little bit better through transformations of policies and practices. | To make the same world a lot better by including more people, voices and perspectives in collective action. | To disinvest in the current unsustainable world and walk with others into the possibility of new worlds. |
| Horizon: single story of progress, development and evolution | Horizon: unification of many voices in a single direction | Horizon: learning from repeated mistakes in order to make different mistakes. change of "way of being and co-existing" |
| Same questions Same answers | Same questions Different Answers | Different Questions Different Answers |
| HOPE for CONTINUITY of the same system | HOPE for the FIXING the system | HOPE for OTHER systems |

| | | |
|--------------------------|---------|---------------------------|
| ↓ | ↓ | ↓ |
| Modernity's Shine | | Modernity's Shadow |
| GCE approaches | | |
| (Neoliberal) | Liberal | Post Critical |

3.4.1 Soft reform; Neoliberal & Liberal.

The soft reform, mirroring the liberal approach, and to an extent the neoliberal, does not engage with any critique of modernity and the corresponding power dynamics (Andreotti et al., 2015). Within the neoliberal approach, inequalities are based on lack of initiative on the individual level and in context of the liberal, on the need for accessibility and/or inclusion within ‘modernity’s’ framework (Andreotti et al., 2015). Hope is envisioned through continuity of present approaches. It does not entail looking beyond, or envision the possibility of, the present systemic constructs.

Emphasis is placed on inclusion into the prevailing system without addressing the reasons for exclusion to begin with (Pashby et al., 2020).

According to Pashby et al., (2020) the neoliberal approach is characterized by “market imperatives, commercialisation, commodification” (Pashby et al., p.145). The global citizen is guided by globalization and therefore capitalism and technological advancement (Giraud, 2020). This aligns with human capital and the utilitarian perspective as the driving force of education (Andreotti, 2014c; Brissett & Mitter, 2017; Hakala et al., 2015); we learn to earn. Economic growth is viewed as the overriding factor towards development with social (moral and political) and environmental factors needing to adapt towards this goal (Oxley & Morris, 2013). It is centered on the development of specific skills to be able to compete within the global arena and where education, knowledge, is a commodity and quantifiable (Brissett & Mitter, 2017; Roberts, 2020). It extends outward from developing individual competence for gainful employment, national economic development and that of global economic prosperity (Stein, 2015). One could view this as from the individual, to the local, national to the global. Unequal distribution of wealth and prosperity are the result of underdevelopment with an emphasis on individual adaptation to succeed. It revolves around the premise of universal goals and needs in spite of ‘individual’ distinctions and disregards moral imperatives and has been labeled as ‘thin citizenship’ (Oxley & Morris, 2013).

The liberal approach views education as the development of learners towards an “emancipatory” (Giraud, 2020, p.3) route and developing their full potential. It is characterized by “erudition as rigour¹⁵, individual development, research for the public good” (Pashby et al., 2020, p.145). Moving away from the individualistic aspects of the neoliberal approach, the liberal approach entails the notions of empathy and a sense of a global humanity and respect, inclusion, equality of the ‘other’ in context of race, gender, sexuality, class, culture (Andreotti et al., 2015). I will discuss two main conceptions of the liberal approach: the cosmopolitan and Andreotti’s (2014c) ‘Soft GCE’.

The cosmopolitan is cited as the most prominent encountered within GCE approaches (Goren & Yemini, 2017; Pashby et al., 2020). The cosmopolitan is seen as having the main

¹⁵ ‘Erudition as rigour’ refers to academic knowledge

features of “pluralism, caring and personal action”, (Guajardo & Reiser, 2016, p.243). Oxley & Morris (2013) define the cosmopolitan as enveloping moral, political and cultural dimensions. However, it needs to be noted this remains with economic growth highlighted on the individual, national and global level (Oxley & Morris, 2013; Pashby et al., 2020). From a political perspective it adheres to the tenets of democracy and supporting international institutions such as the United Nations (Oxley & Morris, 2013). This relates to the moral cosmopolitan due to the liberal approach association with the UN concepts of universal human rights and the ideal of a global ethical framework (Oxley & Morris, 2013). In relation to this is an emphasis on open discourse in context of global issues (Giraud, 2020). There is the concept of ‘trust’ being placed in science and key actors, such as politicians, towards achieving the goal of a sustainable future and just world (Ojala, 2013). This links with cultural cosmopolitan with its emphasis on technology, science, arts and languages (Oxley & Morris, 2013). Oxley & Morris (2020) expands the cultural cosmopolitan towards the understanding and learning of the ‘other’. It needs to be underscored this is centred on a contrast of the ‘other’ to the ‘Western’ sphere rather than in parallel and equal with; it remains within the confines of universalistic Western epistemology and the belief of the superiority thereof. This can be seen in the emphasis of Western centered language learning being a strong component towards cultural GCE (Oxley & Morris, 2013). Liberal cosmopolitan, as does ‘Soft GCE’ (Andreotti, 2014c), displays the ideal of global interconnectedness but from within the perceived ideal of a ‘Western’ framework (Andreotti, 2014c; Oxley & Morris, 2013).

‘Soft GCE’ promotes learners towards the concepts of ‘Western’ development of ‘helping’ the ‘other’ in context of “education, resources, skills, culture, technology, etc.” (Andreotti, 2014c, p.46). It envisions the need of ‘Western’ expertise as ‘helpers’ of the ‘other’, mirroring a paternalistic framework towards the mainstream ideals of development and sustainability (Andreotti, 2016). It is about compassion and civic engagement, and as succinctly put by Andreotti (2014c), about “responsibility for the other” rather than “towards the other(or learn with the other)-accountability” (Andreotti, 2014c, p.47); this will be further elaborated on within the critical perspective. The ‘problems’ to ‘combat’ are seen as resulting from within segments of local or national society and for the need of structural changes within these segments, rather than structural change on a more encompassing level (Andreotti, 2014c). This is a key critic of the liberal approach - the failure to “engage substantively with the structural

inequalities” (Pashby et al., 2020, p.151). It is viewed as ethnocentric, depoliticized and lacks a deeper theoretical engagement with diverse perspectives (Jääskeläinen et al., 2011). As with the soft reform enunciation, there is hope in the present system to incite needed change and does not engage with the relationship of the shine and shadow of modernity.

3.4.2 Radical Reform: Critical GCE

The radical reform acknowledges the overriding power of ‘modernity’. The radical reform broaches the need to correct modernity’s inequitable structures and confront its “hegemonic and ethnocentric practices” (Andreotti et al., 2015, p.26). Reflecting Andreotti’s work in HEADS UP, the pitfall of radical reform is the process of ‘fixing’ the system can result in the extension of the very problems one hopes to solve (Andreotti et al., 2015; Andreotti, 2016). Within the radical perspective it is from the epistemological standpoint of including more ‘ways of knowing’; the inclusion of more voices in the system to find balance (Andreotti, et al., 2015). There is the recognition of both the shine and ensuing shadow of modernity. Within the radical reform there is a more “drastic interruption of business as usual” (Andreotti et al., 2015, p.26). It is about empowering those that have been silenced and “address epistemological dominance (i.e. Eurocentrism), and redistribute and re-appropriate material resources” (Andreotti et al., 2015, p.33). This, however, is from within a local sphere and does not engage with the overriding sustainability of modernity itself (Andreotti et al., 2015). The radical reform echoes that of the critical GCE approach.

Within the critical GCE approach there is a direct critique of the emphasis placed on economic growth and mainstream concepts of progress and development (Pashby et al., 2020). It does not entail just ‘fixing’ the challenges and injustices that we are facing but also addressing and acknowledging the causes of. An analogy that resonates is “where one not just puts a band aid on the wound (reducing poverty), but goes beyond and studies the structures that caused the wound (Phuthi, 2021, p.46). The two main conceptions of critical GCE that will be expanded upon are the radical and transformative presented by Shultz (2007) and ‘Critical GCE’, Andreotti’s (2014c) mirror of ‘Soft GCE’ discussed above.

The critical approach goes against the ideal of universalism and views the neoliberal and liberal approaches as being centered on Eurocentric constructs that inhibit a true engagement in

critical thinking based on the geographical ('North-South'), social and epistemological perspectives (Giraud, 2020). It directly broaches the inequalities due to "race, ethnicity, class, gender, disability, sexuality, religion, language and Indigeneity" (Dei, 2016, p.34). Pashby et al. (2020) characterizes it as enveloping the ideals of "social justice, interrogating systemic injustices and substantively changing the status quo" (Pashby et al., 2020, p.145). However, it does have interfaces with the liberal approach. They describe it as connected to the moral cosmopolitan in context of its inclusion of established political actors (government, the UN), but in conjunction with a strong interface with advocacy groups such as Greenpeace, who hold 'contempt' for the former (Oxley & Morris, 2013). There is a solid emphasis on sustainability, interconnectedness of not only humans but also non-human entities and rights thereof (Oxley & Morris, 2013). It is here where the critical boundary becomes highlighted.

Within this we can see the engagement with different knowledges (epistemologies) and a movement beyond mainstream representations of social structures. From this one can connect the thread of the (need of) Decolonial, postcolonial, theory within GCE as expressed by Andreotti (2011). Andreotti (2014c) contrasts this with 'Soft GCE' and presents 'Critical GCE'; cited by Pashby et al., (2020) as being one that squarely fits within a critical confine. In 'Critical GCE' there is the need to mobilize students towards an understanding of the social and economic constructs that sustain inequalities (Andreotti, 2014c; Pashby & Sund, 2020b). As quoted by Pashby & Sund (2020b) many scholars view conventional, liberal, ESD, and in connection GCE, as glossing over:

"...systemic issues and note a lack of attention to the interdependence of globalization, post- colonialism, and environmental matters, and a perpetuation of Western epistemologies at the expense of non-Western and indigenous worldviews"(Pashby & Sund, 2020b, p.67).

Within this expansion on the critical approach, engagement would be centered on the incongruent power (Pashby & Sund, 2020b), historical and present, to incite a transformative education that facilitates a realistic engagement of transformative change. It is here where one can envision the incorporation of Andreotti's pedagogical devise HEADS UP and how it can serve as a starting point to facilitate critical awareness and reflection in how one conceptualizes 'problems' and solutions can lead to the other 'problems' (Andreotti, 2016). A strong critical approach will incite students to recognize the 'shadow', and their relationship to it.

Shultz's (2007) Radical GC sees the need to look outside, and within some critical frameworks directly against, the established institutional confines for other pathways of what 'progress' could entail that does not oppress nor impoverish (Pashby et al., 2020; Shultz, 2007). Shultz (2007) moves towards a transformative GCE, the second cited by Pashby et al. (2020) as sitting squarely within the critical perspective. Transformative GCE emphasizes the connections between the local and the global and in turn the interconnectedness of all. It is not just about challenging the injustices from the perspective of a common humanity but towards the ideal that 'a better world is possible' (Shultz, 2007, p.255). It also reflects the decolonial premises of the differences of *'thinking with'* rather than *'thinking about'* (Cortina et al., 2019) with the emphasis on mutual learning across social, cultural and geographical divides (Shultz, 2007). The transformative approach mirrors that of Andreotti's (2014c) 'Critical GCE' with the importance placed on critical thinking and a sense of ethical action from an informed position. However, this also reflects that it is not necessarily about a drastic change but hope "for fixing the system" (Andreotti et al., 2015 & UBC, 2018). Here we can return to Andreotti's concept of "towards the other (or learn with the other)-accountability" (Andreotti, 2014c, p.47). It is about recognizing one's epistemological and ontological positionings and their influence on how the world is perceived not only by oneself but also how they effect power relationships within a local to global context (Andreotti, 2014c).

3.4.3 Beyond Reform: Post critical GCE

The beyond perspective moves from epistemological engagement of the radical to the deeper level of the ontological (Andreotti et al., 2015). Within an ontologically perspective, 'beyond reform' does not envision transformative change within the existing system(s). It is about an alternative to modernity itself, without the violence that characterizes the shine and shadow (Andreotti et al., 2015). The present system is underscored by its unsustainability and cannot be fixed (Andreotti et al., 2015). Here there is the emphasis on asking different questions with different answers (Andreotti et al., 2015 & UBC, 2018). That mistakes made will lead to learning rather than a continuance of present structures that are unjust and unsustainable (Andreotti et al., 2015 & UBC, 2018).

The post critical GCE approach most reflects the beyond reform. It is an expansion of the critical and remains with the decolonial/postcolonial domain (Pashby & Sund, 2020b). This is

seen in the continued emphasis on a "...radical political and social transformation...to transform our worldviews and social and political relations" (Giraud, 2020, p.4). It is centered on the need to move away from core concepts of modernity and expands towards the notion of humans and nature as not separate. As with the critical, development and progress based on socio-economic life and the 'North' / 'South' separation is critiqued (Giraud, 2020). Pashby et al., (2020) cite two approaches as fitting into the postcritical: Stein's (2015) 'Incommensurable' position and Andreotti's (Pashby et al., 2020) 'GCE other'. Both delve much deeper into the theoretical aspects of Decolonial Theory.

Stein (2015) writes of the possibility of a GCE approach that contests the dominant universalistic ideal of European Knowledge. It is about confronting not only the 'physical' violence against the 'other', but also the symbolic (Stein, 2015). It goes beyond just that of political, economic, social relationships as cited in the critical approach, and the *thinking towards* or *thinking with*, but perhaps one could think of *thinking beside*; the notion of differences of being and knowing being opened from a space of not perhaps understanding but mutuality of respect and acceptance. The incommensurable position revolves around the idea of epistemic justice and reflects de Sousa Santo's (2015) work on 'epistemicide'; the reductionism of onto-epistemic framing of the European Knowledge system of being superior to all 'others', with the 'other' always being framed in contrast but more importantly inferior to the forementioned. I envision here Blasers (2013) work, in "*Notes towards a political ontology of 'environmental' conflicts*", as referenced in previous personal academic writing, that broaches this "in the hierarchy of modern ontology (reasonable politics; culture and nature as separate) being dominant over relational ontology (no distinction between nature and culture)" (Roberts, 2022, p. 5). Andreotti's GCE 'other' is articulated not in context of its possibility but rather impossibility due to the overwhelming, predominant normative power, critiques and all, of the other three approaches (Pashby et al., 2020). The shine of modernity built on a one-world, universal, perspective so engrained that the possibility of the 'otherwise' becomes unfathomable.

3.5 Critical pedagogy.

Paulo Freire's, a Brazilian educator, concepts towards pedagogy have influenced pedagogical practices around the world (Rugut & Osman, 2013). These grew out of his work in adult

education and literacy programs in rural Brazil. His philosophical writings thereof have inspired and influenced not only social movements and education but also disciplines within academia (Rugut & Osman, 2013). Freire is cited as a basis for an engagement with a critical approach within education (Bourn, 2021b; Elkorghli, 2021; Misiaszek, 2015). Sometimes termed as ‘liberatory education’, empowerment is the method and goal of this pedagogy (Heaney, 1995). The core of this comes from hope and love through critical consciousness, *conscientização* (Freire, 1970; Gill & Niens, 2014; Misiaszek, 2015). Freire’s concept of love was not romanticized but what he referred to as ‘armed love’. For Freire armed love “is the fighting love of those convinced of the right and the duty to fight, to denounce, and to announce” (Freire et al., 2018, p.208). Bourn (2021b) relates to Freire’s concept of hope as about learning “in hope” rather than “for hope” (Bourn, 2021b, p.69). Love and hope are the foundation of courage to take action and an “ontological necessity” (Ojala, 2017, p.78). This form of hope must come with practice, learning, through a realistic lens of the systemic structures that hinder transformation (Bourn, 2021b; Gill & Niens, 2014; Ojala, 2017). This connects with hope seen as paramount for transformative change from within a system that is often seen as ‘unquestionable’ and ‘unchangeable’ (Misiaszek, 2015; Misiaszek, 2019). We must go beyond this and believe that change can happen; ‘we’ can change (Misiaszek, 2015). Alternatives need to be presented and discussed to nourish a movement away of the fatalism that ‘things’ cannot change, which can lead to inaction rather than action (Ojala, 2017). Learning in hope, liberatory education, comes through *conscientização* from the praxis of action and reflection promoted through dialogue from within a non-hierarchical space. From learning from another, teacher and student, student and teacher there is the possibility in hope.

Freire’s work emphasized *dialogue*, centred on the praxis of action and reflection to move towards *conscientização*, critical consciousness (Freire, 1970). Dialogue, and the praxis thereof, must be approached from a space of equality and a shift from the normative hierarchical dynamic of oppressor and the oppressed, humanization and dehumanization, teacher and student (Freire, 1970). De Lissovoy (2010), in context of Freire’s work, speaks of building authentic relationships that brings equal meaning to each individual. Within this is the need to recognize ones own position and the possibility of a duality as both oppressor and oppressed (Elkorghli, 2021). It is about learning from one another, with another and of one another and not just the emancipation of the ‘oppressed’. Critical consciousness is seen to come through collective

engagement and praxis (Heaney, 1995). Without dialogue, the praxis of action and reflection, learning does not take place. It is from this point of praxis that both students and teachers can become critically aware of injustices both locally and globally and act towards change. Ojala's (2013) description on social learning is apt within this context:

"...the social learning approach is a transformative kind of learning in which a communicative process is supposed to enable one to critically examine one's own values, habits and norms (deconstruction), listen to what others have to say (confrontation) and construct new viewpoints about the issues at hand (reconstruction)." (Ojala, 2013, p.170)

'Education' is not about providing answers, but about nurturing a space for critical thinking (Rugut & Osman, 2013). It is not just about finding solutions to problems, answering a question, but asking the right questions with or without the capacity to find the answer. That is what empowers. This reflects Freire (1970) emphasis on the need of 'problem solving education' and his critic of 'banking concept of learning' (learning without creating an intrinsic bridge between self and knowledge).

