

LEARNING BEYOND GROWTH?

Exploring Degrowth Pedagogy Within and Beyond Education for Sustainable Development



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AUTHOR'S DECLARATION

I, the undersigned, **Jan Henrik Albertz**, candidate for the MSc degree in the Erasmus Mundus Masters course in Environmental Sciences, Policy and Management (MESPOM) declare herewith that the present thesis is exclusively my own work, based on my research and only such external information as properly credited in notes and bibliography. I declare that no unidentified and illegitimate use was made of the work of others, and no part of the thesis infringes on any person's or institution's copyright.

I also declare that no part of the thesis has been submitted in this form to any other institution of higher education for an academic degree.

Vienna, 29th May 2025

Jan Henrik Albertz

ABSTRACT

In times of deepening planetary and societal polycrises, accompanied by global uncertainty and a growing sense of hopelessness, education may serve as one of few leverage points capable of enabling meaningful social and ecological transformation. If configured appropriately, it can help address the root causes of current crises, including the persistent belief that endless economic growth is compatible with human-nature flourishing. This paradoxical belief shapes our imaginary of what constitutes a good life, essentially blockading meaningful sustainability transformations. Degrowth radically challenges this narrative, offering a transformative vision of human-nature thriving. Yet how such transformation is supported pedagogically in real-world education remains largely underexplored.

This thesis investigates how degrowth-informed pedagogical approaches are reflected, challenged, or refined within nonformal Education for Sustainable Development (ESD). Using a qualitative case study of the Austrian initiative *WeltTellerFeld*, it draws on document analysis, field observations, and semi-structured interviews with educators. Guided by a theoretical framework grounded in critical pedagogy and transformative learning, the findings reveal strong alignment with degrowth-informed pedagogical principles such as problem-based learning, redefined educator-learner roles, and the politicisation of education.

Yet the initiative's educational practice also challenges and refines degrowth pedagogy, suggesting its expansion to include learning approaches that incorporate emotional engagement and utopian imagination. Ultimately, the thesis argues that small-scale, nonformal initiatives like *WeltTellerFeld* can function as 'cracks in the system', 'real utopias' in the here and now, where alternative ways of living and learning beyond growth are cultivated, offering hope and direction toward urgently needed socio-ecological change.

Keywords: degrowth, education for sustainable development, socio-ecological transformation, social-ecological transformation, social imaginary, critical pedagogy, transformative learning, nonformal education, emotions, utopia

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Hm, somehow these acknowledgements appear more difficult to write than a regular academic sentence from my Discussion chapter. Perhaps this has something to do with the recognition that this here relates more deeply to emotionality and relationality than is often allowed, not only in academia, but possibly throughout much of my lifetime? Not digging any deeper here...; this thesis has brought me to a point where writing in such manner is becoming increasingly easier, and I hope its impact will not be restricted to this single project.

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CHAPTER ONE: INTRODUCTION

“Without significant precautions, education can equip people merely to be more effective vandals of the earth” (Orr 2004, 5), “and of each other” (Orr 2017, x).

With this dystopian warning, David Orr directs our attention to the profound crises currently unfolding on a planetary scale. These include ecological catastrophes such as biodiversity loss and climate change, which are rapidly worsening right in front of our eyes, with humanity now exceeding six out of nine planetary boundaries (Richardson et al. 2023), and an “imminent breach of a seventh” (Potsdam Institute for Climate Impact Research 2024). Alongside these ecological emergencies, escalating social injustices across and beyond geographic scale (Hickel 2020; Fraser 2010) further underlines the need for urgent transformative change. Crucially, Orr underlines education’s paradoxical role within these crises: if configured inappropriately, education does not alleviate but rather perpetuates and intensifies ongoing socio-ecological “vandalisations”.

Yet precisely because education and its underlying systems are humanly construed (Freire 2014), just as our social, economic, and political institutions (Schmelzer, Vetter, and Vansintjan 2022), they can also be examined, reimagined, and remodelled toward harmonised human and nature thriving. Therefore, education holds not only destructive potential, as Orr warns, but equally the promise of emancipating us from the very crises it may have once contributed to. This raises a fundamental question: what kind of education is needed to respond to these interconnected ‘polycrises’ meaningfully?

This question has significantly occupied the field of Education for Sustainable Development (ESD), where scholars fiercely debate the contours of an appropriate response, or indeed, if such a response is even possible. At its core, ESD explicitly aims to equip learners with the

knowledge, skills, values, and attitudes necessary for building a sustainable future (UNESCO 2014). Yet ESD is fundamentally challenged in its transformative potential when it uncritically harmonises sustainable development with the pursuit of endless economic growth on a planet with finite resources (Wals, Weakland, and Corcoran 2017; Berryman and Sauvé 2016; Selby and Kagawa 2010). In this context, the concept of degrowth has recently gained increasing prominence.

Degrowth fundamentally challenges the possibility, and desirability, of sustaining economic growth indefinitely while maintaining environmental and social harmony (Hickel and Kallis 2020; Hickel 2019; Parrique et al. 2019). Instead, degrowth argues for a democratically organised reduction in material throughput, designed explicitly to minimise ecological harm while simultaneously promoting human and non-human well-being (Parrique 2019; 2025). Crucially, degrowth maintains that overcoming the contemporary ecological and social crises requires more than economic restructuring; it necessitates fundamental transformation within our collective imaginaries. These so-called ‘social imaginaries’ (Latouche 2009; 2014b) represent our shared understandings of what constitutes a desirable, meaningful, and flourishing life. Currently, however, these imaginaries remain largely constrained by the ‘growth paradigm’ (Schmelzer, Vetter, and Vansintjan 2022), a hegemonic global ideology that equates continuous economic growth with economic and political stability, social well-being, and societal progress (Kallis et al. 2018).

These ‘growth imperatives’ (Binswanger 2013) instil values such as competitive individualism, consumerism, and the drive for constant improvement, which become ingrained in our social imaginaries (Feola 2019; Muraca 2015a; Petridis, Muraca, and Kallis 2015) and culminate what (Wissen and Brand 2021) describe as ‘imperial modes of living’. It is precisely this ‘growth imaginary’ (Schmelzer, Vetter, and Vansintjan 2022) and the associated values that continue to blockade genuine socio-ecological transformation (Muraca 2015b; Asara et al. 2015;

Schmelzer, Vetter, and Vansintjan 2022). Education, then, emerges, as a critical leverage point for facilitating shifts away from the entrenched growth-oriented imaginaries (Latouche 2014; Getzin 2019), toward alternatives grounded in care, relationality, conviviality, autonomy, regeneration, and resonance (Schmelzer, Vetter, and Vansintjan 2022; Deriu 2014; D’Alisa, Deriu, and Demaria 2014; D’Alisa, Demaria, and Kallis 2014). It is at this intersection, where ESD meets degrowth, that this thesis is positioned, exploring how education might meaningfully contribute to socio-ecological change.

1.1. In Search of Practised Degrowth Education

If education is recognised as a fundamental leverage point for liberating our imaginaries from the grip of growth imperatives and thereby supporting socio-ecological change, what kind of education could meaningfully enable such emancipation? While research at the intersection of degrowth and education is now receiving much-needed scholarly attention (Tannock 2025; Baldacchino and Saeverot 2024), following a notable absence in foundational degrowth literature (D’Alisa, Demaria, and Kallis 2014; Barlow et al. 2022), the exact forms and practises through which degrowth-informed education materialises remain both theoretically and practically underexplored. This oversight is particularly puzzling since degrowth, as a vision and project for socio-ecological transformation (Asara et al. 2015), risks substantial restriction if education, left untouched by its principles, continues to perpetuate growth imaginaries and the vandalisations that Orr urgently warns of.

Recent theoretical advancements in degrowth education, upon which this thesis builds, have begun conceptualising key pedagogical principles grounded in degrowth. Informed especially by Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019), these principles include approaches such as problem-based learning, re-defining educator-learner relationships, and the politicisation of education, each forming crucial elements of the

theoretical framework of this thesis (see [Chapter 3](#)). However, the same studies simultaneously highlight an urgent need for empirical work into how such pedagogical approaches manifest in concrete, real-world educational settings.

This gap is particularly apparent in nonformal educational contexts, settings functioning outside formal institutions such as schools or universities, typically run by nonprofit organisations (Overwien 2009). You may reasonably wonder here why nonformal rather than formal education, given the typically broader and more influential reach of formal education. This is because formal educational institutions are often criticised for instilling values closely aligned with the growth paradigm, such as competitiveness, performativity, and individualism (Sterling and Huckle 2014; Stoddard et al. 2021; Getzin 2019), leaving little room for alternative pedagogical practises (Rostock & Weller, 2016). In contrast, nonformal educational contexts often possess greater freedom and flexibility to experiment with experiential, reflective, and transformative pedagogies (Singer-Brodowski 2018; Kaufmann, Sanders, and Wortmann 2019), eventually including those informed by degrowth.

Despite this potential, it remains significantly under-researched which kind of nonformal educational initiatives engage in degrowth-informed educational approaches, and if they do, how they practise them in real-life learning contexts. Collectively, these points underscore a twofold research gap: First, on a broader conceptual level, there remains the open question of what kind of education is capable of liberating social imaginaries from the grip of the growth paradigm in order to support genuine socio-ecological transformation. Second, and at a more practical level, it remains unclear how such degrowth-informed pedagogical approaches manifest in actual nonformal learning contexts.

1.2. From Sowing Questions toward Cultivating Insights

This thesis seeks to respond to both of these gaps. The broader conceptual aim is therefore to contribute to the understanding of what kind of education can meaningfully support the emancipation of social imaginaries and enable socio-ecological transformation. Translating this aim into a more concrete empirical investigation, the thesis examines how degrowth-informed pedagogical approaches are reflected, challenged, or refined in the educational practices of nonformal ESD initiatives. To this end, the research employs an in-depth qualitative case study of the nonformal ESD initiative ‘WeltTellerFeld’ (World, Plate, Field) in Austria, which organises experiential, nature-based workshops addressing sustainability challenges ranging from food system impact to climate change. Through analysing pedagogical documents, field observations, and semi-structured interviews with educators, this thesis investigates whether and how degrowth-informed pedagogical principles such as critical reflection phases, educational politicisation, and redefining educator-learner relationships are put into practice. The central, empirical research question guiding this study is therefore:

In which aspects and how do WeltTellerFeld’s Education for Sustainable Development (ESD) practices reflect, challenge, or refine degrowth-informed pedagogical approaches?

By addressing these two interrelated questions, the thesis aims to make both a theoretical and empirical contribution. On a theoretical level, it contributes to the conceptual understanding of what kind of education may support the emancipation of social imaginaries and enable socio-ecological transformation. More specifically, it assesses the practical relevance and limitations of combining existing degrowth-informed pedagogical frameworks, drawing on critical pedagogy (Freire 2014) and transformative learning (Mezirow 2009; 2018). Empirically, it investigates how educational practices on the ground reflect, challenge, or refine these

theoretical frameworks in potentially unexpected ways. In doing so, the thesis not only grounds the theorisation of degrowth-informed pedagogy in practice but also offers insights into how education can serve as a lever for transforming social imaginaries and advancing socio-ecological change.

Before outlining the roadmap of this thesis, a few personal sentences should be dedicated to the research motivation behind this thesis. While my interest in degrowth and the broader question of how socio-ecological transformation might unfold predated this project, it was through engagement with the case study of WeltTellerFeld that my interest in education and pedagogy was ignited. During a short internship with the initiative, I supported both agricultural tasks and educational workshops with children. These experiences led me to wonder whether and how such practises might resonate with degrowth. Rather than presupposing the answer, this question became the starting point for this thesis. I am grateful to have been introduced to the world of education and pedagogy which, cheesy as it may sound, does indeed sow the seeds for any meaningful harvest of genuine and sustainable social and ecological transformation. I hope to have sparked some form of curiosity in you about what kind and form of education may support such change, and if you choose to follow along this occasionally winding journey, I trust it will prove as worthwhile for you as it has been for me.

1.3. A Roadmap for This Journey of a Thesis

This thesis is structured into seven chapters. Following this introduction, [Chapter 2](#) reviews the relevant literature, beginning with the convoluted task of unpacking the field of degrowth, an idea that has often been misunderstood, both inadvertently and deliberately, and tracing its evolution toward its intersection with Education for Sustainable Development (ESD). Doing so leads to the identification of knowledge gaps, particularly regarding the pedagogical dimensions of degrowth and the lack of empirical research on how these might be realised in the practises

of nonformal ESD initiatives. [Chapter 3](#) introduces the theoretical framework guiding the analysis of this thesis. It merges in total five pedagogical approaches derived from previous work by Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019), situating and contrasting them within transformative learning theory and critical pedagogy. This results in the degrowth pedagogical framework that consists of five degrowth-informed pedagogical approaches including problem-based learning, phases of intense reflection, educator-learner redefinition, reflection on the role of educational institutions, and the politicisation of education. [Chapter 4](#) outlines the research design and methodology. It begins by situating the study within a constructivist-transformative epistemological position and presents the qualitative single-case study of the nonformal educational initiative WeltTellerFeld. The chapter describes the multi-method data collection process, including document analysis, field observations, semi-structured interviews, and the qualitative content analysis used to interpret the data. It concludes with ethical reflections and a critical account of my positionality and its influence on the research process. [Chapter 5](#) presents the empirical results, structured according to the five pedagogical categories, and complemented by an inductively derived category. The latter captures the emerging importance of emotional, motivational, and humour-based learning as a distinct pedagogical dimension. The findings suggest that WeltTellerFeld's educational practises strongly resonate with the degrowth-informed pedagogical approaches, especially problem-based learning, and phases of intense reflection, while also revealing practical constraints, tensions, and enhancements. [Chapter 6](#) offers a critical discussion of the results by situating them within the theoretical framework and scholarly debates on degrowth education, critical pedagogy, and transformative learning. It highlights how WeltTellerFeld not only reflects and refines the degrowth pedagogical framework but also expands it through the inclusion of emotional and utopian learning. The discussion further reflects on methodological limitations encountered during the research

process and proposes directions for future research that emerged from these reflections. These include the need to integrate multiple perspectives, such as those of learners and educators, and to expand research across more geographically and culturally diverse contexts. Finally, [Chapter 7](#) concludes the thesis by summarising its main findings, discussing their theoretical and practical implications, and reflecting on the broader role of degrowth-informed education in times of socio-ecological crisis, global incertitude, and directionlessness. It argues that even small-scale, nonformal educational initiatives like WeltTellerFeld can act as ‘cracks in the system’ or ‘real utopias’, offering alternative imaginaries and pedagogical spaces that support learners in envisioning and co-creating socially just and ecologically feasible futures.