The 'banking concept of learning' envisions students as passive objects who are presented with predesigned curriculum that fits within a designed, non-questioned, normative framework (Freire, 1970). It does not instill a movement towards questioning the status quo and change. In contrast, 'problem solving education' represents the "unveiling of different reality" (Freire, 1970, p.54) and the "dichotomy of people in the world towards one being with the world" (Freire, 1970, p.50). This reflects Selby's (2002) 'signature of the whole', and as presented in the introduction the intrinsic connection of the 'near and far', how actions of one can effect the whole. He views it as a radical interconnectedness not only within the human world, but also the human world and nature (Selby, 2002). Both Jenkins (2015) and Selby¹⁶ (2002) refer to a web of interconnectedness that must be highlighted if 'change' is to transpire in context of global and environmental education. Sterling (Sterling, n.d) uses the metaphor 'web thinking' vs 'box thinking'. 'Box thinking' has one think within borders whereas 'web thinking' emphasizes interconnectivity. This reflects the difference between reductionist and systemic thinking and the emphasis for systemic thinking within approaches to environmental and social issues (Sterling,

¹⁶ Selby continues beyond the concept of a web towards the metaphor of dance. Though he still envisions a web to be an apt metaphor for interconnectedness, both in context of strength and fragility, dance represents processes towards a movement of wholeness (Selby, 2002)

2007; Tilbury, 2007). Reductionist thinking reflects Western thinking that is characterized by analytical thinking that deconstructs, reduces, elements into smaller components to be understood (Sterling, 2007; Tilbury, 2007). Systems thinking, however, shifts away from placing everything in silos and rather emphasizes the complexity and the holistic relationship between different elements (Tilbury, 2007). It considers "the whole rather the sum of the parts" (Tilbury, 2007, p.123). Sterling (2003) envisions hope through 'whole systems thinking' that "attempts to explicate the ecological¹⁷ worldview, through revisioning epistemology, ontology and methodology in terms of wholeness" (Sterling, 2003, p.45). Jenkins (2021) connects the importance of a critical, dialogical approach and a movement towards the whole with the assimilation of politics, ecology and ethics within "*Ecological Global Citizenship*"¹⁸.

Jenkins (2021) holds that the opportunity of the assimilation between global citizenship and sustainability are the concepts of '*politics*', '*ecology*' and '*ethics*'. She underlines the unequal level in which environmental issues hold prominence over that of ethical, political and social considerations (Jenkins, 2021). In essence, the *Ecological Global Citizenship* model extends to incite ecological ethos through the inclusion of ethico-political care theory (Jenkins, 2021). Jenkins' (2021) envisions ethics, encompassing care theory and values, as a starting point of a reframing that links global citizenship and sustainability education¹⁹. The inclusion of care theory, ethics of care, in Jenkins' framework is on the premise of emotions, the affective, being of equal importance to the cognitive towards critical thinking and collective learning (Gaudelli, 2014; Jenkins, 2021; Ojala, 2013).

¹⁷ Sterling (2003) speaks of ecologism that entails a radical shift in our bond with "the natural world, and in social and political life (Sterling, 2003, p, 45)

¹⁸ Ecological Global Citizenship' builds on the work of 'Ecopedagogy'. Misiaszeks (2015), a core academic in the field of Ecopedagogy, contests that other forms of environmental education, such as ESD, can through the goal of transforming society, unintentionally "contribute to reproducing historical socio-environmental oppressions" (Misiaszeks, 2015, p.280). He highlights the need for transformative action that stresses the connections between the environment, social, and in turn economic, power relationships that lead to negative effects for some and gain for others.

¹⁹ Jenkins holds that the term 'sustainability education' concisely removes the concept of 'development' which is framed around Western ideals of progress.

3.5.1 Care Theory

Care theory, developed in the late 20th century, encompasses the notions of social connections and collaboration (Held, 2006). It offers an alternative to leading moral approaches and is often contrasted with the ethics of justice (Gaudelli, 2014; Held, 2006). The ethics of care revolves on the mutual caring of one another, in contrast to that of caring for another, not only in context of the immediate, but also beyond (Held, 2006). It underscores the need of non- relational care (Jenkins, 2021); caring for those we don't know nor fit within the ones onto-epistemological (uni)verse. Actions of care are neither selfless or selfish but set on the foundation of collective well-being through cooperation and, as Held (2006) contests, can merge with the concept of justice. The ethics of care involves shared responsibility, sensitivity and trust whereas the ethics of justice highlights "fairness, equality, individual rights" (Held, 2006, p.15). Here I see the contrast, or better said, relation, with justice...one can instill justice (e.g., individual rights and fairness) but without 'care' does it have inner, intrinsic value and longevity? Care theory brings the affective, emotions to the forefront and equal to that of rational thought (Jenkins, 2021). This differs from them often being placed below that of the mind (reason) (Selby, 2002). The inclusion of the ethics of care recognizes the value of emotions in "knowledge creation and decision making" (Jenkins, 2021, p.103.). Ojala (2013) also places the importance of emotions, and the acceptance thereof, within a dialogic and deliberative process towards ESD and to nourish the ability to listen.

Emotional intelligence is needed to confront the "anxiety, worry, apathy, helplessness, hopelessness, or cynicism" (Jenkins, 2021, p.104) learners, and society at large, are confronted by due to present ecological and social uncertainties. Unsettling emotions can be brought forth when coming to terms with the power structures, that we are all intrinsically a part of, within the confines of the modern world. Jenkin's (2021), citing Stein et al., (2019) terms this as the continued impact of 'colonial legacies'. Pihkala (2020) writes that though eco-anxiety, climate anxiety, can incite difficult emotions there is also an "adaptive dimension, which can be called "practical anxiety"...associated with expectation, motivation, and hopes" (Pihkala, 2020, abstract). But, as discussed, (hard) critical approaches behind the concepts of SDG 4.7 are often glossed over. This is due to both the teachers lack of 'knowledge' towards deep critical reflection

but also for the ‘fear’ of upsetting the students and teachers uncertainty and/or lack of consensus on how to address the emotional tensions that can be created by this, not only for students but for teachers themselves (Pihkala, 2020). However, a spontaneous emotional reaction-of say fear, worry, anger hope/lessness, denial, confusion, frustration, guilt, empathy, sympathy does not negate the possibility of deeper, present and future reflection (Ojala, 2013). Ojala (2013) highlights the fact that though learners may struggle to express their opinions and ideas in an articulate manner, it does not negate a critical process. Unsettling emotions are actually seen as crucial for transformative learning (Jääskeläinen et al., 2011) and can “...include argumentation and(or) rational reasoning on issues that one feels strongly about” (Ojala, 2013, p.175). As Ojala (2013) articulates that by avoiding these emotions we lose our ability to explore our values and objectives.

4 Methodology

This research was based on a qualitative approach. Qualitative research is viewed as a conducive in giving insight into how we perceive and understand ‘our’ world (Berg & Lune, 2012). As often with qualitative methods, an inductive analysis was applied that allows concepts and theories arise from data collected (Bryman, 2016). The main objective of this study was to gain insight into Norwegian youth reflections around the concepts of SDG 4.7, GCE and ESD, and their response to a critical approach thereof. This chapter will discuss the methodologies of this research, data collection, sample units, data analysis, limitations and ethical considerations. Due to the dynamic nature of the workshops a deeper description of them will precede the ‘Findings and Analysis’, chapter 6.

4.1 Data collection

Data was collected from three upper secondary level institutions (units) through a mini ethnographic case study using participatory observation in the form of classroom workshops. An ethnography is seen as the recording and interpretation of a social group’s expressions, actions and interactions (Fusch et al., 2017). A mini ethnography is characterized by a shorter time span than a full ethnography and can be both participatory and observatory (Fusch et al., 2017). The use of workshops is supported by academic literature in which workshops are seen as a viable

participatory design research methodology that can result in deep results for data collection (Ørngreen, 2017). The format of the workshops can also be aligned to focus groups which is cited as enabling the researcher to gain various perspectives on a subject simultaneously (Fusch et al., 2017). This allowed me to move away from semi-structured interviews and have students to lead their own discussions around specific topics with minimum guidance. This is supported by my central research questions and the key goal of ‘hearing’ the students’ voices’ guiding the methodology. A reflective journal was kept throughout the process.

Workshops were video recorded using GoPros²⁰ with a planned interval of one week between the first and second workshop. Different stages of the workshops entailed both an active and passive approach, with at times acting as a passive observer while at others participating in dialogue with the participants. A richer description of my role and the workshops themselves, will be addressed in the ‘Context and Analysis’ chapter (5.4). This resulted in approximately 18 hours of video recorded data. Each sample unit participated in two workshops: the first at 1.5 hours and the second of between 45 minutes to 1 hour of duration. Data produced in Workshop1 per Unit subgroup consisted of 1 developed poster board, 1 note taking sheet, 6 final chosen images, 4 self taken images and 1.5 hrs of video recording. In context of Workshop2, data produced consisted of 1 note taking sheet and 1 brainstorming worksheet per Unit subgroup. Workshop2 also incorporated the poster boards created in Workshop1 and the same 16 images. Appendices will be presented in ‘Context and Analysis’, chapter 5.

The development of the workshops, ‘lesson planning’, was a multi-phase process. I approached the process from a facilitator/teacher perspective and incorporated my experience thereof into the process. A rough conception was created and implemented with two adult individuals. To allow for a nuanced feedback one individual was a colleague within the Global Development department at NMBU with the other an individual outside of academia. This was followed by a pilot workshop with two youth²¹ through convenience sampling. Through observing the recorded data, transcript and notes taken from the pilot workshop, the final workshop outline was solidified and implemented with the sample units.

²⁰ GoPro’s are small cameras that take both video and still shots.

²¹ Consent forms were signed by participants in the pilot workshop.

The workshops (lesson plan) were based on a learner centred, dialogical approach with a strong emphasis on the iterative process and critical thinking. They drew upon Paulo Freire's critical pedagogy and philosophical work. It incorporated the concepts of social and transformative learning and a tactile, creative experience. Within this study, there are elements of participatory action research in that it sets the stage for participants for 'self-reflective enquiry' and to engage in 'problem posing' and, to a degree, 'problem solving' (Cohen et al., 2002). This reflects critical pedagogy and the importance of the praxis of reflection and action in conjunction with Freire's premise of problem-solving versus banking education (Freire, 1970) and systems thinking (Sterling, 2007; Tilbury, 2007). In connection to this, the workshop design echoes the social constructivist learning methodology that expounds the importance of learning through collaboration and a student centered approach that is nourished through dialogue (Barraket, 2005). As described Slavich & Zimbardo (2012), the social constructive perspective holds educational approaches are more effective when they involve social interaction and the engagement "in activities or exercises that require them to reflect on their understanding and examine or explain their thinking" (Slavich & Zimbardo, 2012, p.574). This was supported through the incorporation of photo elicitation methods and a teaching resource developed in response to the research that supports critical engagement with ESD and GCE, *Teaching for sustainable development through ethical global issues pedagogy: A resource for secondary teachers* (Pashby & Sund, 2019), that mobilizes the pedagogical and analytical tool HEADS UP by Andreotti (2016) discussed in chapter 3.3.

4.1.1 Photo Elicitation

The photo elicitation (PE) method is defined as the incorporation of photographs into data collection methods (Bryman, 2016; Creswell, 2002; Harper, 2002). It increases overall material to be triangulated, as in the case of this study, of transcripts (verbal data), behavioural observations (live and recorded), visual images and hard copy material (Bignante, 2010; Glaw et al., 2017). PE is cited as an effective tool to stimulate deeper data and can assuage the power dynamics between researcher and subject (Bignante, 2010; Ford et al., 2017; Glaw et al., 2017; Harper, 2002; Torre & Murphy, 2015; Tsang, 2020; Van Auken et al., 2010). It gives more 'space' for students to form reflections and reduce the stress of being the centre of dialogue as in a traditional interview that entails a more question-answer format dynamic (Ford et al., 2017;

Torre & Murphy, 2015). PE is also cited as enhancing participants engagement and reflection allowing the researcher to gather deeper meaningful data and enhances validity and complexity to data (Glaw et al., 2017; Harper, 2002; Torre & Murphy, 2015). As cited in Harper (2002) it is “not simply an interview process that elicits more information, but rather one that evokes a different kind of information” (Harper, 2002, p.13). In addition, as stated by Torre & Murphy (2015), in context of educational research, PE allows students to become direct collaborators and take on the role of facilitator through shared ideas and reflections. Within this study the auto driven method of PE was employed.

According to Torre & Murphy (2015) the auto driven method entails participants taking photos and/or sorting images(photos) along pre-established themes guided by the researcher. In the case of this study, 16 images aligned with the themes of GCE and ESD were provided by the researcher combined with 4 images per group taken by the participants. In context of supplied images, I used the ‘words’(concepts) connected to ESD and GCE as portrayed in the UNESCO document “*Schools in action. Global citizens for Sustainable development. Student guide*” (UNESCO, 2016a) (Figure 7) as a guide in the search for images.

Figure 7 “*Schools in action. Global citizens for Sustainable development. Student guide*” (UNESCO, 2016, p.10)



A broad internet search of GCE and ESD of both academic, educational, and specific SDG resources were examined for images that portrayed, as interpreted by this researcher, both negative and positive characteristics aligning with the concepts. Images were chosen from within these sources in conjunction with other stock images. All were chosen with the purpose, hope, of

inciting in-depth reflexivity on behalf of the participants. The images were purposefully printed and distributed as whole sets to each unit subgroup to allow a tactile, hands-on experience of sorting through them. All images can be found in Appendix 1. I experienced this allowed the participants to create a greater connection with the material and removes the focus on one another to lessen the stress of participation. It also moved away from the present predominant form found in Norway of teaching material being placed on a projector.

4.1.2 HEADS UP

A core component to foster a ‘whole story perspective’ within the workshops was the mobilization of the HEADS UP (Andreotti, 2016) pedagogical tool discussed in chapter 3.3. This was derived from a teaching resource stemming from research²² that mobilized HEADS UP in participatory workshops with teachers from England, Finland and Sweden: *‘Teaching for sustainable development through ethical global issues pedagogy: A resource for secondary teachers’* (Pashby & Sund, 2019). It was designed by the participating teachers to support teachers in their engagement with critically connecting GCE and ESD in their teaching practise (Pashby & Sund, 2019). The resource provides activities that support students to localize their position within a topic and reflect on how ones mainstream perspectives can disregard the marginalized thereof (Pashby & Sund, 2019). A key component for the workshops was drawn from a series of questions that were developed to cultivate students ‘breaking down an issue and identifying key challenges’ (Pashby & Sund, 2019, p.8). The main activities drawn upon from the resource can be viewed in Appendix 2 and specific implementation will be elaborated on in the workshop descriptions chapter (5.4.2.)

4.1.3 Sample Units

The samples units were derived from three Norwegian Upper Secondary schools with an average age of 17. As a particular age group of the population was required this can be termed as purposive sampling as sample units were not chosen on a random basis (Bryman, 2016). Specific units were from three main pedagogical designs in Norway; mainstream education, Waldorf

²² *‘Teaching for sustainable development through ethical global issues pedagogy: a participatory research with teachers’* (Pashby et al., 2022)

Steiner, and Montessori. The reason for including the three pedagogical designs was to ensure a broad population from varying educational backgrounds were represented. All were academic in orientation rather than vocational. This can be further termed as a priori purposive and criterion sampling approach as specific criteria was required of the units (Bryman, 2016., pp.410).

To ensure anonymity, especially in context of the limited number of Steiner and Montessori Upper Secondary schools in Norway, the location of the schools will be identified geographically only in context of two being within the municipality of Viken, situated in Eastern Norway, surrounding the capital of Oslo and with one within Oslo itself. A data base of various upper secondary schools from the three pedagogical backgrounds within the Oslo and Viken area was created. Initial contact was made via email to the head of the schools describing the research and enquiring of the possibility of a workshop with a class (Appendix 3). This was combined with contact made through convenience sampling. The final units were established in the following manner. The mainstream school is part of the research project, *Educational for Sustainable Development in Practice* (UBU i Praksis), at NMBU in the Educational Sciences department. Due to personal connections with a PHD student within the research project, contact was made with the project coordinator of the research²³, and in turn directly with a teacher interested in participating. The second unit was through a personal contact at a Waldorf Steiner upper secondary school who presented the concept of the workshop during a teacher meeting. Details of an interested teacher were then shared with me, and contact made via email. The third and final unit, a Montessori upper secondary, was established via the forementioned data base with the head of school sharing the email received with teaching staff. This resulted in one response where the workshops were eventually implemented. The final units resulted in a total of 42 participants over the 2 workshops. The units are identified as Unit 1, 2 and 3. Each individual unit was then subdivided into smaller groups which are identified as Unit1A, Unit1B etc. (Figure 8) and then again as Unit1AS1(S=student), Unit1BS1 etc.

²³ The project coordinator, Ingrid Eikeland, was indispensable for this research. It was upon her advise that class workshops were decided upon as a means to facilitate participation. Recruitment of participants outside of class time, or to enquire a small number to be excused from class time would have been more difficult to negotiate. It was through the coordinator that the idea to use GoPros to record groups and the loan of three thereof established.