CHAPTER TWO: LITERATURE REVIEW

The following literature review begins by introducing degrowth, briefly tracing its historical foundation and what can actually be understood by it. It then merges into degrowths' two most fundamental criticisms towards sustainable development (SD), which simultaneously build the bridge between degrowth and education for sustainable development (ESD). Presenting for this thesis fundamental concepts emerging from the degrowth discourse such as socio-ecological transformation, growth imperatives, and social imaginaries, the review then uses these to highlight the importance of education including ESD from a degrowth perspective. Followingly, the scant, but emerging literature on degrowth approaches towards education and ESD will be presented, revealing potential pedagogies of degrowth. The review concludes by identifying gaps in empirical research, particularly concerning degrowth-informed ESD in non-formal learning environments. This gap sets the stage for investigating how such educational initiatives can contribute to the liberation of social imaginaries and thereby facilitate socio-ecological transformation. To enable such investigation, the chapter thereafter introduces the theoretical foundation of the thesis, drawing on degrowth-informed educational approaches grounded in critical pedagogy and transformative learning.

2.1. What the hell is Degrowth?

What the hell is degrowth? Is it a concept (Petridis, Muraca, and Kallis 2015), an academic paradigm (Weiss and Cattaneo 2017), a social movement (Treu, Schmelzer, and Burkhart 2020), an activist slogan (Demaria et al. 2013), none or all of the above? There are widely varying understandings of degrowth, with probably the one agreement being that there is no agreement on what degrowth actually is (Parrique 2025). While some argue that such definitional defying leaves degrowth open for interpretation conducive to the widening of the

field (Parrique 2025), others emphasize its strategic use as a ‘missile word’ designed to resist co-optation (Hickel 2021).

Indeed, degrowth is anything but a homogenous and uncontroversial concept, with its mere mention inevitably stepping on someone’s toes and often igniting fierce debates. Rather than engaging in such disputes held at length and depth elsewhere (Jackson, Hickel, and Kallis 2024; Savin and van den Bergh 2024), with rightly questioned usefulness (Parrique 2024a), degrowths’ historical roots trace back to the French term ‘décroissance,’ coined by André Gorz (1980), who drew inspiration from the infamous *Limits to Growth* report by Meadows, Randers, and Meadows (2004).

Degrowth is strongly rooted and emerges from the field of ecological economics with Herman Daly’s (1992) work on steady-state economics, and the differentiation of strong versus weak sustainability (1995), representing its commencement points. Strong and weak sustainability relate directly to the triple bottom line framework, which aims to balance the economy, the environment, and society (Elkington 2004). Weak sustainability views these three dimensions, also often called the three P’s, people, planet, and profit (Elkington 2004), as being of equal importance (Muraca and Döring 2017). It assumes that environmental degradation can be compensated for by economic growth and social improvements, meaning that losses in natural capital (ecosystems, species, resource depletion) can be offset by gains in human-made or social capital (Daly 1992). Strong sustainability, in contrast, argues that society (people) and the economy (profit) are fundamentally dependent on- and embedded within the environment (planet), and can accordingly not function independently of it (Ott, Muraca, and Baatz 2011). Accordingly, the loss of natural capital cannot be simply replaced by economic- or human gains (Muraca and Döring 2017) but rather must remain at a rate that respects ecological integrity such as planetary boundaries (Rockström et al. 2009), that preconditions any sustainable economic and societal well-being.

Therefore, degrowth outright rejects weak sustainability and instead aligns with strong sustainability, recognizing that the economy and society are fundamentally embedded within, and dependent on, the integrity of ecological systems. Nicholas Georgescu-Roegen (1975), who is considered a ‘founding father’ of degrowth (Clémentin and Cheynet, 2003, 11, in Martínez-Alier et al. 2010, 1742), expanded Daly’s ideas by emphasizing that economic growth is fundamentally constrained by the laws of thermodynamics. From this initial ecological critique of economic growth, degrowth has evolved into a multidisciplinary concept gaining recognition through its incorporation into IPCC reports (Parrique 2022a; Parrique 2022b), or even by conferences within the European Parliament (Kallis, Mastini, and Zografos 2024). The question remains, what can now actually be understood under degrowth? While acknowledging that it may be “foolish” to settle the debate on defining ever-evolving degrowth, (Parrique 2025) synthesizes over 100 definitions to describe degrowth as:

“A downscaling of production and consumption to reduce ecological footprints, planned democratically in a way that is equitable while securing well-being”
(Parrique 2025, 1).

Entailed in this definition are five foundational elements that comprehensively delineate degrowth: (1) a downscaling of production and consumption (2) to reduce ecological footprints, (3) planned democratically (4) in a way that is equitable (5) while securing wellbeing (Parrique 2025, 3–4). The first two foundational elements can be summed by centralising on the biophysical necessity of reducing societal- and environmental non-beneficial economic activity so to align with ecological limits such as the planetary boundaries (Richardson et al. 2023). At present, ecologically destructive economic activity and ‘imperial mode of living’ (Wissen and Brand 2021) of the wealthiest people and economies situated predominantly in Global North countries (Hickel 2020b; Vogel and Hickel 2023), exceed six out of nine planetary boundaries

(Richardson et al. 2023), with an “imminent breach of a seventh”(Potsdam Institute for Climate Impact Research 2024).

To re-enter the ‘safe operating space’ (Rockström et al. 2009), ‘carrying capacity’ (Daly 1992), or ‘ecological ceiling’ (Raworth 2017) of the earth and its ecosystems, degrowth rejects the widely pursued objective of absolutely decoupling continued economic growth from ecological pressures such as biodiversity loss and climate change (Hickel and Kallis 2020; Hickel 2019; Parrique et al. 2019). This rejection is based on extensive empirical evidence indicating that absolute decoupling, or ‘greening growth’, remains unachievable at the scale and speed required to mitigate ecological crises (Wiedenhofer et al. 2020; Haberl et al. 2020). Degrowth argues thus that to achieve socio-ecological harmonization and the timely achievement of biodiversity- and climate-protection goals (Otero et al. 2020; Vogel and Hickel 2023), it necessitates a deliberate contraction of ecologically and socially harmful economic activity. Herewith, degrowth sets itself apart from the broader post-growth umbrella with which it is often conflated (Savin and van den Bergh 2024), if post-growth remains agnostic about the role of economic growth in achieving human- and non-human well-being (Kallis et al. 2025).

The second clause of the definition, in contrast, extends the critique of the preceding systems by offering a socio-political vision for an “alternative sustainable future” (Schneider, Kallis, and Martinez-Alier 2010, 512). Degrowth is thus not solely a critique of the systematic exploitation of people and the planet from acclaimed misconfigured socio-economic systems or simply capitalist profit (Kallis 2011; Hanaček et al. 2020). Rather, it is also a conception of what could replace these systems to achieve holistic (non-)human and planetary flourishing (Schmelzer, Vetter, and Vansintjan 2022). This imagination of alternative realities, or ‘utopias’ (Kallis 2018; Kallis and March 2015), is substantiated with concrete policy proposals (Fitzpatrick, Parrique, and Cosme 2022), where a multitude of interdisciplinary research

elucidate degrowths' core elements of democracy (Asara, Profumi, and Kallis 2013), justice (Muraca 2012), and well-being (Büchs and Koch 2019; Hickel 2019).

What the definition leaves however implicit is that degrowth necessitates deep-reaching transformations. That such transitions extend beyond merely economic adaptations to fundamental reorganization and rethinking of modern societies has been well-introduced by Serge Latouche, another “founding father” of degrowth (Gräbner-Radkowsch and Strunk 2023). Latouche (2009) substantiated degrowth from the initial sole ecological critique with a socio-cultural one moving critical discussions surrounding development, and particularly, sustainable development to the core of degrowth.