Figure 8 Sample Unit Breakdown

| Unit | #Male | #Female | Total |
|--------|-------|---------|-------|
| Unit1A | 1 | 5 | 6 |
| Unit1B | 2 | 4 | 6 |
| Unit2A | 3 | 3 | 6 |
| Unit2B | 3 | 3 | 6 |
| Unit2C | 6 | 1 | 7 |
| Unit3A | 4 | 3 | 7 |
| Unit3B | 3 | 2 | 5 |
| Total | 21 | 21 | 42 |

Unit size varied. Unit1 consisted of 12 participants, Unit2 18 participants and Unit3 12 participants. Unit1 and Unit2 participants were all 2nd year upper secondary, Unit3 contained multiple grades from year 1 till year 3. All workshops were held in the English class subject period with the teacher present as an inactive observer²⁴ and were in English. The use of English was deemed feasible as Norway is consistently ranked with high level English Language proficiency (Bonnet, 2004; EF, 2021). Due to class scheduling, the time between workshops were organized one week apart. In the case of Unit1 the second workshop was delayed by two and half weeks due to personal illness.

4.2 Data analysis

In reflection of the multiple forms of data the workshops furnished (transcripts, posters, hardcopy sheets and video/behavioural description) an integrated process of categorizing and connecting strategies was applied. This supports Maxwell (2012) emphasis on the need of the two strategies for a deeper, richer “well-rounded” (Maxwell, 2012, p.113) analysis of qualitative data. Categorizing strategies implement coding techniques which organizes data into segments to then reveal a connecting theoretical base (Maxwell, 2012). Though effective, it reduces the

²⁴ In the second workshop of Unit2, the teacher was not present due to illness. This did not result in any change to the level of engagement of the participants

importance of overall context and their connecting relationships (Maxwell, 2012). Whereas, connecting strategies view the data holistically and finds connections and relationships between statements (Maxwell, 2012). As such concepts of thematic analysis, a categorizing strategy, alongside that of discourse analysis, a connecting strategy, was decided upon. The choice of incorporating both approaches was also deemed appropriate as they are cited as being flexible without fixed, concrete processes that allow a researcher to adapt them accordingly (AlMaamari, 2020). Concepts from both thematic and discourse analysis created a cohesive, holistic approach to the data and a deeper insight into unforeseen threads.

Thematic analysis was seen as a valuable tool to organize data along a specific framework. It is seen as a favorable means for “analyzing, organizing, describing, and reporting themes found within a data set” (Nowell et al., 2017, p.2). As a novice researcher this was seen as indispensable. To ensure trustworthiness and consistency an adapted version of a six-stage process often applied to thematic analysis was implemented (Braun & Clarke, 2006; Nowell et al., 2017; Xu & Zammit, 2020). As cited by Xu & Zammit (2020) this consists of a six-stage process: “1. familiarizing yourself with your data, 2. generating initial codes, 3. searching for themes, 4. reviewing themes, 5. defining and naming themes, 6. producing the report” (Xu & Zammit, 2020, p.2). Within the context of this research an inductive method was used in that the themes were derived directly from the data, and not along any pre-established theoretical framework (Nowell et al., 2017).

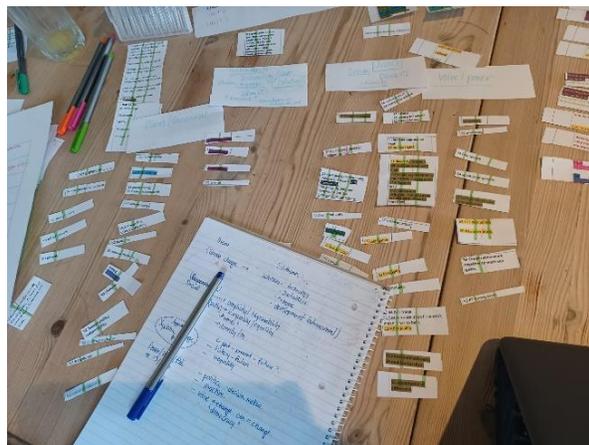
Concepts of discourse analysis, a connecting strategy, allowed me to view the data more holistically. Discourse analysis does not conventionally employ coding and it is envisioned more as an ‘analytic mentality’(strategy) (Bryman, 2016, p.533). It moves along the paradigm of constructivism and sees discourse beyond just ‘language’ but how it integrates the speakers’ understandings of the(ir) world; knowledge, beliefs around their social world, identity and power structures (Almeida, 2004; Zastavker & Darer, 2014). This also reflected the need to analyse not only how the students responded but also how they came to their statements and defended them. Within discourse analysis one also “...explores the organization of ordinary talk and everyday explanations and the social actions performed in them”(Cohen et al., 2002, p.389). The emphasis lies on how something is expressed rather than just what is expressed (Bryman, 2016). I was also interested not only in what and how something was said at one point in time, but how it overlaps within the sphere confirmation and/or contradiction at another juncture. Connected to this was

also the behavioural interactions of the participants. Not only the relationships, connections, between different statements but the rhetoric employed in discussions. Such an approach enabled me to “connect statements and events within a context of a coherent whole” (Maxwell, 2012, p.113).

The first step of analysis was an initial rough transcription of recorded material in a word document. A copy was made and material not pertinent to this study deleted. The data was then reviewed again with a deeper incorporation of reviewing the recorded data with the transcripts alongside a table of the images used in the workshops for noting comments made in relation to them and to envision specifics and connections more clearly. Worksheets and final posters were also referred to at this stage. It was during this viewing that the concepts of discourse analysis were applied and recorded into the transcripts. These entailed observations made of behaviour, both spoken and unspoken using the comment application in word. Connections were made in context of confirmations and contradictions and notes taken on the interaction between participants in context of voice and body language. For ease of comparison and triangulation of data across Units, it was at this juncture that one large table in a word document was created. This integrated all data gathered in the workshops, transcriptions, with noted comments, and images of the hardcopy materials and from which thematic analysis applied.

It was from within this integrated document that the thematic analysis process of coding began. The coding was a multi-stage process. I first open coded Unit1a workshop, identifying, naming and noting different codes through highlighting specific dialogue in different colors. I then used this as a base for coding the other Units and added new codes as they appeared. From the initial codes, I then began generating the themes. As part of the process of naming and defining the themes, and to reflect the tactile experience emphasized in the workshops, key highlighted dialogue along the initial codes were printed and cut into strips (Figure 9). These were then organized and re-organized into groups and triangulated

Figure 9 Thematic Analysis. Coding and themes



with the hard copy material and through which the final themes were generated. This was a multi-stage process with themes being reviewed and re-defined and resulted in the final four core themes of climate, money, people and power with a number of connected subthemes. A final integrated table of themes is presented in chapter 5.2., 'Context and Analysis'.

4.3 Limitations and Ethical Considerations.

There are both strengths and limitations to this study. The overriding limitation is that as a novice researcher and a 30 credit Master thesis, the study was both large and complex. However, this research was broached from the space to mobilize a learning experience for both myself and the participants. Moving away from the norm of semi-structured interviews towards complex workshops furnished rich and complex data. The amount of data was vast and required a depth of time and experience to analyze. I was aware of the scope the methods would entail but during the initial planning stage the workshops were first scheduled for the fall of 2021 to provide sufficient time for such a study. However, due to Covid-19 and subsequent cancellations, workshops in the fall were moved to early 2022 with the final workshop taking place in late February 2022.

Another duality of a strength and limitations was my prior experience in education. With many years of teaching experience, the development of the workshops and the implementation thereof was an added strength. However, it also led for at times a fine balance between the goals of trustworthiness as a researcher and that of implementing a lesson plan from a pedagogical perspective. A balance that I do feel was found with nourishing the participants towards a deeper criticality in context of the systemic power structures and the four criteria of trustworthiness for research. The four criteria of trustworthiness are credibility, transferability, dependability, and confirmability and are cited as conducive to evaluating the quality of qualitative research (Bryman, 2016).

4.3.1 Trustworthiness; credibility, transferability, dependability, and confirmability

Credibility refers to the validity of how the researcher interprets the data gleaned from the participants of the research (Bryman, 2016; Nowell et al., 2017). One means to ensure credibility is through triangulation (Bryman, 2016; Nowell et al., 2017). The multiple forms of data from the workshop used to triangulate strengthens the credibility of this research. Also, that there were two integrated workshops that built upon one another through an iterative process also adds to

credibility. A limitation of the study that could affect the credibility is due to the levels of subjective interpretation in context of the images used in the photo elicitation method. Two levels of subjectivity are the choice of images by the researcher directly influenced the discussions of the participants and in turn the subjective interpretation of the data. This is in conjunction with due to the number of images created at times snippets of conversations rather than nourishing deeper discussions. Also, it could be argued discussions were led by the more vocal participants with participants choosing to concede and go along with the flow of discussions rather than contradict and disrupt. This is heightened by the age of the participants. However, where observed this was noted and taken into consideration.

Transferability refers to the ability to replicate the study (Bryman, 2016; Nowell et al., 2017). In the context of this research, replication of this study is possible. A rich description of the workshops is provided along the side of analysis used. I feel that the workshops as a whole and/or as in components are transferable not only as a research tool but also as a pedagogical tool. However, I would suggest with some possible fine tuning. The images chosen are extremely subjective from within the researcher's perspective. Another means to increase both transferability and credibility, would be a larger time span of research that would entail the students furnishing their own images that better reflects their context. This is extremely apt when considering that one's experience and interpretation to social justice and in turn sustainability is highly influenced by their position within inherent power structures.²⁵

Dependability refers to adopting an 'auditing' approach (Bryman, 2016, p.384). This entails concise records of the process of the research throughout its stages (Bryman, 2016). As such I have been conscious of conserving records of each step of this research from a reflexive journal, the initial research proposal, workshop development, all data gathered and transcripts thereof. This allows for ease of accessibility for other researchers if desired.

Confirmability is recognized when credibility, transferability and dependability are attained (Nowell, et al.). Within this is the objectivity of the researcher (Bryman, 2016). It encompasses the degree in which a researcher allows their own positionality to influence the

²⁵ My initial 'dream' for this research was to facilitate workshops with youth from Canada, Mexico and Norway for a cross contextual analysis. However, obviously, in context of a 30credit thesis and during a global pandemic this was not feasible. There is the hope for future research that incorporates the images furnished by the youth themselves which is then incorporated into larger cross contextual workshops.

research, known as ‘researchers bias’ (Bryman, 2016, Fusch et al.,2017). It is paramount that a researcher recognizes their biases when engaging with and throughout a study. My prior lived experiences, described in the loci of enunciation preceding the ‘Introduction’ (chapter 1), in both the Global South and Global North and the opening of space of decolonial theory throughout my Masters degree has created a level of bias that entailed a conscious effort to remain impartial in the analysis of the data and within the discussions with the participants. I envision this research as grounded on a constructivist ontological position that how one views their reality is socially constructed and as such can influence a research project as a whole (Bryman, 2016). This relates to not allowing my own positionings inadvertently guide discussions to a space that participants could feel was desired due my own positionality. Though impossible to confirm completely, I do feel that within any discussions I entered, I made it clear that there were no right or wrong answers. A conscious effort was made to make participants feel their opinions were important whether they aligned with my own or not. This reflects the ethical considerations that must be taken in any study.

4.3.2 Ethical considerations

Ethical considerations within research are based on the concept of doing no harm (Bryman, 2016). According to Bryman (2016) harm involves “physical harm, stress, harm to the participant’s development, or loss of self-esteem” (Bryman, 2016, p.126). Throughout this research steps were taken to ensure that none of the above took place. This can be seen from the above comments that all participants views and positions were respected with no overt judgment. In conjunction to this I tried to instill a democratic and ‘safe’ space for the participants to share their thoughts. From a broader scale, NMBU has the ethical prerequisite that all research connected to its’ institution adheres to the mandates of Norwegian Centre for Research Data (NSD) and approval from thereof; as this study does. This consisted of sharing an outline of the research prior to data collection. This study also complied with the NSD mandate that all participants must be informed of the nature and purpose of the study and request signed consent from each participant (Appendix 4). Within this, participants were ensured anonymity and informed that involvement was voluntary and that they could withdraw at any time.

5 Context and Dynamics of Analysis.

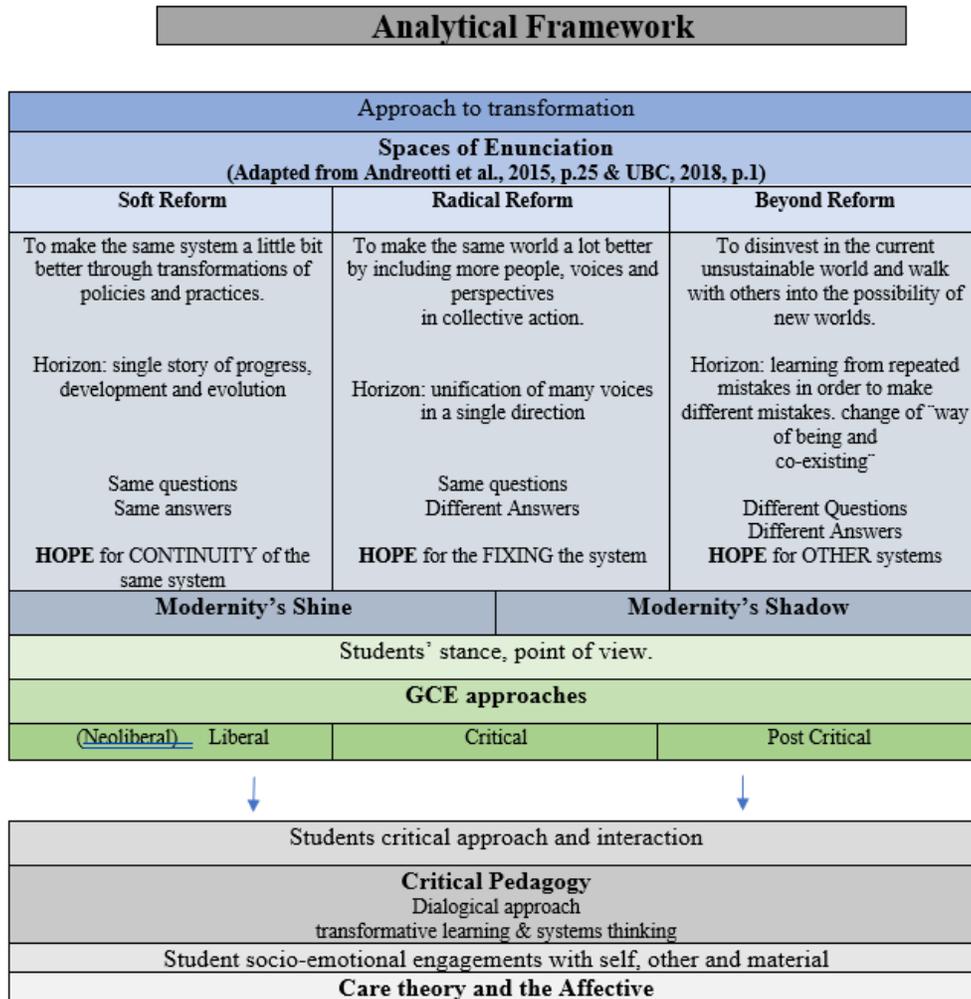
This chapter introduces the dynamics of analysis and context of this research. The first section introduces the analytical framework based on chapter 3, 'Theoretical Framework'. This is followed by a thicker description of the themes and a table thereof revealed from the process presented in chapter 4.2, 'Data analysis'. An overview of the settings and social dynamics of the workshops are then depicted before a description of the workshops. As discussed in the Methodology chapter, due to the dynamic nature of data collection a deeper description of the workshops is presented directly preceding the 'Findings and Analysis'(6). This gives the reader a richer visual imagery of the pedagogical methods applied and my role within this dynamic. The final subchapter, 'Reflections' (5.5), opens the space for deeper reflection on my part in context of the methodology applied to this research.

5.1 Analytical Framework

The analytical framework (Figure 10) is based on the theory and concepts presented in the theoretical framework chapter ²⁶. It reveals how they have been knitted together and employed for analysis of the data. The 'spaces of enunciation' examines how the students approach transformation, or perhaps better expressed, as their perspective on 'change'; where their hope lies in change and their engagement/articulation of the shine and shadow of modernity. The approaches to global citizenship reflect the 'spaces of enunciation' and represent the students' stance. Critical pedagogy, the concepts of transformative learning and systems thinking are applied to the students' critical approach and interaction. It elucidates how the students respond to a method built on a critical and integrated approach to the core concepts of SDG 4.7, ESD and GCE, Care theory and the affective (emotions) examines the socio-emotional engagements with self, other and hard copy material.

²⁶ Adapted from "Social cartography of general responses to modernity's violence" (Andreotti et al., 2015, p.25) & "Soft, Radical and Beyond approaches to system reform" (UBC, 2018, p.1)

Figure 10 Analytical Framework



5.2 Themes

Due to the dynamic nature of the workshops, with participants comparing and contrasting different images, themes do overlap. However, the following are the most prevalent ones derived from an inductive approach to the data. The themes are climate, money people and power in conjunction with several connecting themes; (in)equality, knowledge, complicity in/separate from, anxiety, worry, apathy, helplessness, hope/lessness, cynicism, empathy and sympathy. The main themes and their key characteristics are presented in Figure 11. I have included the images applied within PE methodology that incited the most dialogue within the themes.

Figure 11 Themes

| Climate | Money | People | Power |
|---|---|--|---|
|  |  |  |  |
| climate change sustainability solutions technology environment | development resources growth inevitable | diversity/difference injustice human rights 'other' | politics change in/action voice |
| connecting subthemes in/equality complicity in/separate from knowledge anxiety, worry, apathy, helplessness, hope/lessness, cynicism, empathy, sympathy, trust | | | |

5.3 Settings and Dynamics

All workshops took place in the English period classroom. Prior to participants arrivals, I ensured the desks were arranged in squares with a large working space available and conducive to group discussions. After an initial introduction, all students were requested to sign the consent form and then randomly subdivided into smaller groups dependent on overall attendance²⁷. It wasn't evident that this was along pre-established close social networks. Participants were informed that participation was completely voluntary; only one student declined to participate due to English language proficiency. All subdivided groups were recorded via a GoPro on a headband of one of the participants. Participants were then informed of the premise of the workshop in context of research examining their reflections around GCE

Figure 12 GoPro Unit1B



²⁷ As stated in chapter 4.1.3, there was an average of 6 participants per subgroup.

and ESD. A rapport with the participants was made as quickly as possible in the sense of making them feel comfortable and at ease with an emphasis placed on the importance of their voices and that there were no right or wrong answers.

Some initial observations I made of two of the schools was the absence of any hard copy didactic material nor completed work on the walls, both in the classrooms and the halls themselves. It was evident that the students worked primarily with individual laptops and projector slides. This was even more greatly marked by most of these students lacking any writing materials, pens etc.

Within all Units, students were very much engaged with the material. Feedback from the teachers revealed that this level of engagement was not necessarily the norm. Though students did participate within whole class discussions and feedbacks, there was a better flow within their smaller groups. Throughout the workshops I emphasized I wanted to listen to their opinion, their voice and there are no right or wrong answers and mirrored this in my interactions with them. At times, I did join the discussions if I observed the students getting off track or to propel the conversations through prompts like who, what, when, where and how. There was also the need to make sure there was a balance of dialogue between participants. Though in general the social dynamics were very democratic, with students giving space for one another to participate and express their opinions, there were moments of domination that compelled me to try and bring in other opinions and perspectives. I observed that in some groups those who could express themselves more forthrightly and had the ability to better articulate their opinions did silence others. Both in the workshops and in my analysis below, I have made a conscious effort to not allow this to impede the varied voices to be heard. The main component of the workshop was an abbreviated definition that combined those of GCE and ESD:

“...a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. To promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” (UNESCO, 2016b, p.6)

The full definitions can be found in Appendix 5. It was cited to the students a ‘key’ goal within education and placed on all key projection slides after its initial introduction. To ensure anonymity, the participants insights will be referenced as follows and reflects Figure 8 in the Methodology chapter.

As stated in ‘Sample Units’ (4.1.3), Units are identified as Unit1A, Unit1B etc. and then again as Unit1AS1(S=student), Unit1BS1, Unit1BS2 etc. Unless otherwise stated, the quotes are taken from the GoPro transcriptions. ‘R’ represents researcher.

5.4 Workshops

There were two overarching components of the workshops: a series of brainstorming activities on poster boards and the implementation of the photo elicitation method. This resulted in each subunit creating a hard copy didactic material that was built upon throughout the two workshops. This was used as an iterative tool throughout the workshops and to triangulate with the recorded videos during analysis. They were also left with the participants as a point, hopefully, of continued reflection with participants encouraged to display them in their classrooms. Each activity was allotted approximately 20-25 minutes to ensure engagement. A class feedback session took place after each core activity. The full lesson plan for the workshops including projection slides can be found in Appendix 6.

5.4.1 Workshop1.

The core components of the hard copy material were primarily developed in the first workshop. Directions for the workshop were placed on projection slides. The participants were given a poster board and various colored markers and directed to draw an inner circle with education written in its center. Subsequently they were asked to draw another outer circle and asked to brainstorm what they felt was the goal of education. I stressed that it was not what their teachers or parents tell them, but what they felt was important. Another circle was then added with the corresponding request to note school subjects in general. They did not have to be the ones they have taken. At this juncture they were asked to draw one final circle for this stage of the workshop. This was to brainstorm the skills and knowledge these school subjects ‘gave’. This represented roughly the first 25 minutes of the workshops at the end of which students were directed to the posters aside for the moment. The photo elicitation activity was then introduced.

As stated in the methodology chapter, the photo elicitation method consisted of 16 hard copy images for each group and directly revealed the main themes for analysis. After the initial brainstorming activities, the abbreviated definition of GCE and ESD, presented in chapter 5.3, was introduced to the participants and was cited as a goal within education. I purposefully abbreviated the

Figure 13 Photo Elicitation Activity, Unit1B



definition to allow the students the freedom and ability to form their own constructs around them. Prior to handing out the envelopes that contained the hard images and a note taking sheet (Appendix 7) the students were directed as follows. Through a brief activity on the white board students were guided, in correlation with the above definition, to examine the images in context of their negative and positive implications in context of the ‘whole story’; from the local, national, global towards another local. This was with the hope of mobilizing the participants towards Jenkins (2021) non-relational care and Selby’s (2002) ‘signature of the whole’ and how what takes place in one ‘local’ can affect another ‘local’. Within their subunits, they were asked to discuss and choose three images that positively and three images that negatively connected with the ‘goal’. Figure 13 is an image of the activity for Unit1b. They were directed to write key words around the discussion of the image and more complete thoughts for the final 6 chosen images on the note taking sheet²⁸. The task of whittling down to 6 final images was to incite a deeper discussion and critical engagement around the images. To facilitate my analysis of the data, the images were numbered, and students were asked to refer to them in this context²⁹. Students were encouraged to play around with the images and spread them across the table. However, it is not the final images that are of most interest but rather the dialogue leading

²⁸ This was also seen as a backup should there be any issues with the recordings.

²⁹ Though students did not consistently do so, through the dialogue and video recordings it was possible to infer which photo was being discussed.

towards them. The above activity was given approximately 20 minutes and followed by a break³⁰.

After the break, participants were directed to add a final outer circle to their poster boards and brainstorm the words/concepts that they associated with the 'goal' and the images from the photo elicitation activity. They were asked to circle the subjects, skills and knowledge brainstormed previously that promote the 'goal'. They were directed to add any skills or knowledge they felt were missing outside of the circles around the poster. Subunits then each presented their posters. I would like to stress that though visually there appears to be a different level of input, development, within the hard copy materials, this does not reflect differences of engagement. Though some can appear quite 'bare' so to speak, the depth and level of discussions were on equal par with the others and at times due a conscious effort to concentrate and promote dialogue as one participant noted, *"maybe we should do more than just write things down...but talk about it is as well. Why is it important"*(Unit2CS1).

Figure 14 represents an outline of the brainstorming activity on the poster boards with Figure 15 representing an example of the final hard copy didactic material. It needs to be noted that I collected the posters between workshops and typed up the sentences from the hardcopy sheet of the final photos chosen and pasted the image next to it. Posters from all groups can be found in Appendix 8.

³⁰ The break was combined with the following activity: Students were directed to explore their school and take 4 photos that connected with the 'goal'. Negative or positive. The parameters of this activity were to use the first 7 minutes for the 2 negative and the last 7 minutes (on the way back to classroom) for 2 positive. As per NSD, students were told these could not include any self identifying images. The images and sentences were sent to me via text. Unfortunately, it needs to be noted this element of the workshops did not furnish consistent nor quality data. By integrating into the break period, students did not take this activity as seriously as the ones within a classroom dynamic. This combined with my inability to observe the activity in progress, and the scope of a 30credit thesis has led me to exclude it from my findings and analysis. In further research, I would aim to include a similar activity but with better implementation.

effects of the above. I observed that students needed a lot of guidance and prompting within this activity, with me mainly leading the discussion. However, the data revealed when applied and reflected upon in their group discussions they had predominantly captured components of the ‘whole story perspective’. Students were then directed to return their posters and discuss the final 6 images in context of any connections between the positive and negative images and how a positive and negative could influence one another. This included a hard copy note taking worksheet (Appendix 9). The direction slide (Figure 17) also included an outline of key points of reflection/prompts adapted from

Pashby & Sunds’ (2019) resource. As the ensuing discussions naturally started to incorporate images outside their final 6, I quickly expanded this to include all 16 images.

The last two activities of the final workshop were a final mind mapping and a group discussion asking the

students to reflect on the two workshops. The mind mapping activity on a hard copy worksheet (Appendix 10) had students look back at their posters, reflect on their discussions and to reflect again on what skills/knowledge and subjects they felt are most important towards the goals. They were directed to keep in mind the interconnectedness they had discussed between the ‘positive’ and ‘negative’ images. The final slide of the workshop presented the abbreviated definition separated under the two headings of global citizenship education and education for sustainable development. They were asked if they saw any connections between them and for general reflections on the workshops.

Figure 17 Workshop2 Direction Slide. Whole story reflection points.

Group work

Look at the final 6 photos on the posters.

Discuss if you see:

- any connections between the positive and negative images.
- how a positive and negative could influence one another.
- Use the worksheet to take notes on your group discussions on the above questions.

Think of whole story/picture

- Who, where, why, how, when
- From local, national to global

Keep in mind: mainstream vs marginalized perspectives

- Power dynamics
- How history affects the present
- Whose approach is seen as best
- How approaches affect people differently
- Who is most impacted by an issue or solutions.
- Social, environmental and economic inequalities

(Pashby & Sund, 2019)

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6



5.5 Reflections

The workshops were a labor of love. The development thereof and implementation. Though I have already addressed some strengths and the limitations of this research in Methodology chapter, I will take this opportunity for further deeper reflection. There is not enough space to delve into all the layers seen, and I would stress unseen by myself, but here I wish touch upon on two key components of the workshops, the images and in relation the concepts of ‘negative’ and ‘positive’.

The hope of the workshops was to open the space for students towards thinking differently, to contemplate, ‘disrupt’, mainstream notions of the concepts behind SDG 4.7. Yet, still within that there are elements of the mainstream within the workshops themselves. There is the obvious subjectivity, addressed in the limitations chapter, of the choice of images that were a core basis of the workshops themselves. I expand here in context of their framing from the within mainstream notions of sustainability and citizenship themselves, with UNESCO documents framing their choice and the cited ‘goal’. As well, the number of photos created stilted conversations around the images. At times, as stated in the context of credibility, it gave participants the ability to turn to another image rather than delve deeper and ‘disrupt’. Do the students move on when it gets too hard? Opportunities to think differently missed. This also effects, at times, the quality of the quotes used to support the findings, with the reader perhaps wanting another layer of context, more, that does not exist within the data. This is compounded by the language used within the workshops. As the theoretical premise of this research is based on Decolonial Theory and in turn the colonial matrix of power, there is an irony that the language the workshops were in the ‘global’ language of English and not Norwegian. As a native speaker, I dominate the language in a different way and the participants are obliged to manoeuvre and negotiate around that. This effected the power dynamics within the workshops, further underscored and age difference, and raises the question how the workshops, data, would have been different in Norwegian. However, the above does not negate the findings reveal a ‘disruption’, or one could argue room given to mobilize and nourish thoughts already in place. This can be seen in their engagement with the direction of the premise of ‘negatives’ and ‘positives’. A deeper element is in context of the dichotomous engagement with the ‘negative’ and ‘positive’.

One layer I envision within the negative and positive, as expressed above, is as a reflection of the shine and shadow of modernity. I hold this to be an apt analogy yet there is another layer. As one pulls off another layer the essence of even thinking in dichotomies was presented to me by a colleague. I was asked if it was ‘natural’ for me to think this way. Is that the way ‘we’ are taught? To answer such a question is not in the capacity of this thesis, however, it had me return to and contemplate a certain stage of the workshops. After the mind mapping activity implementing the pedagogical tool of Andreotti (2016), HEADS UP, they are asked to work within the final six ‘negative’ and ‘positive’ images on the posters. At this point they move the methods away from the concept of having to choose between them and begin discussing images outside their final six. They bring back images not chosen. They innovate the methods to create a space that included all 16 images. They move away from the negative and positive and rather open a space for a ‘whole story’. It could be said, that as within the beyond reform, in context of the workshop they brought forth a space for different questions and different answers, that I had not seen. This also brings forth Freire (1970) and the premise, of learning with another, oppressed and oppressor, teacher and student. This reminded me of the notion, as with the spaces of enunciation and the approaches of GCE, that things are not fixed in black and white but can osmose between one another.

6 Findings and Analysis: “The world is complicated”³¹

This chapter gives voice to the participants. In some ways, each step of the workshop holds the possibility of standing alone, a thesis within itself. As such, the findings and analysis will touch upon different aspects of the workshops that more directly guide towards answering the main research questions associated with this thesis. There is the objective to incorporate the data in broader future research that builds on the methodology and incorporates not only more youth both nationally and internationally but educators as well.

The chapter is divided into three subchapters. The first, ‘Themes’ (6.1.), engages with the themes climate, money, people and power. This is followed by ‘Competencies and Critical approach’ (6.2) and analyses how the participants deliberated on the competencies that they

³¹ Quote from Unit Unit3AS6

identify as needed for SDG 4.7 and the connected aspect of their response to a critical, integrative approach of the same. The quotes are derived from the GoPro recordings unless stated otherwise.

6.1 Themes

The following subchapter (6.1) incorporates data mainly gleaned from the photo elicitation activity but is triangulated with other segments of the workshops. These engage with the themes climate, money, people and power were found within the data. They give the reader an insight into how the Norwegian youth in this study critically reflect on the concepts of sustainability and social justice within SDG 4.7, ESD and GCE, from a ‘whole story perspective’. For ease of reference, I have included the images that most strongly correlate with the dialogue. The numbers applied to the images within the workshops have been retained but for ease of readership they are followed with the figure number and title in brackets. As stated in chapter 5.2, the themes do overlap, with aspects of one echoed in another.

6.1.1 Climate: “ Okay, but it can also hurt them”³²

The theme of climate focused on climate change, the tensions of technological solutions and their sustainability in context of their environmental and social impact.

The image of a robotic hand holding the earth (Figure 18) set the stage for intriguing insights into the use of technology, innovation, as a primary mechanism towards sustainability. Technology was problematized to a degree not anticipated; though it was expressed as the fundamental approach to sustainability, this was not done without criticality. This criticality is interesting due to technological optimism holding prominence within the Norwegian curriculum (Eriksen & Svendsen, 2020). There were articulations of the concept of the shadow of modernity within their dialogues. Though there is the overriding premise that technology is a necessary aspect towards the ‘goal’, its’

Figure 18 ‘Robotic hand holding the earth’ (Dreamstime, 2021)



³² Unit1BS1

hegemonic ideal is questioned in context of its environmental impact, equity of access and on a deeper level overriding other solutions outside this normative framework.

One student's questions if the image of the robotic hand (Figure 18) reflects a 'positive' towards the 'goal' due its hegemonic placement within solutions. Unit2CS6 comment "... *but should we be so dependent on technology that without it, our world would fall apart*" brought about an in-depth discussion around its positivity. For the majority in Unit2C technology represents the linear ideal of progress and an entrance into the shine of modernity. It is deemed as means to increase economic growth and improve educational attainment which increases one's possibilities into the mainstream dynamics of progress and development. While actively moving between the images of solar panels (Figure 19) and the robotic hand holding the earth (Figure 18), Unit1B discussed their perceptions of positive solutions towards sustainability:

Figure 19 'Solar Panels' (PracticalAction, n.d.)



Unit1B

S1. *I'd say it's this one (holding figure 19, solar panels), let's say this one. Maybe it's a big one because it allows us to meet our needs now without compromising on future generations.*

S3. *Technology, you mean? (points to figure18, robotic hand) ... well technology, uh, aren't technologies taking over...*

S1 *but technology can also help you. Can solve the problem.*

The body language and tones of voice at this juncture reveal a stronger difference of opinion than displayed in the written text. Unit1BS1 displays a hegemonic stance on solutions towards climate change. Unit1BS3, though not clearly expressed here, throughout the workshops exhibits hope in more radical reform. It needs to be mentioned there were numerous points of the workshop in which these two students held contrary opinions. Unit1BS1 was noted to be very confident and forthright in his ideas with Unit1BS3 exhibiting frustration and at one point in the workshop, with a sarcastic tone, stating, "*you're the expert*". In the specific dialogue above it is observed that Unit1BS3 wished to add to her thoughts, but Unit1BS1 continued:

S1. *...but technology can also help. It gives us more development, gives us higher economy, better chance to get solar panels and, and develop as a community. Like everything that helps make us a great nation.*

The mainstream/neoliberal/liberal thought of development and progress connected to economic growth in connection with technology is expressed by other units as well. Though connections at other points of the workshop are made between environmental degradation and development using green solutions, technology is still seen as the caveat to solving climate change. The environmental impact seen as an inevitable step in the present, to secure a sustainable future. The soft reform is also expressed in the following quote:

Unit2A

S4. Uh, new technology thing. I also think that in order to get the knowledge and the resources for a completely sustainable world, you need to kind of like use the coal plants now to get to that step that you could kind abolish that. And the other, so we can completely rely on green energy in the future.

S1. And we just have to see that we don't take nature a way to build that.

It is difficult for many students to envision a different path and remain within the soft reform of same questions, same answers. However, it is also recognized that there are unequal power structures inherently connected to it in context of resources and accessibility. The supremacy of technology as to cure all 'our' ills is questioned within the next dialogue:

Unit2A

S1. Tech shouldn't take over the world

S3. Its effectiveness has created a global problem

S2. and there isn't equal access to this technology,

S4. but technology is improving the climate

S3. for some...

This reflects an engagement with Andreotti (2016) premise that solutions based on universal ideas often result in perpetuating the problem it is attempting to solve. Unit2AS3 recognizes that the benefits towards a local does not transcend to another local. The discussion above was also connected to the image of the solar panels (Figure 19) and though it results in what many would feel is sustainable energy, there is the recognition of the environmental degradation to other localities that do not reap the 'benefits' due to the economic inaccessibility. However, though across Units there is the recognition that there is hope in fixing the system through the concept of 'radical reform', through the inclusion of diverse knowledges/epistemologies, they cannot

envision the viability of such an approach. Here there is the movement towards the same questions, with a different answer, as within the radical reform, but remain on the cusp of still applying the same answer. Though, there is still a single linear form of progress dominant within all Units, there are connections made with it also being part of our problem. One student clearly conveys the concept of the shine and shadow of modernity:

Unit2C

S2. Modernization...but I think modernization is the solution but also part of the problem. Globalization and industrialization is what has been causing all these global problems. But also, I think it is the solution for solving the problems. That hopefully it is part to help the future.