2.2. Building Bridges: Sustainable Development as a Shared Critique of Degrowth and Education for Sustainable Development

What are then the key critiques of sustainable development (SD) from a degrowth perspective, and how do they intersect with or complement those of Education for Sustainable Development (ESD)? The concept of sustainable development itself emerged out of the Brundtland Report (WCED 1987) in preparation for the landmark 1992 Rio Earth Summit, famously defined as:

“Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

While introduced with the objective to harmonise and reconcile the triple bottom line of economic growth, social equity, and environmental protection (Elkington 2004), SD has succinctly been formally institutionalised under the Sustainable Development Goals (SDGs) (Kopnina 2020a; 2020b). Among these goals, SDG 4.7 explicitly recognizes education as a key lever for sustainability transformation aiming at the empowerment of learners to advance a just, equitable, and environmentally sustainable world (UNESCO 2014). The resulting Education

for Sustainable Development (ESD) has played a significant role in globally mainstreaming sustainability thinking across educational institutions (Getzin and Singer-Brodowski 2016; UNESCO 2014). While ESD has provenly contributed to the dissemination of sustainability-related topics into ‘mainstream’ educational curricula (Sterling 2017), with its positive impact, specifically on youth (Michelsen et al. 2015), being evident (Pauw et al. 2015; O’Flaherty and Liddy 2018), this thesis will rather centralise on the critical ESD scholarship (Getzin 2019).

The reason for such criticism relates back to the introductory quote of David Orr (2004; 2017), who incisively warns if education is configured inappropriately, it may serve to perpetuate, rather than mitigate, unsustainability. This can largely be explained by education being “the main means of social reproduction” (Sterling 1996, 18), embedding and reproducing dominant social, political, and economic norms rather than challenging them (Sterling, Dawson, and Warwick 2018). For some scholars, Orr’s (2004; 2017) “dystopian formulation” (Getzin 2019, 62) is already unfolding, particularly in the context of Western education including ESD, which may paradoxically contribute to the very socio-ecological crises it seeks to address (Wals et al., 2017; Harris, 2008 and Orr, 1996 in Wals and Benavot 2017). Such is however not solely a fallacy of ESD itself but rather a reflection of SDs’ intrinsic contradiction between ecological sustainability and economic expansion (Sachs 2009), which ESD as its “offspring” (Selby 2015), unquestionably conciliates and thereby promulgates (Kopnina 2020a; 2020b; Berryman and Sauvé 2016).

It is precisely this tension between sustainability and economic growth that lies at the heart of degrowth’s critique of SD. While Latouche (2009) moved the development critique to the core of degrowth, it was Georgescu-Roegen already denouncing SD as “one of the most toxic recipes” (in Bonaiuti 2014, 25), believing that “there could be development without growth” (Georgescu-Roegen 1975, 364). This fundamental rejection of SD by degrowth is founded on two grounds (Martinez-Alier 2014), both of which are paralleled in critical ESD scholarship.

The first critique centres on the inherent contradiction between economic growth and sustainability. SDs' elements of 'sustainable' and 'development' are claimed to be fundamentally oxymoronic (Latouche 2010). This is because the achieving and maintaining of any kind of (human) development remains equated with the perpetual expansion of economic growth (Kothari et al. 2019; Escobar 2015). Such in turn does not only denies the realization of ecological sustainability due to the inability to decouple ecological pressures from economic growth (Hickel and Kallis 2020; Parrique et al. 2019) but also, that mere increases in economic growth do not automatically translate into increased human well-being (Hickel and Sullivan 2024). Beyond a certain threshold, economic growth is argued to actively undermine societal well-being (Dietz and O'Neill 2013) and, in some cases, even become 'uneconomic,' as the social and environmental costs outweigh its benefits (Kallis et al. 2025).

This contradiction within SD is similarly challenged by critical ESD scholarship (Berryman and Sauvé 2016; Sterling 2017; Selby 2015; Huckle and Wals 2015). By uncritically promoting SD through educational means, mainstream ESD risks functioning as an ideological vehicle that legitimizes rather than questions the oxymoron of SD (Jickling and Wals 2008; Kopnina 2012). Furthermore, by prioritizing instrumentalist and depoliticized understandings of weak sustainability (Getzin 2019), ESD frequently focuses on individualized behaviour changes as a means to redress ecological challenges (Huckle and Wals 2015), rather than addressing the structural socio-economic drivers of unsustainability (Sterling 2010).

Degrowths' second critique towards SD integrates the now well-established field of post-development, tracing its intellectual roots to the works of Ivan Illich (1973) and Cornelius Castoriadis (1987), both considered prominent degrowth forethinkers, with Serge Latouche "disseminat[ing] this perspective in the North" (Escobar 2015, 454). Post-development rather challenges the very notion of development itself, sustainable or otherwise, arguing that it serves as a Western-centric ideological tool or stabilizing force that causes, maintains, and legitimizes

neocolonial unequal exchanges, ultimately perpetuating global inequality and underdevelopment, particularly in the Global South (Escobar 2014; 2015; Kothari, Demaria, and Acosta 2015).

Related to these ideas, degrowth and critical ESD further criticize SD and ESD in their instrumentalization within the SDGs (Robra and Heikkurinen 2021; Kopnina 2020b; 2020a). By prioritizing growth-driven development (Kothari, Demaria, and Acosta 2015), the SDGs undermine the very attainment of their own social and environmental objectives (Hickel 2019). This paradox ultimately sustains the structural drivers of socio-ecological crises, most notably the capitalist growth-based economy (Swyngedouw 2014), therewith ensuring that “nothing really has to change” (Swyngedouw, Hillier, and Healey 2010, 222). This conformity and preservation of unsustainabilities is echoed in critiques of mainstream ESD, which, in its instrumental and depoliticized configuration (Huckle and Wals 2015), frequently serves to sustain rather than transform unsustainable systems (Sterling 1996; 2010; 2017; Selby 2010; 2015).

Thus, while degrowth critiques SD as an ideological construct that legitimizes growth-driven development (Kothari, Demaria, and Acosta 2015), critical ESD exposes how its educational implementation often upholds these same logics (Sterling 2010; 2017), making both synergistically complicit in perpetuating socio-ecological crises (Robra and Heikkurinen 2021; Selby 2010). If both degrowth and critical ESD scholars fundamentally challenge SD, can ESD as its “outcrop” (Selby 2015), still be considered a viable framework? What alternative educational approaches align with degrowth’s vision for systemic transformation, why has such not yet occurred, and why may education be a crucial “driver” in facilitating this transition? Before finding responses to these questions and examining why genuine sustainability transformations have yet to materialize at the scale necessary to address pressing socio-ecological challenges, it is crucial to first clarify how degrowth conceptualizes itself as a

“project of radical social-ecological transformation” (Muraca 2013, 147; Kallis and March 2015, 360).

2.3. Social- and Socio-Ecological Transformation, Growth Imperatives, and the Liberation of Social Imaginaries

The term social-ecological transformation originates in German-language scholarship, where Brand and Wissen (2017) argue that the scale of social-ecological crises necessitates fundamental transformations at the intersection of society, economy, and environment. In English-degrowth literature, this process is more commonly referred to as socio-ecological transformation (see Demaria 2021; Dengler and Lang 2022; Getzin 2019). Since both terms convey the interconnectedness between societal and environmental systems, this thesis will use them interchangeably. The imperative for such systemic socio-ecological transformation arises from the incompatibility of continuous economic growth with effective and timely reductions in socio-ecological pressures (Parrique et al. 2019). The continued adherence to endless economic expansion is widely justified by the ‘green growth paradigm’, which assumes that economic growth can be reconciled with socio-ecological sustainability (Hickel and Kallis 2020).

Beyond the illusion of green growth (Wiedenhofer et al. 2020; Haberl et al. 2020), however, a deeper issue lies in the structural dependence of socio-political and economic systems on perpetual economic expansion (Kallis et al. 2018; Schmelzer 2015; 2016). This dependence has been described as a ‘growth imperative’ (Binswanger 2013), or ‘growth paradigm’ (Daly 1992; Dale 2012), functioning as a hegemonic ‘global ideology’ (Schmelzer, Vetter, and Vansintjan 2022), equating economic-political stability, societal well-being, and progress with continuous economic growth (Kallis et al. 2018). While much of the focus of degrowth is directed towards the material, economic, and political structures that enforce economic growth (Kallis et al.,

2025), the same growth imperative is said to be “deeply embedded in people’s minds and bodies” (Büchs and Koch 2019, 160). Indeed, the growth paradigm not only captivates socio-economic-, and political systems (Schmelzer 2015; Welzer 2011) but also peoples and societies’ ‘social imaginary’ (Latouche 2009; 2014b).

Social imaginaries refer to “collective images of how we might live” (Stoddard et al. 2021, 675) and have been iconically introduced to degrowth by Latouche (2009), referring to the works of Cornelius Castoriadis (1987). Elsewhere described as ‘mental infrastructures’ (Welzer 2011) or ‘world-views or mindsets’ (Göpel 2016), social imaginaries are simply the desires, hopes, and values (Welzer 2011), norms and rules (Getzin 2019), and set of ideas and fantasies (Kallis 2018), with which people make sense of themselves and the world, “keep[ing] the society together as the fabric of shared meanings” (Muraca 2015a, 2). That the imaginary is “addicted” to or “colonized” by growth (Latouche 2014b) is exemplified by current predominantly Western societies being dominated by economism (Petridis, Muraca, and Kallis 2015), endless over-consumption (Feola 2019), competitive individualism (Muraca 2015a), or simply, imperial modes of living (Wissen and Brand 2021).

However, this very dominance of the growth paradigm obstructs the unfolding of socio-ecological transformation (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022). This is because social-ecological transitions necessitate transformative changes on multiple dimensions (Buch-Hansen 2018), where the social imaginary is considered a ‘deep leverage point’ (Meadows 1999), which in turn is specifically resistant to change due to its entanglement close to people’s identities (Abson et al. 2017). It is yet precisely the social imaginary that gives the determining impetus and meaning for sustainability transformations (Muraca 2015b).

It is for that reason that degrowth most profoundly calls for the decolonisation of the social imaginary (Latouche 2014b). While the term “decolonization” has been criticized for its association with anti-colonial struggles (Deschner and Hurst 2018), Latouche himself acknowledged its connotations (Demaria, Kallis, and Bakker 2019), prompting the thesis to nonetheless adopt the more constructive framing of “liberating the imaginary” (Schmelzer, Vetter, and Vansintjan 2022). Once liberated social imaginaries can align with principles of strong sustainability, fostering environmental stewardship and contributing to holistic (non-)human flourishing while remaining within planetary boundaries (Richardson et al. 2023) and ensuring equitable societal foundations (Raworth 2017). While degrowth has effectively identified the ways in which the growth paradigm captures and constrains the social imaginary (Feola 2019), approaches to its liberation remain problematically sparse (Varvarousis 2019).

For the liberation of the imaginary, Latouche himself declares “one cannot but think first of education” (Latouche 2014b, 119). Whereas Latouche believed much can be learned and changed from unfolding disasters with eventually even the freeing of the social imaginary (Latouche 2014a), such an approach represents a rather catastrophic or indeed pessimistic method leaning towards the ‘disaster’ side for the unfolding of socio-ecological transformation (Sommer and Welzer 2017). Instead, socio-ecological transformation can also unfold ‘by design’ (Victor 2008; Wackernagel 2014), with education having to play a fundamental enabling part with its capability to liberate the social imaginary (Getzin, 2019).

Following it is even further puzzling to realise that degrowth scholarship remains questionably marginal in identifying how and what kind of education could contribute to the liberation of social imaginaries if we “can hardly rely on such disaster lesson” (Latouche 2014a, 94). This is evidenced by missing chapters on education in the defining work of *Degrowth: A Vocabulary for a New Era* (D’Alisa, Demaria, and Kallis 2014), and even more recently, *Degrowth and Strategy* (Barlow et al. 2022), which specifically centralises on approaches to bring about

demanded social-ecological transformation but fundamentally disregards education as a viable “strategy”.

2.4. A Pedagogy of Degrowth?

The necessity of developing degrowth-oriented approaches to education comes as no surprise given that Latouche (Latouche 2014b), drawing on Castoriadis, envisions ‘paideia’ (Greek for education) as central in dismantling the growth-dominated social imaginary. The sparse works that have begun exploring the intersection of education and degrowth started with the Second International Degrowth Conference in 2010 (Videira et al. 2014). Those that explicitly link education and degrowth emphasize a critical-emancipatory approach, distancing themselves from utilitarian, growth-oriented models and drawing parallels with eco-pedagogical frameworks (Kopnina 2012; 2020b), ultimately pointing to the need for new degrowth-informed pedagogies (Videira et al. 2014).

Such need has succinctly been addressed by Luis Prádanos, who for the first time, conceptualized a ‘pedagogy of degrowth’ (Prádanos 2015). Prádanos merged critical pedagogy with degrowth principles, centralizing mainly on the need to fundamentally unlearn the ingrained growth paradigm, not only by exposing its social and ecological destructiveness but also by challenging the deeply embedded perception of human-nature separateness that fundamentally sustains socio-ecological crises (Selby 2015; 2017; Berryman and Sauv   2016). Building on such pedagogy of degrowth, D  ez-Guti  rrez has in multiple works explored the intersection of degrowth and education (D  ez-Guti  rrez and Palomo-Cerme  o 2023; D  ez-Guti  rrez et al. 2024; 2025). In D  ez-Guti  rrez and D  az-Nafr  a (2019) the authors delineate their pedagogy of degrowth as centralizing on establishing competencies that challenge the growth paradigm, including living better with less through voluntary simplicity, prioritizing

slow education through reflective and cooperative learning over results-driven competitive educational models, and participatory decision-making on curricula.

In a systematic review of degrowth policy proposals, Fitzpatrick et al. (2022) summarize many of the above-mentioned approaches for a pedagogy of degrowth. Along six categories these cover amongst others critical-emancipatory education grounded in critical pedagogy (Prádanos 2015; 2018), ecocentrism and eco-pedagogy (Kopnina 2012; 2020b), or sufficiency and self-limitation (Díez-Gutiérrez and Díaz-Nafría 2019). Of equal synthesizable value is the review by White (2024) whose degrowth pedagogy covers in total seven dimensions, adding significant aspects such as caring for strong social relationships (Jones 2021) or the importance of place-based learning (Kaufmann, Sanders, and Wortmann 2019).