The industrial revolution is cited as the seed of climate change but that the resulting ‘modernization’ also a key component to solve it. It again echoes Andreotti’s (2016) premise of the solutions found often result in the same problems being repeated within the sphere of global citizenship. However, the continuation of this point of dialogue does show the awareness of the praxis of the negative and positive of modern solutions towards sustainability in context of resources, inequitable environmental division of degradation and social impact. The dialogue above continues:

Unit2C

S4. ...and to get more climate friendly, we need sustainable solutions. And, um, like solar panels is kind of sustainable because the sun never goes out. But, uh, the materials used are not sustainable.

S6. And the materials that they are taken from poor countries because they have many of them. I think it is also the expensive materials and Western countries take advantage of their resources,

S4. and they also need a lot of water to make solar panels. I can't remember my source...

S6. which could be turned into drinking water.

There is a deep critical engagement with the students really looking beyond their immediate and expressing the non-relational care expressed by Jenkins (2015) of consideration for those that are outside our immediate sphere and the domino effect ones action can have on another. This also reflects the ideas of systems thinking and connecting of how some solutions, presented as ideal, hold tensions when examined from within a wider perspective. However, this recognition of complicity is only from within a larger scale of perspective and not more on national, local or individual level. The image of the solar panels (Figure 19) was a centre point for many Units in

context of sustainable solutions, but in context of the soft reform concept of shifting policy and practices towards addressing the problematic characteristics of inequity of access and ecological degradation.

In Unit1B environmental degradation is seen as an unavoidable result for ‘clean power’. During a dialogue on clean power, two students discuss the mines³³(Figure 20) in context of their impact on the environment:

Unit1B

S2 Um, um, if this (points to mines, figure 20) is like killing different animals

S1 but that's an effect of pollution, but we also need the materials to produce, for example, clean power.

Figure 20 ‘ Mines’ (Butler, n.d.)



The conversation continues in respect to solar panels (Figure 19) being a good example of clean energy with the inevitable need for mining. When guided by me to reflect on the circular frame of the local, national, global back to the local, the student moves away from the environmental impact on the local and rather sees this as an opportunity towards economic development as a point of sustainability:

Unit1B

R. Where do you think the materials for the solar panels come from? Are we mining in ‘our’ place? The countries that are buying the solar panels, is that where the mining is happening?

S1. Probably not and from underdeveloped countries. On uninhabited land where no one lives. They can just start by mining there.

R: So, it doesn't affect them? (them refers to the local population)

S1. Yeah, of course it affects them, but maybe a positive they can get jobs. Okay, but it can also hurt them (pauses in thought) ...this is hard’ (but not with exasperation but engagement)

Above there is the definitive sense of the neoliberal/liberal approaches of GCE. There is the linear, hegemonic, notion of progress and development dominated by the economic sphere. As stated in the previous chapter, within the neoliberal approach economic growth is seen as the

³³ I have chosen to delegate this image as mines due to the overriding engagement of the students visualizing it this way.

primary component of development with environmental factors being secondary (Oxley & Morris, 2013) and representing ‘weak’ sustainability. Within a weak sustainability model though economic, social and environmental dimensions are given equal space, it denotes the possibility of given space of one over the other, which is predominantly given to the economic dimension (Berglund & Gericke, 2022). Here it is important to note there is critical engagement with the last words spoken by this participant; “*this is hard*”. This brings in the emotive and Ojala (2013) premise that it is through the engagement with them, such as in the case, that can nourish an exploration of ones values and objectives. This student initially came from a very strong neoliberal standing, with no points of change needed. There was an evolution in his criticality through dialogue with his peers, with an opening of awareness to the shine and shadow of modernity and a shift towards an overlap of the soft and radical reform.

Though students found it difficult to look outside technology as the caveat towards solutions towards sustainability, tensions and all, the need to look towards ‘alternative’ solutions was approached in context of less resource intensive modes and towards ‘traditional approaches’. There is the connection of embracing different knowledges in context of Indigenous knowledge, termed by more than one groups as ‘native’:

Unit2a

S3. *If we lived like the natives there wouldn't be climate change*

S1/S4. *That's true. That's true.*

S3. *I couldn't live like that*

S1. *Like native still on modern in some way*

There is the recognition that there are other ways of being and knowing that could be adopted. The need to look for different questions and different answers outside the modern framework is present. However, this knowledge is relegated to the past and seen not viable in context of the needs of the present. One can envision the work of de Sousa Santos (2015) and his term ‘epistemicide’ and knowledge created outside the Western sphere being considered less valid. This negation of its presence in the present, is a point of dialogue I would have participated in had I been at hand. I would have questioned this relegation into the past and the inference of either or in context of knowledge rather than thinking with. This reflects a drawback mentioned

in the limitations, that with such a large number of participants, points of interest that could have delved into deeper are missed.

Another group interlinks the image of that of hands holding plants in earth (Figure 21) and the smokestack (Figure 22), and though not directly, infers to modernity and in connection the colonial matrix of power, being the core factor to today's global crisis:

Figure 21 'Hands holding plants in earth' (CreativeLives, 2021)



Figure 22 'Smokestack' (Lam, 2021)



Unit2A

S1. *Yeah. Um, but I can start with that one (refers to smokestack, figure 22). Like, I feel like in history, of course, because there weren't as many buildings and as many people, we had more plants, which was better for the environment, but then more people came more buildings, new cities, new streets. So, the plants kind of vanished because we needed space. And now we're trying to like, learn how to care for plants and how to plant new ones and, uh, yeah. To get this away (refers to smokestack, figure 22)*

S4. *Yeah. Yeah. And also, it's kind of funny because this is the reason #3 (hands holding plants, figure 21) for this #1 (smokestack, figure 22) to start because in the neolithic revolution, I think, uh, when we started to grow plants, uh, that kind of became this. Humankind as we know it, which led to, uh, us, um, uh, we got evolving and it evolved into more high-tech, uh, pollution. Yeah.*

S1. *This was the reason for that (refers back to smokestack, figure 22).*

S4. *Trying to go back because we're, we're went a step too far*

There is the acknowledgement of modernity being the result of our present ecological precarity. This is not the only reference of modernity having gone 'too far' with another group referring to the image of two individuals fishing (Figure 23), 'we need to maybe go back to what we did before and learn from it' (Unit1AS2). The discussion continues in context of mass production needed to sustain present needs and again, though critiqued, alternative sustainable methods relegated to

Figure 23 'Two individuals fishing' (Scoullos et al., 2013)



past rather than present knowledge, whether within or outside the prominent European knowledge system.

6.1.2 Money: "but that's just how it is" ³⁴

The image portraying mining (Figure 20) is prevalent within this theme and places a focus on development within an economical framework in connection with ecological degradation. There is the awareness of economical growth overriding that of ecological integrity from an inevitable perspective and reflecting both the neoliberal and liberal approach.

In discussions around the need to move towards a more sustainable future the students engage in conversations around complicity within the global environmental crisis. One group engages from a critical perspective of inevitable self-serving prioritization. They reference the brainstorm implemented at the beginning of the second workshop in which the concept of altruism was presented as an antonym of selfish:

Unit1A

S4. I really like this one point where she (referring to researcher) wrote altruism. But its human nature to prioritize yourself. So, I think if we end up in a global challenge where we don't have food, we're going to prioritize ourselves

S4. I m not going to prioritize myself

S2. No, me neither-

S4. I was thinking uh, politics and economics, because we normally pump so much oil all the time. Uh, the time, like all day long, but it's not good for the climate. And overfishing that's not good either. but we do it because we earn money. So again, the selfishness comes in in that we want to prioritize our country and money and all that.

Above is underlined with the core critic of the neoliberal approach and the prioritization of economic growth overriding social and environmental factors (Oxley & Morris, 2013). Though there is the essence of the need of collective well-being there is the awareness that 'we' remain within the confines of the neoliberal emphasis on the individual and promoting self preservation rather than a movement towards collective change. They can envision the articulation of Held's

³⁴ Unit2BS1

(2006) of action of care set on collective well-being through cooperation, and the lack thereof within present dynamics.

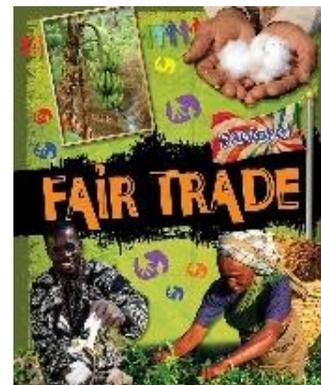
Other participants, however, justify oil extraction from the hegemonic ideal of where progress lies with an emphasis placed on the economic gains thereof. The ecological degradation as a result is deemed justified to combat the very problems it creates. This is emphasized within the Norwegian context by the following participant: *“It’s not just the money we earn from oil but also the fact that we’re so productive, we make so many discoveries and stuff ...”* (Unit1BS1). This speaker then emphasizes the *“need to make technologies”* (Unit1BS1) that will in turn increase productivity. When questioned by another student about the equity of balance between the ecological degradation with economic gains, two other students interject:

Unit1B

S2. *“but we also put #14 (mining, figure 20) and #4 (Fair trade, figure 24,) together”*

S1. *“because if, if you mine like fair trade is making sure that all the people involved get their fair share of the product. And I think then we need to make the connections on the countries where they mine out all the materials. If they maintain a good relationship with the population that already live there, then it can be quite sustainable for the development of the country. Maybe not the environment”.*

Figure 24 ‘Fair trade’ (Powell, 2014)



There is the defense that balance can come through the implementation of economic policies represented by the fair-trade image. Within the comment of ‘they’, I feel there is the othering taking place in which it ‘us’ that will ‘help’ the local population mine effectively, disregarding that the ‘other’ may have the capacity. There is no engagement with the inherent power structures. This sense of the balancing out of inequities through mainstream development based on economic growth, exists within other groups as well.

For many, the fair-trade image represents accessibility and inclusion into the shine of modernity’s framework. It is expressed as a means to even the playing field so to speak and that *“everyone should get the same amount of money regardless...”*(Unit3AS5) and *“it’s about people being equal”* (Unit3AS3). It allows *“other communities than just our own to develop...we make sure they get what they deserve...”*(Unit1BS1). The comments mirror the economic cosmopolitan, as cited by Oxley & Morris (2013), characterized by an overlap between the

neoliberal and liberal approaches. In context of the neoliberal perspective, under development is the result of a lack of wealth and prosperity that can be rectified through global capitalism. The liberal brings in Andreotti's concept of "responsibility for the other" (Andreotti, 2014b, p.47), and equality and rights being ensured by policies put in place by the dominant structures. It is difficult for most students to see inherent power structures embedded within this dynamic. There is, as within Andreotti's (2016) HEADS UP framework, a depoliticization and ahistoric approach. The "we" that ensures "they" have an entrance into the modern. The implementation, need of, fair-trade, is not connected to past injustices and the concept of the colonialism and modernity being 'two sides of the same coin' (Mignolo, 2007a) is not explored. Many feel that from the 'money' perspective imagining the world differently is difficult; *"it's nearer to an actual livable wage. And that's the goal. While the livable wage is also a scam set up to, uh, decrease, global poverty, but that's just how it is"* (Unit2BS1). This is also displayed and supported by the universal placement of "jobs", "money", "career" at the forefront in context of the goal of education in the first brainstorming activity in Workshop1. However, from some participants, there is the acknowledgement that the present emphasis on the economic impedes change. This comes through inferences that it is the existing power structures, politics and economics, the shine of modernity, that creates inequalities and suffering and *"...why in the end we might all suffer a lot"* (Unit1AS4). There is a definite thread among many groups that there is a need for deep structural change. One group, with the image of the refugee camp (Figure 26-see below) the image of the robotic hand holding the earth (Figure 18) and the image of two individual fishing (Figure 23) centred on the table engage with the concepts of weak and strong sustainability:

Unit2c

S6. "So sometimes people think of technology, economical growth, but only cost economical growth, but that modernization and mass production can cause also influence climate change. We can change how we produce commodities and services to make it more sustainable. But we are not doing that because we are putting profit margin above lives".

Within many groups the linear path of development highlighted by economic growth is questioned. There is the unpacking of present structures within the need for 'strong' sustainability in which the environment supersedes that of the economic (Berglund & Gericke, 2022). There is the recognition of a need for a radical and even a beyond reform change; that this

is where hope lies. It is clear that the space to engage with deeper reflection is desired, yet it is difficult to come up with the different questions and different answers needed for that change when one feels, as a previous extract states, *“that just the way it is”* (Unit2BS1).

6.1.3 People: “It can just depend on where you are from”³⁵

The theme of people incorporates the concepts of diversity, inclusiveness, interdependence, injustice, and human rights.

Multiculturalism and diversity are portrayed as a positive concept within the confines of the image of youth of different nationalities on a tree branch (Figure 25). The notion of respect for diversity

Figure 25 ‘Youth on Tree’ (Abraham, 2021)



and a movement towards inclusion is expressed as connected with that of both (in)equality and with an emphasis on human rights. Figure 25 is depicted as a positive representation of the ideal of unity, not only in context of the normative notion of the global represented in the different flags but also their personalized local due to the inclusion of the LGBTQ symbol: *“I’m a very LBGTQ friendly person. Cause I’m part of the community. I love it. It’s very like be yourself regardless of color or gender or whatever. It’s just yourself”* (Unit3BS1). The concepts of multiculturalism and difference is also recognized as a point of injustice and conflict: *“#6 (youth on tree, figure 25) connects to #7(refugee camp, figure 26) because war can be against specific races, people”*

Figure 26 ‘Refugee Camp’ (Brighton, n.d.)



(Unit3AS4). This image brings about dialogue on the present refugee crisis with poverty, war and lack of resources being cited as the main causes with many citing the need ‘to help’, and from an ahistoric perspective. For some groups, the refugee crisis is depoliticised and negates the larger scale perspective. For most groups there is no connection between the ‘Norths’ capitalistic

³⁵ Unit3AS6

interests, depletion of local resources, and environmental aspects as a result, both on a local and global scale, as catalysts for social instability. For many, it is implied that it is more the result of normative factors; Unit1BS6. *"I don't think the main reason for people become refugees is the lack of food. I think just more like war and injustices in the communities they live in."* As Andreotti (2014b) expands in the 'Soft GCE' approach, structural changes are seen as needed within the separated local rather than a structural change on an encompassing level. This is present in the following quote with the added notion of 'helping' when discussing in a feedback session why they chose the image of the refugee camp as one of their three negative images:

Unit1B

S2. *"...the one with the refugees and we thought that wasn't that good because you know, a lot of people come to, for example, Norway...they have to learn a new culture, the new languages...we should travel down to their countries and help them where the problem is and not like move around the problem, because that won't solve that much."*

As in the liberal approach, the issue is placed within the confines of the local absence of development. Though language skills are prominently cited as important skills to support multiculturalism and diversity in the context of competencies to promote the 'goal' from within their position of the CMP, when applied to the 'other' it becomes validation of separation. The capacity to learn is applied for themselves in context of promoting inclusion within a global framework, but then a lack thereof is applied as a reason for exclusion of the 'other'. The 'problem' of the 'other' is broached from within an ethnocentric ideal of superiority. The majority of this subunit held strong neoliberal beliefs and as in 'Soft GCE', there is the notion of 'responsibility for the other' (Andreotti, 2014c), but not on their front door so to speak, rather than deeper systemic analysis in a wider global complicity, responsibility "towards the other (or learn with the other)-accountability" (Andreotti, 2014c) as the following group does engage with. Connections are made between 'Western' complicity in the social, environmental, and economic inequalities from present and historical perspectives within other groups:

Unit2B

S1. *"#7 Refugee (refugee camp, figure 26) the most important one...refugee camps are always, uh, will always be the consequences of the luxury in which we live... is created by the wealth that comes from the oil in the middle east, and also the exploitation of the global south. And the consequence of that is, uh, is the endless wars and the sustainability of the region"*.

S6 *"but the refugees are also because of climate change"*.

S1 *"Yeah, but local climate change that we create., which we...the West will always exploit the global south"*.

UNIT2BS1 enunciation throughout the workshops was within the beyond reform but not from one of hope. Though the student conveys the need for new questions and different answers, they do not express, envision, the possibility of movement towards either. From this and previous quotes, Unit2BS1 is an outlier in their ability to succinctly express the inequalities and injustices resulting from the inherent power structures created by the shine of modernity, but not from a position of hope but cynicism. This participant's ability to cognitively express the inequalities and injustices resulting from the inherent power structures created by the shine of modernity supersedes a wide majority of the participants. It was also evident that they have not developed ways in which to deal with the negative emotions, hopelessness and cynicism, that come with this; hope is not being nourished. This returns us to the notion of Ojala's, in connection with Freire 's concept of love and hope, of hope being an "ontological necessity" (Ojala, 2017, p.78) as a foundation of courage to take action. This reflects the need for more critical perspectives to be addressed within curriculums where students can confront and envision differently, where possibilities of alternatives are presented and discussed (Ojala, 2017). If not, as in the context of this student, it can lead to inaction rather than action (Ojala, 2017).

Overall, participants across workshops reveal critical insights and movement towards mobilizing the shine and shadow of modernity through their reflections on the images. Unit2C connects the concept of globalism (from previous dialogue in the same group this can be inferred as globalization) to the wider global complicity of local injustices and the connecting thread to climate change; *"...and globalism and like immigration and stuff like that. It's caused by conflict and sometimes climate change. That causes refugees in the future"* (Unit2CS6). The whole story perspective on social inequalities is also addressed in the summary of one group during the whole units feedback when comparing youth on tree (Figure 25) and polar bear on ice (Figure 27); *"Inequalities, uh, also have a say in global warming and, uh, some people, uh, based on a geographic*

**Figure 27 'Polar bear on ice*
(FutureLearn, 2021)**



location or social class are more affected than others” (Unit2AS4). This is also expressed by Unit3A during a discussion on a global perspective of geographic inequities:

Unit3A

S7. *Some people are extremely rich.*

S6. *Sometimes there is such a difference between people.*

S7. *some are born with a silver spoon, and some born with a bag.*

S6. *It can just depend on where you are from*

It is interesting to note that this is the closest the data comes to inferring to possible inequalities due to difference or diversity within their own local. Though from the above, there is a recognition of inequities resulting from complicity from a global perspective, there is not an opening of that from their personal local. It does not appear the students are unaware of its presence but rather that it is easier to broach it from a wider sphere of empathy, sympathy etc. towards another local rather than to critically analyse the closer at hand reality.

6.1.4 Power: “Change the System”³⁶

The theme of power contained the notions of systemic power structures, politics, change, in/action, and voice. Though this theme does echo and connect with that of ‘people’, the students reflection on the images of COP26 and activism with the emphasis of participation of global connectedness and unified action within the concepts of SDG 4.7, validates its position as an individual theme. A wide majority express the need to “*Change the system*” (Unit2CS3).

The two images most directly connected to power were the COP26, the United Nations climate conference in 2021 (Figure 28) and young activists (Figure 29). In context of the COP26 image all groups debate over whether it merits a place as a ‘positive’ or ‘negative’. One group places it in the ‘positive’ in connection with the image of the polar bear (Figure 27); “*about kind of the effect of CO2*

Figure 28 ‘COP26’ (Usher, 2021)



³⁶ Unit2CS3

and global warming because the politicians make the laws and they influence each other-the positive and the negative” (Unit2CS6) (the positive being the COP26 image and the negative image, polar bears). This reflects cosmopolitan GCE as described by Oxley & Morris (2013) of support, and from within Ojala’s (2013) trust,

Figure 29 ‘ Activists’ (McCarthy, 2021)



for international institutions such as the United Nations. This sits squarely within the soft reform of enunciation in that through the implementation of policies and practices enough change can happen, there is hope. However, others are quite succinct in their pessimism:

Unit2BS1

S2. *So this COP*

S1. *So this is just bullshit.*

S4. *Is that Boris Johnson?*

S5. *So this negative (all agree)*

S2. *I would say its positive too though.*

S4. *Why?*

S2. *Because they are trying to capture something... (switches to Norwegian for a couple of words and not decipherable)*

S4. *We care just because you want us to care but we don't really care.*

S3. *He's just making a speech because he has to say something.*

S4. *Bunch of people but they don't really care. They'll get a ton of pay but they don't care.*

Contrary to cosmopolitan GCE, the participants have a distrust in the dominant international power structures. This conversation continues and engages with how any true structural change would entail an antithesis to the present capitalist structure in which present power structures are based on:

Unit2BS1

"We have to move away from, uh, global greed and change, uh, mode of production... we are not going to do that because the powerful are the people who actually create... It's the powerful who owns the means of production".

That to move towards the beyond reform would entail relinquishing the power in which the colonial matrix of power has been built upon. The need to move away from our current “unsustainable world” (Andreotti et al., 2015; UBC, 2018) is expressed yet, I would contend not ‘hoped’ for.

Though other groups also feel distrust and promises as hollow, they feel that at least gatherings such as COP26 display an acknowledgement of the need for action. Though predominately it is the established power institutions blamed for lack of concrete action, there is also the concession of mutual responsibility. It should be noted that no groups speak of any personal engagement with political or environmental activism. There is a sense among the students that a show of action from within institutional structures is based on optics rather than a commitment towards change. The majority broach this within the cosmopolitan moral perspective with the need of joint engagement from both institutional powers and public advocacy (Oxley & Morris, 2013). This reflects the overriding comparison of the COP26 image (Figure 28) with that of youth protesting (Figure 29). The image of young activists is seen by some as a means, mirroring the radical reform, for more voices to be heard and push public policies to incite change. That through the inclusion of more voices, though they do not elaborate on how far these voices extend, there is hope of ‘correcting’ the present system that impedes sustainability and social justice (Andreotti et al., 2015; UBC, 2018):

Unit2C

S6 “Well, this protest #13(activists, figure 29) is good because it shows that like people on top realize that the people of different countries care about climate change and other inequalities, which may cause the politicians to act...I guess”.

But there is also an essence of doubt in the above; an understanding that though there is an effort towards changing systemic structures there is the need for different questions and answers if change is to transpire. In other discussions around the same image youth are expressed as the drivers towards change but again there is the feeling that drive does not transcend to those in power; “*the older generation doesn’t care...it shows we care about the future* (Unit1AS2). This is elaborated on deeper by another group in context inequity in the ability to have a voice in change. One student expresses this from within the frame of social dissidence and climate activist Greta Thunberg and the lack of power given to the voice of youth, “*we have good actions*

(that) gets overshadowed by the matter of which, how it's done. It's just kids will be kids" (Unit2BS1). Unit2BS1 continues and connects this to the broader perspective of existing social and economic inequalities and refers to the image as "almost just white privilege and privilege of wealth" and as such will never equate to "anything... it's never any material change" (Unit 2BS1). Though, as mentioned, many sit within the radical reform, there is the whisper of reflection moving towards the beyond reform. That a tweaking of the systemic structures will not suffice. The doubt above echoes the Andreotti's GCE 'other' (Pashby et al., 2020) that though deeper change is needed, the absence of the shine of modernity is unfathomable.

There is also the expression of fear in such change with one group citing the image as bringing about discord and "...there can be a lot of fights and stuff. It(activism) can make people mad" (Unit3BS4). Though there is a distinct difference of level of articulation between some Units, it brings me back to Ojala's (2013) assertion that lack of complex articulation should not negate the possibility of deeper reflection. During the workshop of the latter group, I found myself questioning their ability for critical reflection until after I reviewed the data and needed to be reminded of Selby's notion of the affective being equal to the cognitive. The above student here is referencing the power of the shine of modernity, and the impossibility of it acquiescing. What appeared as more simplistic insights in the moment did represent contemplation expressed more through the emotive rather than in a cognitive manner.

6.2 Competencies and Critical approach. "Talk about it...why is it important"³⁷

This section will analyse how the participants deliberated on the competencies that they identify as needed for SDG 4.7 and the connected aspect of their response to a critical, integrative approach of the same. This is explored mainly through the data gleaned from discussions around the initial brainstorming activity on the poster boards in Workshop1, and the final separate, hard copy material developed at the end of Workshop2 (a mind mapping of skills/knowledge and subjects important towards the goal) and feedback of the workshops themselves.

A starting point to an insight into how participants deliberated on the competencies that they identify as needed for SDG 4.7, is their initial input in what they feel is the goal of

³⁷ Unit2CS1

education, the first circle in the brainstorming activity on the poster boards. The initial knee jerk response reflected a utilitarian, neoliberal perspective of education revolving around the human capital of “work”, “career”, “get a nice job”. We learn to earn as mentioned in the Theoretical Framework chapter. Many of the initial comments centred on the banking concept of education with curriculums based on a non-questioned, normative framework of functionality. This osmosed into social skills and learning the norms of how to participate in society and with one subunit noting on their posters “*life lessons*”. However, the discussions soon expanded with many groups connecting it to more social aspects of personal growth with comments such as the “*most important part is the social aspect of it and meeting other people, some students that are your age getting to just in general, communicating with them and learning from people* (Unit3BS2). This echoes the concept of learning from one another emphasized in praxis of action and reflection. The next quotes continue along this vein with an emphasis on building on ones existing knowledge and experiences; “*to inspire, don't force people into like learning shit, like find out their interests, find out their needs, right?*” (Unit3AS1) and “*get better at things we are interested in*” (Unit1AS1). Mirroring this is an accent placed on the absence of creativity within their educational environment with one student commenting “*... creativity is very important-but you don't learn that in school, you're mostly learned to study and not too much creativity* (Unit2CS6), again reflecting the banking concept (Freire, 1970). There is one group that continues along a more critical path and cites education as “*oppressive force and if you are socialized into (it)...then you just accept it further in life. Educational qualification is to create a consumer base in which we consume to the best of our ability*”(Unit2BS1). At another juncture the same participant engages with a critic of education as a means to uphold the status quo and hinders any true transformative change. This transpired in the discussion of the final mind mapping activity in Workshop2:

Unit2B

S1. *Uh, they're the opposite view of how we need to be taught to internalize the way in which things ought to be and the way things always have been to uphold the power structure, because that's what school is really about.*

This, and the previous quotes, allude to Freire’s concept of *conscientização* and ‘armed love’, or the lack thereof, within their educational system. There is a lack of questioning the system and

the dynamics that could incite change through collective engagement from within a non-hierarchical dynamic. As mentioned previously armed love is about having the courage to act and that we can change, find hope, within this action (Freire, 1970). That education is not about answering the questions but asking the right questions (Freire, 1970) or, as within the beyond reform thinking of ‘different questions and different answers’ (UBC, 2018), and emphasizing the importance of systems thinking versus reductionist thinking ((Sterling, 2007; Tilbury, 2007). This movement towards an emphasis on systems thinking can be seen in how the discussions on competencies evolved from the first to second workshop.

In both workshops, the brainstorming activity on academic subjects and the mirrored activity on a separate hard copy sheet at the end of Workshop2, mainstream competencies learned in school were present. However, in the second workshop, there was a deeper critical connection between competencies and an expansion thereof. This was also seen in the feedback they gave on the workshops that followed this activity. Though directed to add any missing skills and/or knowledge at the end of Workshop1, not one group did so. However, in the mind mapping activity, implemented in the second workshop, though mainstream subjects are still present, for example social and natural sciences, many expand, move beyond these, whether noted on their hard copy or through the verbal data. It was clear that through their discussions around the images, there was a greater awareness of the whole story perspective and the need to engage with the systemic structures that connect the concepts of GCE and ESD.

Communication and learning from one another was prominent, again reflecting the praxis of action and reflection through dialogue. This was revealed from within a very immediate level during the feedback discussion with the following comments are made:

Unit2B

S5. I don't think I've looked at the different topics like this before. The similarities etc.

S3. Yeah. Yeah, yeah, yeah. I've listened to you guys so I've learned from you.

The above mirrors the importance a social learning and a learner centred approach. A discussion in one group highlights the difference of opinions of how ‘different’ knowledges are placed within the concept of mainstream development and progress. I entered this dialogue and asked what kind of knowledge was important:

Unit1B

R: *“What about whose knowledge is important? There's a lot of different types of knowledge, right? We think in different ways, different people think in different ways in different cultures”*

S1. *“I think educated knowledge... most people who are well-educated knowledge is the most important”*

S3. *“I think it's a combination. I think it's a combination of knowledges. Like you need to like one, trying to figure out something out you need. All kinds of points of view, as opposed to like political scientifically educationally, like all of those ”.*

Unit1BS3 enters the frame of radical to beyond reform. The inclusion of ‘other’ knowledges was expressed. This echoes the critical approach of Shultz (2007) and the premise of the importance of mutual learning across social, cultural, and geographical divides. It is not about taking away and supplanting one knowledge with another but of *thinking with* rather than *thinking about* (Cortina et al., 2019). To walk away from this concept of a hierarchy of knowledges but rather seeing how they can work together. It needs to be noted that is very much from an epistemological perspective rather than ontological. There is the acknowledgement of the need to of move away from the dominance of mainstream ways of approaching issues but, also as expressed previously, a difficulty in imagining that in practice. Within their education system, I saw this movement more strongly expressed in the importance and expansion on ‘creativity’ in many groups.

As discussed above, creativity, or lack thereof, was cited as an important goal of education. This remains strongly expressed also regarding the competencies needed. It was interesting to note how many connected creativity with not only the sense of promoting a sense of individuality, an acceptance of difference and diversity, but also with problem solving. The following quote sums up what existed in many groups:

Unit2CS6

“We wrote creativity...because we think school doesn't teach that creativity and that is very important for problem solving in the future and individuality, what way? Well, people in general, we have to be creative and to be ourselves and to be able to express ourselves and how we think different”.

Many students felt, as noted above, that (individual) creativity is not prevalent in their curriculums. Though some align creativity more with self expression and the arts, the quote above moves this connection of creativity with problem solving. To myself, it represents the

acknowledgement of the need to think differently, be ‘taught’ differently. There is the essence they are taught very much within silos with a need for more systemic thinking addressed within the feedback:

Unit2AS1

“It was also a nice to write the things down to like, think about it and that there is important things. Of course, we already knew that, but there's also things where it's like, why”

The students express the desire, and clearly show the ability throughout the workshops, to address the connections between the social, economic, and environmental tensions that exist. It echoes the concept of transformative learning, and in turn the radical form of hope, that inspires students to explore structural systemic dynamics from a ‘whole story perspective’. They recognize the importance of such exploration:

Unit3B

S2. “It was interesting to talk about something we don’t talk about a lot unless in these specific scenarios. They’re very important things to talk about. But we push it to the side in a sense”

This pushing aside, I connect with the research that shows teachers are apprehensive about addressing systemic issues due to their own lack of knowledge and fear of the conflicting emotions it might raise in the students; eco-anxiety, guilt (complicity) etc.(Ojala, 2013; Pihkala, 2020). However, from my observations in the workshop, the students express the desire and ability to engage with them. There is a strong sense from nearly all the students that a more critical, action-oriented perspective is needed. That the present competencies taught and approach do not suffice.

Systemic thinking is also connected with the importance of history to understand the present. For the majority it is viewed as a means to avoid past mistakes.

Unit3B

S5. I kinda of think we need to learn about history to learn about what didn’t do right.

S2. Not only mistakes but also what people did do right.

S5. What worked out in the end. What worked in a way. And what happened if it didn’t work and what kind of consequences that had. Important to know and not forget...so we can improve by learning about the past.

As seen in the exploration of the theme of climate, students do link climate change within linear economic development model from a historical perspective, to even one group referencing the neolithic period, but that extension for the base of present social inequities due to the colonial matrix of power does present itself but not to the same extent.

From within the critical GCE approach, as described by Pashby & Sund (2020), social inequities require an understanding of the incongruent power from both the historical and present perspectives. The concept of power, from the confines of the present, is raised from within a larger perspective when one student is asked why they feel communication, language, is an important competency:

Unit1B

S3. *English and Foreign language is important. Yeah. Yeah.*

S2. *So, communication. Can you say why?*

S3. *To be able do our goals we need to be able to communicate both with the local and global to how we're going to do it.*

S1. *Yeah, but why do we need to be able to communicate.*

S3. *So, we don't do the wrong thing (stressed). If one country decides everything*

Though this returns us to the mainstream competency of languages, this emphasis of communication within this quote focuses on the need to address the existing uneven power dynamics from within a 'whole story perspective'. Another student narrows down the concept of power, as revealed in an above quote, within education in their discussion around competencies in the mind mapping activity with education being what "uphold (s) the power structure because that's what school is really about" (Unit2BS1).

There is a sense from nearly all the students that a more critical, action-oriented perspective is needed. The workshops enabled a level of social learning, as described by Ojala (2015), on the level of deconstruction, looking inwards, confrontation, listening to others, and reconstruction, creating new perspectives, insights. Many groups refer to critical and systemic thinking and of addressing the 'whole story perspective'. It was surprising the number of students that felt the core concepts of SDG 4.7 are not being sufficiently covered. Furthermore, while discussing the interconnectedness of ESD and GCE in the final discussion of Workshop2,

the majority of students clearly express core connections are not being addressed within their education. This is highlighted by when Unit2 was asked directly if “*Do you guys feel, you're learning about this in school?*” (R) the response was “*No*” with a sarcastic laugh of consensus from the class as whole. They do express the desire for more within their curriculums and pedagogical approach.

7 Conclusion

The aim of this thesis was to engage youth with a critical, integrated perspective of ESD and GCE, the core concepts behind SDG 4.7. The aim was also to hear and listen to their voices to gain insight into how they envision the pedagogical practices conducive to their vision and needs. Through a series of ‘whole story perspective’ participatory workshops, a critical and integrative approach was explored that mobilized the participants to think outside the ‘box’ and move between marginalized and mainstream perspectives of sustainability (ESD) and social justice (GCE). The process reflected an engagement with Decolonial Theory and the complexities and tensions found within present and historic perspectives of systemic structures resulting from colonialism; the colonial matrix of power (Mignolo & Walsh, 2018). Through a decolonial lens, the findings highlight that the majority of participants find it difficult to imagine a world without the systemic structures that impede deep transformative change, the shine and shadow of modernity (Andreotti et al., 2015 as cited in Mignolo, 2011). Though the findings show that many spoke of needing to look at the past to avoid repeated mistakes there wasn’t a strong connection that continued injustices are derived from the colonial matrix of power. However, there is a movement towards criticality.

Though, the majority acknowledge that there is hope in fixing the system through the concept of ‘radical reform’ and the inclusion of diverse knowledges/epistemologies (Andreotti et al., 2015), they cannot envision such an approach coming to fruition. The findings reveal there is the awareness that there are other ways of seeing and acting, but these are essentially beyond what the youth can envision and also beyond what the school system they are in nourish for them to see. It is difficult to give space to other ways of being and knowing due to the overriding hegemonic placement of the European Knowledge system which is highlighted within the Norwegian context. Yet, the participants do question the caveat of technological solutions

towards sustainability and recognize the inequitable environmental and social impacts resulting from resources needed. This extends to the strong recognition that it is ‘money’ that drives growth and development; the supremacy of ‘weak sustainability’, with the economic overriding both the environmental and social, overwhelming the acknowledged need for ‘strong sustainability’ in which with environmental integrity is the key (Berglund & Gericke, 2022). The participants do envision youth as drivers towards change but express that drive does not transcend to those in power. There is a strong expression of lack of trust, cynicism and hopelessness and feelings inaction from within dominant power structures. The youth within this study recognise the limitations to their own knowledge; that what they know is not sufficient to contribute to a sustainable and just world.-But the youth do call for change.