The “small but growing literature on degrowth education” (Tannock 2025, 455) is applaudable for its relevance to liberating social imaginaries and thereby contributing to the unfolding of social-ecological transformations. While the special issue of *Nordic Studies in Education* (Vol. 44, No. 4, 2024) is entirely dedicated to exploring a reimagination of education through a degrowth lens is representative of such a contribution (see Baldacchino and Saeverot 2024), research on the explicit intersection of degrowth and ESD remains still sparse with more scholarly attention being directed towards exploring alternatives to growth-oriented economic models in business management studies (Bobulescu 2022; Kopnina and Benkert 2022; Kopnina and Bedford 2024; Liuzzo 2025; Liuzzo and Tsai 2024).

2.5. Degrowth Pedagogies Beyond Education for Sustainable Development

Although critical ESD scholarship mirrors many of the degrowth critiques including the economic growth imperative (Orr 2017; Sterling 2017), global neoliberal domination (Selby & Kagawa, 2010), or development critiques (Stein et al. 2023), it was not until Getzin & Singer-

Brodowski (2016) that an explicit and systematic linkage between the two fields was established. Indeed, while Selby (2007) even advocated for education for sustainable contraction, entirely unaware and disassociated with the overlap of degrowth, Getzin and Singer-Brodowski (2016) first conceptualised degrowth approaches towards ESD.

Getzin and Singer-Brodowski (2016) argue that degrowth-informed approaches to ESD must centralise critical-emancipatory education identified equally by Deriu (2012) and Fitzpatrick et al. (2022). They develop four didactical approaches grounded in transformative learning (Mezirow 2018; Freire 2014), emphasizing place-based, problem-based, transformative, and experiential learning. This enables deep (self-)reflection, not only on one's own embeddedness within the growth paradigm but also on how formal educational institutions perpetuate it (Stoddard et al. 2021).

Whereas Getzin and Singer-Brodowski (2016) find that degrowth must continue criticising and pushing ESD from the sidelines, disfavours a merging due to degrowth's anti-capitalist and system-critical nature, Kaufmann, Sanders, and Wortmann's (2019) position is "less hardened" (933). They find that degrowth's re-politicization of the sustainability discourse (Demaria et al. 2013) is precisely what ESD requires if it is to contribute to systemic socio-ecological transformation. As such, Kaufmann, Sanders, and Wortmann (2019) affirm the didactic facilitation of intense reflection phases identified by Getzin and Singer-Brodowski (2016), within practical material and experiences (Konzeptwerk Neue Ökonomie, n.d.), but add a fundamental need to politicize education and ESD as a precondition for liberating the social imaginary and enabling transformative change.

This need for ESD's politicisation mirrors voices from critical ESD scholars (Huckle and Wals 2015; Huckle 2017; Sterling 2010; 2017) and is reinforced by Getzin's (2019) most comprehensive work on the intersection of degrowth and ESD. In her PhD dissertation, Getzin

(2019) concludes that an ESD that is informed by degrowth can indeed foster the liberation of the social imaginary from the growth imperative while simultaneously enhancing self-efficacy through political engagement and collective action that thereby act as a lever for systemic social-ecological transformation.

2.6. Towards a Degrowth Pedagogy in Nonformal Education

While degrowth highlights the need to liberate social imaginaries from growth imperatives that obstruct systemic socio-ecological transformation (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022), critical ESD scholars underline that mainstream ESD approaches often sustain ecological challenges rather than addressing their root causes (Sterling 1996; 2010; 2017; Selby 2010; 2015). Bringing these fields into dialogue reveals that for ESD to contribute to the emancipation of the “imaginary of growth” (Schmelzer, Vetter, and Vansintjan 2022, 48) and support social-ecological transition, it must be informed by a pedagogy of degrowth that is grounded in critical-emancipatory- and transformative education (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019; Getzin 2019). To visually synthesise the conceptual terrain and tensions discussed above, following Figure 1 maps the core foundations of SD, ESD, and degrowth. It highlights the central “under-researched tension” where aspirations for systemic transformation meet growth compatibility, and where pedagogical aims fluctuate between instrumentalism and transformation.

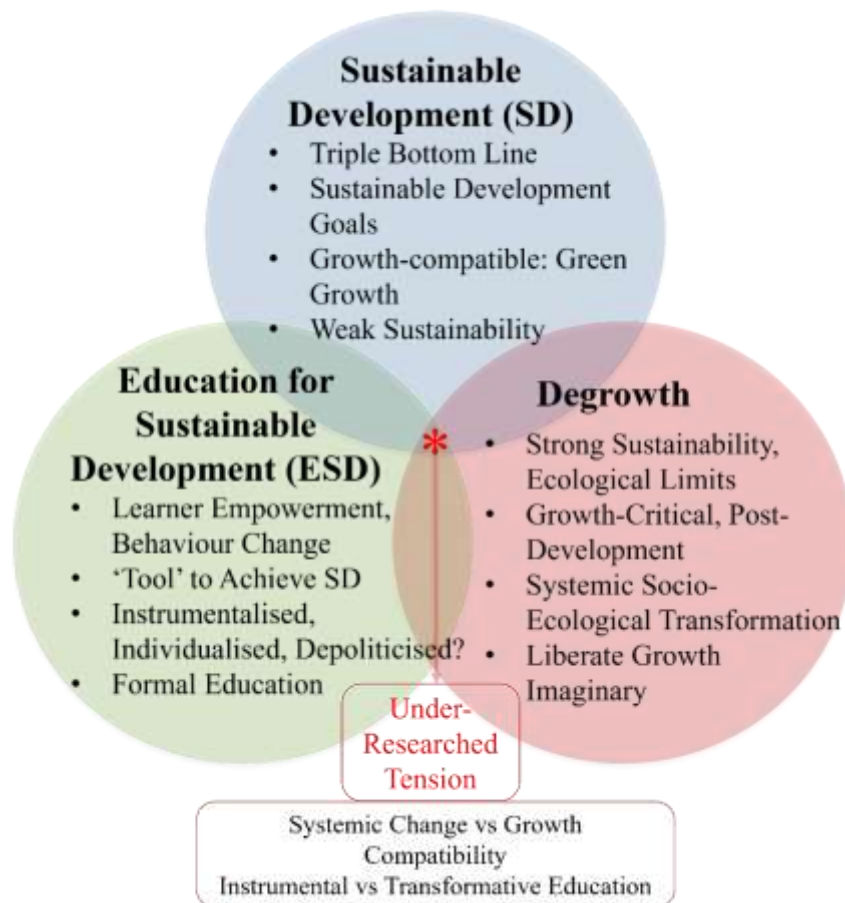


Figure 1. Navigating the Tense Space for Degrowth-Informed Education (own illustration)

Despite increasing engagement on the intersection of ESD and degrowth (Tannock 2025), where proposed approaches include critical-reflective learning (Kaufmann, Sanders, and Wortmann (2019), place-based- (White 2024), and problem-based education (Getzin and Singer-Brodowski 2016), empirical studies on how these approaches may manifest in real-world settings remain absent. Whereas formal education has been widely criticized for being institutionally constrained (Sterling 1996), ill-equipped to foster systemic change (Rostock and Weller 2016), and even complicit in the perpetuation and reinforcement of unsustainabilities (Stoddard et al. 2021), spaces of non-formal education may instead be better suited to engage in the demanded transformative education (Singer-Brodowski 2018; Kaufmann, Sanders, and Wortmann 2019). Indeed, formal educational institutions, such as schools or universities, are

considered to be “typically less free to innovate than non-formal [education]” (Sterling 1996, 21 in Getzin 2019, 103).

Contrastingly, nonformal education refers to learning environments outside formal institutions, often facilitated by nonprofit organizations (Overwien 2009), where more experimental educational approaches can be tested (Rostock and Weller, 2016; Singer-Brodowski, 2018). Accordingly, it is within these often-small-scale spaces where opportunities for transformative pedagogical approaches including those informed by degrowth emerge and develop (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019). One may, however, question and even challenge the transformative significance of small-scale nonformal educational initiatives, given that they remain embedded within an unsustainably institutionalized formal education system (Göpel 2016; Amsler and Facer 2017; Narberhaus 2016). This critique can nonetheless be countered by recognising the significance of small-scale nonformal educational initiatives as catalysts for larger systemic change.

Precisely, degrowth frequently highlights the role of ‘social laboratories’ (Muraca 2015a), ‘real utopias’¹ (McGreevy et al. 2022), and ‘nowtopias’ (Petridis 2016) as counterhegemonic practices that contribute to the liberation of social imaginaries (Schmelzer, Vetter, and Vansintjan 2022). Once accumulated and expanded, these liberated imaginaries and subsequent practices can unroll wider socio-ecological transformations (Demaria et al. 2013). Similarly, within small-scale nonformal educational initiatives, it is the ‘little steps’ (Amel, Scott, and Manning 2015) including hands-on sustainability practises that cultivate self-efficacy in addressing socio-ecological crises. When such practises become “mainstreamed”, “upscaled” (Getzin 2019, 89), and connected to socio-political struggles (Kaufmann, Sanders, and

¹ Note that the initial idea of ‘real utopias’ emerge from the work of Wright (2020).

Wortmann 2019), they may have the potential to create an “avalanche for sustainability (Amel, Scott, and Manning 2015, 308).

Despite this hope-given potential, it remains underexplored in which aspects and how these initiatives reflect degrowth-informed pedagogical practices considered imperative for socio-ecological transformation. Responding to calls for more empirical research at the intersection of ESD and degrowth (Getzin & Singer-Brodowski, 2016; Getzin 2019), this thesis explores whether nonformal ESD initiatives can be understood as instances of ‘living’- (Brossmann and Islar 2020) or ‘real-existing’ degrowth (Kallis, Varvarousis, and Petridis 2022). While Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019) propose theoretical and conceptual models for degrowth approaches to ESD, research has yet to explore how these pedagogies manifest in real-world nonformal learning settings. These gaps point therefore to the need for empirical studies that examine which aspects and how ESD practises within nonformal educational initiatives reflect, challenge, or refine degrowth-informed pedagogical approaches, that aim to liberate social imaginaries and thereby unroll socio-ecological change.

To enable such analysis, the next chapter presents the guiding theoretical framework, drawing on the four didactical approaches for transformative degrowth learning proposed by Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019) call for the politicization of education, equally identified by Getzin (2019). The thereof developed framework is fundamentally based on, justified, and contrasted with transformative learning including critical pedagogy.

CHAPTER THREE: THEORETICAL FRAMEWORK

To examine which aspects and how ESD practices within nonformal educational initiatives reflect, challenge, or refine degrowth-informed pedagogical approaches, this chapter presents the theoretical framework guiding this thesis. Building upon the literature review and the identified degrowth-related pedagogical approaches to ESD, this chapter examines these in greater detail. The discussion situates, contrasts, and legitimises them in the traditions of Critical Pedagogy, and Transformative Learning.

The aim of this chapter is threefold. First, it distinguishes an instrumental approach to education, including ESD, from a critical-emancipatory understanding, which forms the foundation of any degrowth-informed pedagogy. Second, it introduces transformative learning and critical pedagogy as additional conceptual pillars, that together with critical-emancipatory education, form the overarching theoretical foundation of degrowth pedagogies. Third, degrowth-informed pedagogical approaches are discussed in detail, undergirding them with insights from transformative learning and critical pedagogy. Finally, the chapter closes with a conceptual synthesis of all five degrowth pedagogies, resulting in an operationalisable framework that informs the subsequent case study analysis.

3.1. Instrumental- versus Critical-Emancipatory Education

Before diving into the educational approaches to ESD that have been explicitly shaped by degrowth, it must be clarified what is meant by a critical-emancipatory approach to education, on which these approaches are fundamentally based. The debate on instrumental and critical-emancipatory education actually reflects a wider and deeper philosophical discussion on the role and purpose of education in societies (Biesta and Robinson 2015; Wals et al. 2008; Wals 2012; Sterling 2010).

While some view education as an ‘instrument’ to achieve certain means (Wals 2012), which for mainstream ESD is the achieving of the Sustainable Development Goals (Glavič 2020), others take a contrasting view. They see education as a life-long- and open-ended process, centralising on the development of critical, reflective, and emancipatory competencies and conscience to challenge identified oppressive structures toward more just and sustainable futures (Sterling 2010; 2017; 2024; Jickling and Wals 2008).

In the realm of ESD, Vare and Scott (2007) prominently distinguish between an instrumental ‘ESD1’, and a critical-emancipatory ‘ESD2’. ESD1 is rooted in goal-oriented, competency-based learning through the transmission of expert knowledge, intended to induce individual behaviour change for achieving sustainability objectives (Wals 2011; 2012; 2015; Wals et al. 2008; Sterling 2010). This approach has however widely been criticised for promoting uncritical, top-down knowledge reproduction (Jickling and Wals, 2008), individualising responsibility for systemic issues (Huckle and Wals, 2015) and reinforcing a weak sustainability paradigm that treats nature as a resource to be managed (Kaufmann, Sanders, and Wortmann 2019; Selby 2017; Getzin 2019).

In contrast, critical-emancipatory ESD2 prioritises the development of critical reflection skills, enabling learners to continuously question, adapt, and co-create solutions for evolving sustainability challenges (Vare and Scott 2007; Sterling 2010; Wals 2012). Furthermore, Getzin (2019) identifies ESD2 to be essentially connected to a strong understanding of sustainability, one that reflects on the “contradiction inherent in sustainable living” (Vare and Scott, 2007, 194), while simultaneously recognizing the constraints imposed by “environmental limits and intergenerational dimensions” (194).

Following this view and in contrast to ESD1, which identifies education as the means **for** achieving sustainable development, ESD2 understands the process of learning itself **as** a

fundamental dimension of sustainable development. In this view, sustainable development is not a fixed target but an ongoing “social learning process of improving the human condition” (Foster 2002, in Vare and Scott 2007, 195). Whereas Table 1 summarises the distinction between Weak Sustainable ESD1, and Strong Sustainable ESD2, it is within the realm of critical-emancipatory ESD2 that Getzin and Singer-Brodowski (2016) have developed their “didactic facilitation of transformative learning in the context of degrowth” (43, self-translated).

Table 1. Weak and Strong Sustainable ESD1 and ESD2, based on Vare and Scott (2007) and Getzin (2019)

Concepts	Weak Sustainable ESD1	Strong Sustainable ESD2
Main Approach	Instrumental, behaviourist, competency-based	Critical, Reflexive, Emancipatory
Relation to Sustainable Development	Learning for sustainable development; Works within sustainable development	Learning as sustainable development; Questions contradictions of sustainable development
View of Nature and Sustainability	Nature can be replaced, and resource to be managed	Nature is irreplaceable, and humans are embedded- and dependent
Role of Education	Informed and skilled individual behaviours and thinking; A tool to achieve SDGs	Critical questioning of sustainability knowledge, and root causes of unsustainability

While the critical-emancipatory origin of degrowth approaches to ESD has now been introduced, they are simultaneously, essentially, and conceptually grounded within different streams of transformative learning including critical pedagogy (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019; Getzin, 2019). Although transformative learning and critical pedagogy have been mentioned before, the following section will briefly

introduce them more explicitly, drawing on the work of Jack Mezirow (2009; 2018), among others, for transformative learning, and Paulo Freire (2014) for critical pedagogy.