Many groups refer to critical thinking, problem solving, directly and indirectly; the present competencies and approach do not suffice. There is a strong sense from all the students that a more critical, action-oriented perspective is needed and wanted. Space must be given to ask questions even if they cannot be answered; to ask different questions and imagine different answers (Andreotti et al., 2015; UBC, 2018). The work of Andreotti (2016), HEADS UP, is an invaluable tool to do so and forms of which should be implemented across all levels of pedagogical practices, from primary to post secondary education for both educators and learners. To engage in critical dialogue with one another, for one another. It is clear that youth have the capacity to critically engage with the ‘whole story perspective’ but it needs to be nourished within pedagogical practices and curriculums in order for the foundation of courage to take action in hope (Bourn, 2021b; Ojala, 2017). A transgressive learning approach that opens the space to question the status quo and acknowledges the emotional intelligence needed to do so. As Ojala (2013) contests it is through inclusion of the emotive that one can explore values and objectives deeper. Within this, it is absolutely necessary to be aware of the frames of mind that structure our youth’s orientation and action in the world. If there is to be hope in addressing the sustainability challenges and the connected social injustices, stemming from the past into the present, we must open spaces to engage youth, and ourselves, with a critical perspective. To engage with the ‘whole story perspective’. That is where hope lays.

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9 Appendix

Appendix 1 Images



1.

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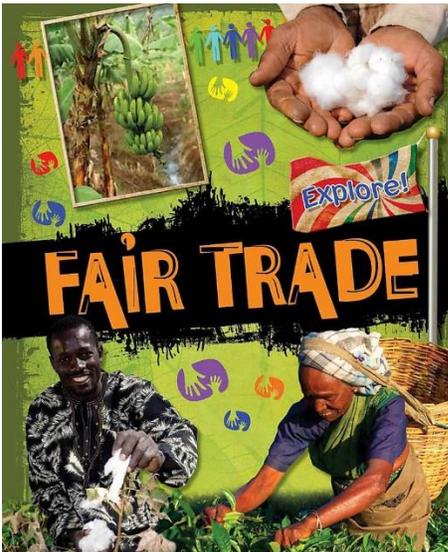
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Appendix 2 Teaching resource

Breaking down an issue and identifying key challenges

The following three activities were developed as ways of exploring issues after students have studied contextual information from a variety of sources. They complement what teachers may already be doing in their classrooms. The question sets can be used separately or together, in group work or independent work, and can be adapted to different age and skill levels.

Breaking down an issue 1

This activity was adapted from a class designed by a teacher who used it as a way of consolidating learning after year 9 students were given contextual information about a case study (urbanisation in Kibera, Nairobi). It could be adapted as a way of breaking down a local or global issue. The question topics are adapted from **HEADSUP** into language with which students at different levels of secondary are familiar. The addition of alternative questions helps students to further complexify their approach and to recognise that raising new questions is an important learning outcome.

"Some of the students really, really got into it, and what was really interesting actually is a lot of the less able kids really enjoyed it and really got on and actually came up with some incredibly good questions through their lateral thinking"

| | | |
|--------------|----------------------|--|
| BACKGROUND | Key Question | What have been the main causes of this situation? |
| | My Answer | |
| | Alternative Question | |
| PERSPECTIVES | Key Question | What are the different viewpoints of this situation? |
| | My Answer | |
| | Alternative Question | |
| FAIRNESS | Key Question | Who is the most impacted by this issue? |
| | My Answer | |
| | Alternative Question | |
| LEADERSHIP | Key Question | Who is in the best position to make a change for everyone? |
| | My Answer | |
| | Alternative Question | |
| RESPONSES | Key Question | What is one good option for improving this situation? |
| | My Answer | |
| | Alternative Question | |
| FUTURE | Key Question | What do you think this place will be like in the future? |
| | My Answer | |
| | Alternative Question | |



8

Teaching for sustainable development through ethical global issues pedagogy:
A resource for secondary teachers

Pashby, K. & Sund, L. (2019). *Teaching for sustainable development through ethical global issues pedagogy: A resource for secondary teachers*. Manchester Metropolitan University., p.8

A teacher in Finland adapted these questions to discuss climate change: "We don't need to solve the problem of climate change because even I cannot reply conclusively to these questions. But, we should start now to think what we know and what we don't know, and what is the perspective or world view that is in our mind"

Breaking down an issue 2

This question set is another way of engaging with **HEADSUP** and can be used to inform a variety of classroom activities. Students can use their discussion of the questions to inspire a mind-map of different factors influencing a particular issue as modelled below. Refer to the *International Youth White Paper on Global Citizenship* for further support exploring the difference between equality and equity

Key themes and example questions

| | |
|---|---|
| Power *who is impacted, involved, in power | 1. Who/ which group has the power to define the problem? 2. Who has the power to solve the problem? 3. Who is most impacted by this situation? |
| Perspectives *mainstream and marginalised | 4. Is there a mainstream perspective on this issue? 5. Who could provide an alternative perspective or viewpoint? |
| Context *interconnections and interdependencies | 6. What are some key factors contributing to this issue today? 7. What factors reach back into history? 8. What local issues and global issues does this particular issue link to? 9. In what ways am I connected to this issue? |
| Responses *improving the situation | 10. What responses are proposed to support a solution to the issue? 11. Who would benefit from each response, and in what ways? |
| Equity *Is there potential to centre the needs of those who are marginalised? | 12. Does each response help to promote more equality? 13. Does each response help to empower others (i.e. those least powerful) or to sustain the status quo (i.e. those who already have power)? |
| Future & Sustainability *looking forward | 14. Does each response minimise impacts in the future? 15. Does each response have long term potential? What possible issues may arise and require re-evaluation? |

www2.mmu.ac.uk/

Pashby, K. & Sund, L. (2019). *Teaching for sustainable development through ethical global issues pedagogy: A resource for secondary teachers*. Manchester Metropolitan University., p.9

Appendix 3 Introductory email to Schools

Dear _____

I am a Master's student in Global Development Studies from the Norwegian University of Life Sciences (NMBU) who has worked in education for many years. For my thesis, I am researching Norwegian youth perspectives on their education and how they reflect behind the concepts of Global Citizenship and Sustainable Development. I am contacting you to enquire how it would be possible to hold a workshop for a class of students in their final year of videregående to explore the above. Please find the lesson plan attached. The workshop is approximately 1.5 hours and would take place in English. Based on my thesis timeline, I would like to hold workshops between November and January. The involvement of your students would be indispensable towards my research and an interactive learning experience for those involved.

Thank you for your time and look forward to hearing from you,

Beth Annwyl Roberts

Appendix 4 Consent Letter

Are you interested in taking part in the research project "Norwegian Youth reflection on Education"?

This is an inquiry about participation in a research project where the main purpose is to on how Norwegian youth reflect on their education from a local, national and global scale. In this letter we will give you information about the purpose of the project and what your participation will involve.

Purpose of the project

- To analyze how Norwegian students of videregående, reflect upon their education and how these reflections align around the concepts of SDG 4.7.4-global citizenship education (GCE) and education for sustainable development (ESD)

- **Main Research Question:**

1. What are Norwegian youth reflections around the concepts of global citizenship education and education for sustainable development?

Sub-Questions:

2. Do Norwegian youth reflections on education align with the concepts of SDG 4.7.4, and if so, how?

3. How are these reflections embodied within differing learning arenas/ pedagogies?

- Master's Thesis in Global Development studies at NMBU (Norwegian University of Life Sciences.)
- Information gathered is only for the purpose of this thesis.

Who is responsible for the research project?

Norwegian University of Life Sciences is the institution responsible for the project.

Why are you being asked to participate?

- As this project is based on the reflections of videregående youth, your present status as a student within this stage of your education positions you as a key participant. It is important that students are allowed to actively reflect on their education.
- Three different videregående have been asked to participate-1 from Montessori, 1 from Steiner and 1 from mainstream backgrounds.
- This workshop has been approved by your school.

What does participation involve for you?

- If you choose to take part in this project, it will involve a 1.5 group interview/workshop during a regular class period.
- It will consist of brainstorming with your fellow classmates about education.
- It will consist of taking photographs of your school
- It will consist of discussing various images with your classmates in smaller groups.
- Go-pro cameras will be used to record the discussions.

Participation is voluntary

Participation in the project is voluntary. If you chose to participate, you can withdraw your consent at any time without giving a reason. All information about you will then be made anonymous. There will be no negative consequences for you if you chose not to participate or later decide to withdraw.

Your personal privacy – how we will store and use your personal data

We will only use your personal data for the purpose(s) specified in this information letter. We will process your personal data confidentially and in accordance with data protection legislation (the General Data Protection Regulation and Personal Data Act).

- Two individuals will have access to the data: Beth Annwyl Roberts (Master's Student) and her supervisor Esben Leifsen (supervisor).
- The data will not contain your name or information that can specifically identify you.
- Your school will not be identified by name.
- Collected data will be anonymised.
- Participants **will not be** identifiable in publications, but the pedagogical background will be referred to.

What will happen to your personal data at the end of the research project?

The project is scheduled to end June 31st, 2022.

- all personal identifiable data, such as audio and video recordings, will be destroyed at the end of the research project, while a transcript of the conversations will be archived and stored for 10 years for any follow-up studies and later research

Your rights

So long as you can be identified in the collected data, you have the right to:

- access the personal data that is being processed about you
- request that your personal data is deleted
- request that incorrect personal data about you is corrected/rectified
- receive a copy of your personal data (data portability), and send a complaint to the Data Protection Officer or The Norwegian Data Protection Authority regarding the processing of your personal data

What gives us the right to process your personal data?

We will process your personal data based on your consent.

- Based on an agreement with, at NMBU (Norwegian University of Life Sciences),

NSD – The Norwegian Centre for Research Data AS has assessed that the processing of personal data in this project is in accordance with data protection legislation.

Where can I find out more?

If you have questions about the project, or want to exercise your rights, contact:

NMBU (Norwegian University of Life Sciences) via (student) Beth Annwyl Roberts (beth.annwyl.roberts@nmbu.no) and/or project supervisor Esben Leifsen(esben.leifsen@nmbu.no)

Our Data Protection Officer: Hanne Pernille Gulbrandsen (personvernombud@nmbu.no)

NSD – The Norwegian Centre for Research Data AS, by email: (personverntjenester@nsd.no) or by telephone: +47 53 21 15 00.

Yours sincerely,

Project Leader

Student (if applicable)

(Researcher/supervisor)

I have received and understood information about the project and have been given the opportunity to ask questions. I give consent:

- to participate in a group interview/workshop
- to be audio and video recorded
- that the data produced may be used in further research, professional articles, lectures and presentations.

I give consent for my personal data to be processed until the end date of the project, approx. June 31st, 2022.

(Name, signature and date) Age: _____

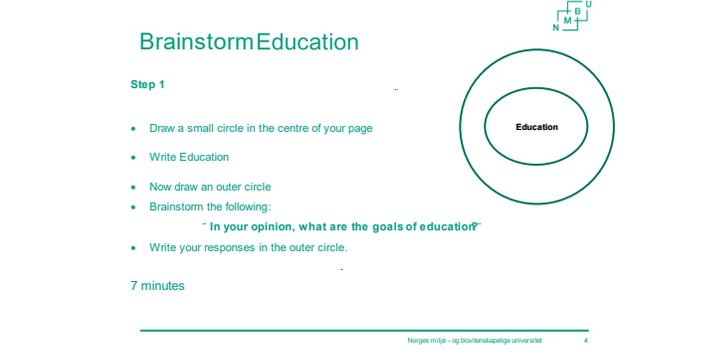
Appendix 5 GCE and ESD full definitions

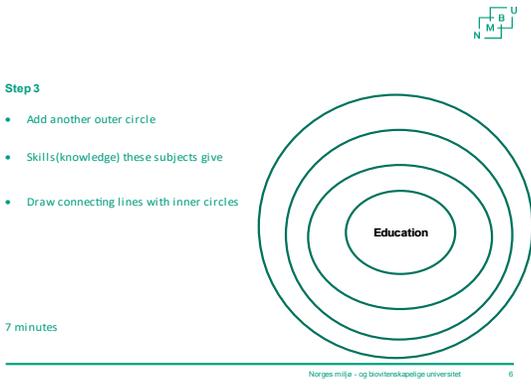
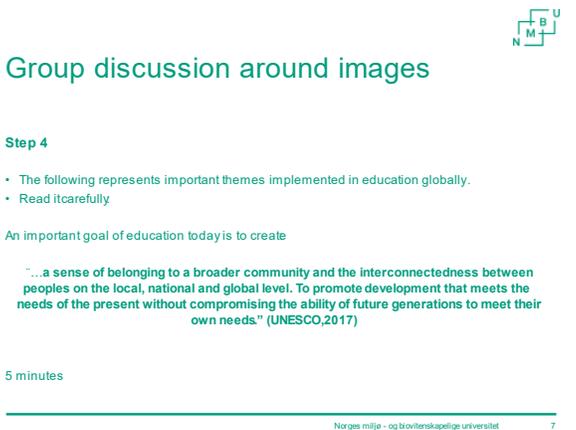
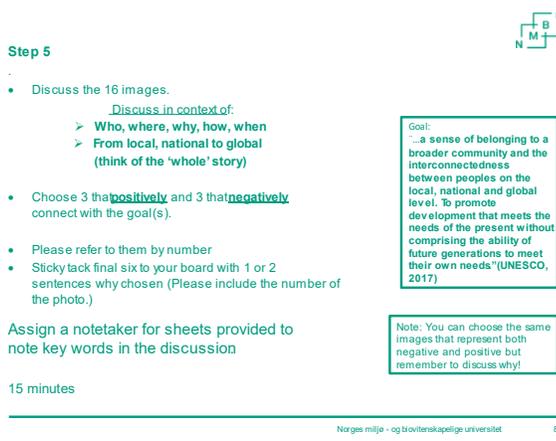
Global Citizenship: “ There are different interpretations of the notion of “global citizenship”. A common understanding is that it means a sense of belonging to a broader community, beyond national boundaries, that emphasizes our common humanity and draws on the interconnectedness between peoples as well as between the local and the global. Global citizenship is based on the universal values of human rights, democracy, non-discrimination and diversity. It is about civic actions that promote a better world and future”(UNESCO, 2016b, p.6)

(Education for) Sustainable Development: “Sustainable development can be understood as “development that meets the needs of the present without comprising the ability of future generations to meet their own needs.” (Brundtland Report, Our Common Future, Report of the World Commission on Environment and Development, 1987). The environment, economic issues and social issues are interlinked. This means that (economic and social) development need not be at the expense of the environment. In short, sustainable development is about balancing the demands of the environment, economy and society”(UNESCO, 2016b, p.6)

Appendix 6 Workshop Lesson Plans

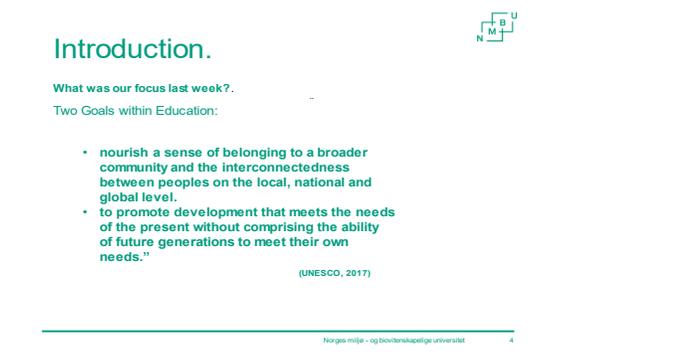
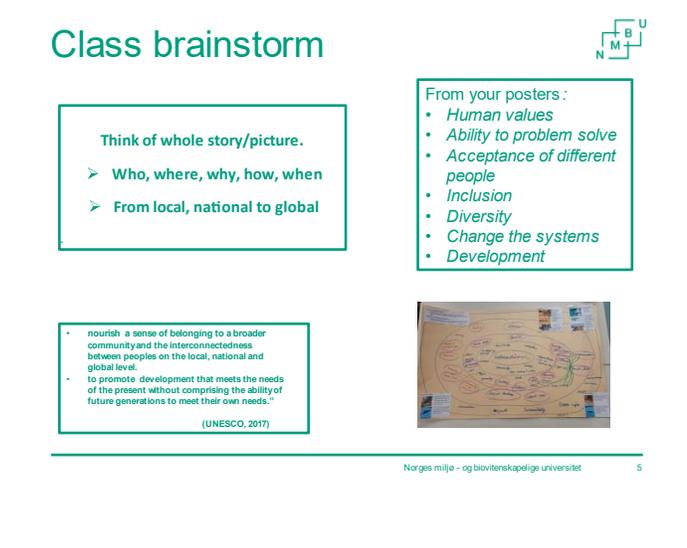
Workshop 1

| | Activity/T directions | Projector Slides |
|---|---|--|
| 1 | <ul style="list-style-type: none"> • Present myself. Background. Thesis Background • The importance of your voice • Inform of Go pros and recordings • Collect Consent Forms. • Stress-Workshop-want to hear from you; your insights. |  <p>Outline of workshop</p> <ul style="list-style-type: none"> • Consent forms • Importance of your voices! • Brainstorm around Education • Group discussion around Images • Quick Feedback around Images • Photo taking • Connecting Activity • Whole class Feedback • No Norwegian Please. • 41354866-add to your contact list. <p>Norges miljø- og biovitenskapelige universitet 3</p> |
| 2 | <ul style="list-style-type: none"> • S/S in groups of 4-5 (NUMBER GROUPS!) • Hand out poster boards and markers. • set up go pros. | |
| 3 | <p>Prompts: what does it represent to you? -what is its goal? Purpose?</p> <p>Move around room and observe. Try and learn names.</p> |  <p>Brainstorm Education</p> <p>Step 1</p> <ul style="list-style-type: none"> • Draw a small circle in the centre of your page • Write Education • Now draw an outer circle • Brainstorm the following: " In your opinion, what are the goals of education?" • Write your responses in the outer circle. <p>7 minutes</p> <p>Norges miljø- og biovitenskapelige universitet 4</p> |
| 4 | <p>Next circle.</p> |  <p>Step 2</p> <ul style="list-style-type: none"> • Add another outer circle • Brainstorm subjects • In general, don't have to be the subjects you are taking/have taken. <p>7 minutes</p> <p>Norges miljø- og biovitenskapelige universitet 5</p> |

| | | |
|--------------|--|---|
| <p>5</p> | <p>Prompts -what do you learn in these subjects? -what skills do they give you.</p> |  <p>Step 3</p> <ul style="list-style-type: none"> • Add another outer circle • Skills(knowledge) these subjects give • Draw connecting lines with inner circles <p>7 minutes</p> <p>Norges miljø- og biovitenskapelige universitet 6</p> |
| <p>6</p> | <p>Present GCE and ESD concept from UNESCO. Read out loud and then give students time to read individually. Ask for reactions-confirm captured</p> |  <p>Group discussion around images</p> <p>Step 4</p> <ul style="list-style-type: none"> • The following represents important themes implemented in education globally. • Read it carefully <p>An important goal of education today is to create</p> <p>"...a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. To promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs." (UNESCO,2017)</p> <p>5 minutes</p> <p>Norges miljø- og biovitenskapelige universitet 7</p> |
| <p>7</p> | <p>Photo Elicitation Exercise</p> <p>Present envelopes and contents (16 numbered photos and note taking sheet)</p> <p>Direct to choose notetaker</p> |  <p>Step 5</p> <ul style="list-style-type: none"> • Discuss the 16 images. <ul style="list-style-type: none"> ➢ Discuss in context of: <ul style="list-style-type: none"> ➢ Who, where, why, how, when ➢ From local, national to global (think of the 'whole' story) • Choose 3 that positively and 3 that negatively connect with the goal(s). • Please refer to them by number • Sticky tack final six to your board with 1 or 2 sentences why chosen (Please include the number of the photo.) <p>Assign a notetaker for sheets provided to note key words in the discussion</p> <p>15 minutes</p> <p>Norges miljø- og biovitenskapelige universitet 8</p> |
| <p>BREAK</p> | <p>BREAK</p> | <p>Incorporate break into photo taking activity</p> |

| | | |
|-----------|---|---|
| <p>9</p> | <ul style="list-style-type: none"> • Photo taking. | <p>Photo Taking</p>  <p>Step 6</p> <ul style="list-style-type: none"> • Go and explore your school and take 4 photos that connect with the defined goal 2 Negative and 2 positive. • You have 15 minutes. <ul style="list-style-type: none"> • Use the first 7 minutes for the 2 negative • The last 7 minutes (on the way back to classroom) for 2 positive • (Extra minute to have a smile) • These cannot include photos that identify any individual nor your school specifically. All photos that do so will be deleted. • They do not have to connect with your chosen images. • Send them to me in a message with a sentence why. <p>Tel. 41354866 (include your group #)</p> <p>15 minutes</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Goal: ...a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. To promote development that meets the needs of the present without comprising the ability of future generations to meet their own needs" (UNESCO, 2017)</p> </div> <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 9</p> |
| <p>10</p> | | <p>Step 7</p>  <ul style="list-style-type: none"> • Look back at your posts Draw one more circle and write the key concepts/ words you feel defines the goal, chosen images and photos taken • Circle the subjects and skills that promote defined goal, images chosen, photos taken, and key concepts • Add the skills/knowledge/topics that you feel aren't present outside the circle, more ways the goal could be achieved (this could be in context of formal or informal education) <ul style="list-style-type: none"> • Discuss in context of: <ul style="list-style-type: none"> > Who, where, why, how, when > From local, national to global <p>> 10 minutes</p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>Goal: ...a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. To promote development that meets the needs of the present without comprising the ability of future generations to meet their own needs." (UNESCO, 2017)</p> </div> <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 10</p> |
| <p>11</p> | <p>Present posters (more in-depth follow up in Workshop 2)</p> | <p>Step 9</p>  <ul style="list-style-type: none"> • Present and Discuss your Posters. <p>10 minutes</p> <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 11</p> |
| | <p>Thank you and give quick specific feedback and encouragement on presentations and what was said in groups. Inform students that I will return in 1 week.</p> | <p>Thank you for participating!</p>  <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 12</p> |

Workshop 2

| | Activity/T directions | Projector Slides |
|--|--|---|
| | |  <p>Outline</p> <ul style="list-style-type: none"> • Introduction • Review • Class Brainstorm • Group work • Discussion • Group work • Discussion <p>No Norwegian, please.</p> <p>Norges miljø - og biovitenskapelige universitet 3</p> |
| | <p>Who can remember our focus last time? Elicit responses. (Ensure overview for those absent from workshop1)</p> | |
| | |  <p>Introduction.</p> <p>What was our focus last week?</p> <p>Two Goals within Education:</p> <ul style="list-style-type: none"> • nourish a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. • to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” <p>(UNESCO, 2017)</p> <p>Norges miljø - og biovitenskapelige universitet 4</p> |
| | <p>Present their brainstorm from outer circle of poster; concept/words they connected to the goals and images.</p> <p>Brainstorm: Whole story in centre of white board- brainstorm as a class- T brainstorms with class. What do I mean by this? possible prompts: -power dynamic (equal voice of approach)- -whose approach is seen as best? -history-possibilities -local, national and global interests -variety of solutions? (who decides what the best solutions are?)</p> |  <p>Class brainstorm</p> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>Think of whole story/picture.</p> <ul style="list-style-type: none"> ➢ Who, where, why, how, when ➢ From local, national to global </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <p>From your posters :</p> <ul style="list-style-type: none"> • Human values • Ability to problem solve • Acceptance of different people • Inclusion • Diversity • Change the systems • Development </div> <div style="border: 1px solid black; padding: 5px; margin-bottom: 10px;"> <ul style="list-style-type: none"> • nourish a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. • to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” <p>(UNESCO, 2017)</p> </div>  <p>Norges miljø - og biovitenskapelige universitet 5</p> |

| | |
|--|---|
| <p>-how approach affects others. -mainstream vs marginalized -What have been the main causes of this situation? What are the different viewpoints of this situation? Who is the most impacted by this issue? Who is in the best position to make a change for everyone?</p> | |
| <p>Handout worksheet1 Guide in using brainstorm as prompts for discussion</p> | <p>Group work</p> <p>Look at the final 6 photos on the posters.</p> <p>Discuss if you see:</p> <ul style="list-style-type: none"> any connections between the positive and negative images. how a positive and negative could influence one another. <p>Use the worksheet to take notes on your group discussions on the above questions.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Think of whole story/picture</p> <ul style="list-style-type: none"> Who, where, why, how, when From local, national to global </div> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>Keep in mind: <u>mainstream vs marginalized perspectives</u></p> <ul style="list-style-type: none"> Power dynamics How history affects the present Whose approach is seen as best How approaches affect people differently Who is most impacted by an issue or solutions. Social, environmental and economic inequalities </div>  <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 6</p> |
| <p>Open discussion to include all images. feedback.</p> | <p>Group discussion</p>  <p style="text-align: right; font-size: small;">Norges miljø- og biovitenskapelige universitet 7</p> |

| | |
|--|--|
| <p>Group discussion</p> | <div style="text-align: right;">  </div> <h2 style="text-align: center;">Group Discussion</h2> <p>Use your posters as a reference to elaborate on:</p> <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>Think of whole story</p> <ul style="list-style-type: none"> > Who, where, why, how, when > From local, national to global </div> <ul style="list-style-type: none"> • which subjects and skills/knowledge you feel are most relevant to achieving the goal(s) on local, national to global level. • Are there new ones? • Keep in mind the connections you have discussed between the + and – images. • Create a mind map to visualize your main discussion points <div style="border: 1px solid black; padding: 5px; width: fit-content; margin-left: auto; margin-right: auto;"> <p>Goal:</p> <ul style="list-style-type: none"> • nourish a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. • to promote development that meets the needs of the present/without compromising the ability of future generations to meet their own needs.” </div> <p style="text-align: right; font-size: small;">Norges miljø - og biovitenskapelige universitet 8</p> |
| <p>Class discussion Feedback on previous task. Did you reflect differently/add from the last workshop?</p> | <div style="text-align: right;">  </div> <h2 style="text-align: center;">Class Discussion</h2> <p>Global Citizenship Education</p> <ul style="list-style-type: none"> • nourish a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level. <p>Education for Sustainable Development</p> <ul style="list-style-type: none"> • to promote development that meets the needs of the present without comprising the ability of future generations to meet their own needs.” <p style="text-align: right; font-size: x-small;">(UNESCO, 2017)</p> <p style="text-align: center;">Do you see connections between them? If so, how?</p> <hr style="width: 100%; border: 0.5px solid black;"/> <p style="font-size: x-small; display: flex; justify-content: space-between;"> Titel på presentasjonen Norges miljø - og biovitenskapelige universitet 9 </p> |
| | <div style="text-align: right;">  </div> <p style="text-align: center; margin-top: 100px;">Thank you for participating!</p> <hr style="width: 100%; border: 0.5px solid black;"/> <p style="font-size: x-small; text-align: center;">Norges miljø - og biovitenskapelige universitet 10</p> |

Appendix 7 Note taking sheet

Group Number ____ Number of Students ____

Note taking for Images

- Each image has been assigned a number.
- Write key words around the discussion of the image (if you need to use a Norwegian word that is fine, but please leave to a minimum 😊)
- For the final 6 chosen- write complete more developed thoughts.

| Photo Number | Notes |
|--------------|-------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |
| 7 | |
| 8 | |
| 9 | |

| | |
|-----------|--|
| | |
| 10 | |
| 11 | |
| 12 | |
| 13 | |
| 14 | |
| 15 | |
| 16 | |

Unit1B

Global Education

Develops a sense of belonging to a broader community and the interconnectedness between people from the local, national and global level.

Education for Sustainable Development

Encompasses the knowledge, skills, values and attitudes that empower the ability of future generations to meet their own needs.

(UNESCO 2017)

GROUP 3 (N)

Negative

CO2, technology

Refugees, Borders

We need it to make new tech.

Negative-School

Too much is not good for you. The way it is produced is not good.

Negative because people drink too much

Allows other communities to grow, provide us, and we can provide them

Provides us with energy and life

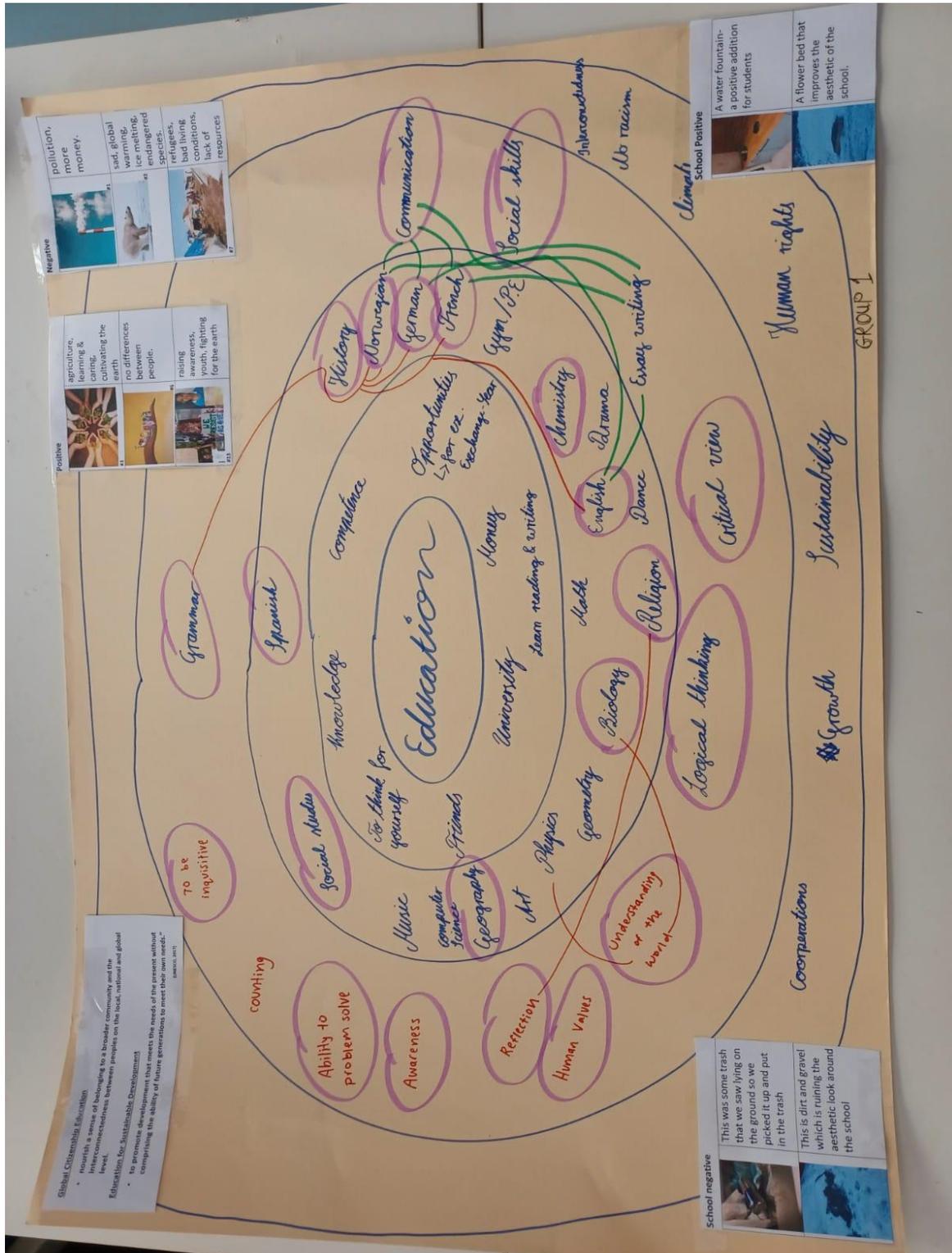
rice feeds millions of people but not efficient

Positive-School

the school nurse can help you

The doctors office. They help you when you have an issue

Unit2A



Unit2B

GAPZ

JK

Positive

| | |
|--|--|
| | Sustainable start for workers rights in developing countries |
| | reusing plastic bottles |
| | diversity, inclusion |

Positive school

| | |
|--|---------------------------|
| | diversity, inclusion |
| | nature and photosynthesis |

Negative

| | |
|--|--|
| | global warming without an end in sight |
| | poverty, global underdevelopment, exploitation, refugee crisis |
| | global leaders are not trying to fix climate change. |

Negative School

| | |
|--|------------------------|
| | driving on fossil fuel |
| | overconsumption |

education

Social studies, Religion / ethics, Math, English, History, Chemistry, foreign languages, internationalism, pressing force (Forum), Self a Job, Physics, Informatics, Literature, numbers, PE, biology, psychology, economics, discussing, diversity, inclusion, Human rights, common sense, acceptance of different people, Norwegian, basic skills, writing skills, Culture, History, Human rights, common sense, acceptance of different people

Global Citizenship Education

research a number of belonging to a broader community and the interconnectedness between peoples on the local, national and global level.

Education for Sustainable Development

to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs. (UNESCO, 2017)

Unit3B

education

to educate
to develop
Social

Math, Science, Languages, Biology, Physics, History, Literature, Drama, Music, Art, Creative, AI, Culture

Technology, Climate change, Future, equality, Pollution, Education, Social skills, Problem solving, Nonegen, Immigrants

how it's hard to find the future

Global Citizenship Education
 "to establish a sense of belonging to a broader community and the interconnectedness between peoples on the local, national and global level."
Education for Sustainable Development
 "to promote development that meets the needs of the present without compromising the ability of future generations to meet their own needs."
 (UNESCO, 2017)

Positive
 Fair trade is positive because we should pay equally for the same work in the same jobs.
 equality shows respect for different backgrounds, together in one hand.
 It shows a way of living with sustainable energy.

Negative
 Climate change, global warming
 refugees
 negative-looking technology, our selves to look after the planet. positive-who can represent solutions

Negative
 negative because it reminds me of photo number 7 of refugees
 positive because it shows development.

Appendix 9 Note taking sheet, connections between positive and negative.

School: _____ Your Group #: _____ Number of students _____ Date _____

Look at the final 6 photos on the posters.

- Do you see any **interconnectedness** between positives and negatives?
- How a positive and negative influence one another?

| Poster Group # _____ | |
|----------------------|----------|
| Photo #s | Comments |
| | |
| | |
| | |
| | |
| | |

Think of whole story.
 -who, where, why, how, when
 -from local, national to global

- Keep in mind: mainstream and marginalized perspectives.
- Power dynamics
 - How history affects the present
 - Whose approach is seen as best
 - How approaches affect people differently
 - Who is most impacted by an issue or solution
 - Social, environmental, and economic inequalities

Appendix 10 Final Mind Mapping worksheet

Look back at your posters. Reflect again on what skills/knowledge/ subjects you feel are most important towards the goal(s)? Keep in mind the interconnectedness you have discussed between the + and – images.

Goal(s)



Norges miljø- og biovitenskapelige universitet
Noregs miljø- og biovitenskapelige universitet
Norwegian University of Life Sciences

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Norway