3.2. Transformative Learning and Critical Pedagogy

Indeed, transformative learning offers a response to a fundamental question that degrowth largely leaves open: What kind of education enables the liberation of social imaginaries captivated by the growth paradigm? This is because transformative learning concerns not only the transformation of individual perspectives (Mezirow 2009), but also, more broadly, that of societal structures (Brookfield, 2012 in Getzin and Singer-Brodowski, 2016). It is accordingly with such educational approaches, including degrowth-informed pedagogies, that the imaginary captivated by growth imperatives can be liberated, enabling pathways towards socio-ecological transformation (Getzin 2019). Whereas Getzin and Singer-Brodowski (2016) consider their didactic approaches to degrowth education to be grounded not only within critical-emancipatory education, but also in transformative learning under which critical pedagogy is included as a subset, this thesis applies and discusses transformative learning and critical pedagogy as separate but complementary schools of thought for theoretical clarity.

3.2.1. Transformative Learning

Transformative learning has its roots in adult education and social-constructivist learning theories (Getzin and Singer-Brodowski 2016), matching well with the constructivist and transformative worldview of this thesis (see [Section 4.2.1](#) for more detail). Jack Mezirow (2009) first introduced the idea of transformative learning that centres on the advancement of change through “challeng [ing] learners to critically question and assess the integrity of their deeply held assumptions about how they relate to the world around them” (Mezirow and Taylor 2009, xi).

These deeply held assumptions that Mezirow (2009) terms as ‘meaning perspective’ or ‘frame of reference’ conceptually align fundamentally with the social imaginary endorsed by degrowth (Latouche 2014). While meaning perspectives centralise more on the individual-held belief systems (Singer-Brodowski 2016b; 2023), social imaginaries operate on the collective societal level, referring to the societal fabric that legitimises reality but also the trajectories towards envisioned futures (Muraca, Petridis, and Kallis 2015; Schmelzer, Vetter, and Vansintjan 2022). Despite these different theoretical origins, all three concepts describe how individuals and societies understand and engage with reality, sharing a central concern with enabling deep-reaching transformation. For conceptual clarity, the thesis treats these ideas as interrelated, with an emphasis on their shared relevance for degrowth pedagogies that seek to unlearn dominant narratives and reimagine futures.

Within transformative learning, such transformation typically unfolds through several stages, initiated, however, always with a ‘disorienting dilemma’ (Mezirow 2009; 2018) that disrupts the existing frame of reference. Subsequent phases include the critical reflection and self-examination of previous beliefs, conducted within collective learning processes that are free from pressures, allowing learners to adopt and probe alternative meaning perspectives (Schneidewind et al. 2016; Singer-Brodowski et al. 2022). Ultimately, transformative learning is considered inherently positive as it leads to critical reflection, emancipated worldviews, and autonomous thinking (Mezirow 2009; 2018).

Whereas Mezirow’s focused initially and predominantly on transformative educational change at the individual level, it has been advanced by connecting achieved individual change to broader societal transformations (Brookfield 2000; 2012 in Getzin and Singer-Brodowski, 2016; Kaufmann, Sanders, and Wortmann 2019). This is because Mezirow (2009; 2018) believes that meaning perspectives are fundamentally shaped by personal life experiences, contrasted with Brookfield (2000; 2012 in Getzin and Singer-Brodowski, 2016), who argues

that these are also deeply influenced by socio-economic structures. Exemplary of Brookfield's widening of transformative learning is the argument of "how capitalism shapes belief systems and assumptions (i.e., ideologies) that justify and maintain economic and political inequity" (Brookfield 2000, 128).

It is within this wider understanding that transformative learning fundamentally aligns with degrowths' ambition to liberate social imaginaries from the grip of the growth paradigm, thereby enabling social-ecological transformation. This conceptual overlap signifies that any degrowth-informed approach to ESD that aims to free social imaginaries and unroll socio-ecological change must be fundamentally based and guided by transformative learning. Importantly, however, whereas Brookfield's contributions to transformative learning significantly expand its scope to include systemic conditions, Mezirow's original, more individual-centred interpretation remains limited in its engagement with power relations, social injustices, and political agency, concerns that critical pedagogy, by contrast, places at its centre (Getzin and Singer-Brodowski, 2016).

3.2.2. Critical Pedagogy

Indeed, emerging out of the fundamental work of Paulo Freire (2014), critical pedagogy can be described as an emancipatory and liberating educational approach that seeks to expose and challenge systemic inequities, while simultaneously emphasising their resolution through political action and social empowerment. It conceives education as a fundamentally political practice to overcome societal inequities (Kopnina and Bedford 2024), an aspect that Mezirow's individualistic understanding of transformative learning tends to shy away from (Getzin and Singer-Brodowski 2016).

Freire's central work, 'Pedagogy of the Oppressed' described as the "third most cited book in social sciences" (Fitzpatrick 2024, 73), centres on the dialectic between the 'oppressed' and the

‘oppressors’. While Freire originally referred to Brazilian agricultural workers as the oppressed and political-economic elites as the oppressors (Fitzpatrick 2024), this thesis interprets the oppressor-oppressed dialectic more structurally. While cognisant of Freire’s original signification, the thesis aims to critically adapt, rather than universalise, his ideas to more Westernized contexts. It does so with caution, aiming to avoid the perpetuation of what Macedo (2014 in Freire 2014) rightly critiques as the domestication, depoliticisation, or superficial appropriation of Freire’s radical, revolutionary, and liberating pedagogy.

For the context of degrowth, the growth paradigm can itself be understood as a hegemonic system of structural oppression that constrains social imaginaries and thereby limits the possibility of socio-ecological transformation (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022). The ‘oppressor’ is thus understood not as a clearly defined group, but as a deeply institutionalised ideology embedded in societal systems that are maintained and reproduced by those operating within and benefitting from them. Conversely, the ‘oppressed’ include not only marginalised individuals, such as the agricultural workers in Freire’s original, who disproportionately suffer under the socio-ecological destructiveness of these very systems and their associated imperial modes of living (Wissen and Brand 2021; Wiedmann et al. 2020). They also include all those who, while reproducing an unjust system, find their capacity to imagine and enact alternative realities simultaneously constrained by the dominant logic of growth. Followingly, the strict dialectic between oppressor and oppressed becomes more blurred and multi-layered, where individuals may be both complicit in and subject to systemic forms of oppression.

It is for this more nuanced understanding of oppression, that Freire’s conceptualisation of education becomes even more central. For Freire, education enables the oppressed to become aware of their repression through a process of critical consciousness, conscientisation, or ‘*conscientização*’. This is achieved, on the one hand, through critically reflecting on the root

causes and drivers of oppression and, on the other, through becoming socially and politically active in working towards their reversal, resulting in what Freire (2014) terms ‘praxis’, the “reflection and action directed at the structures to be transformed” (126).

In the context of degrowth-informed educational approaches, critical pedagogy extends transformative learning by not only enabling individual change but also with active participation in redressing structural injustices, including socio-ecological crises. Through such educational approaches, the grip of the growth imperative on social imaginaries can be loosened through a collective reimagination and co-creation of alternative social-ecological futures. Accordingly, transformative learning and critical pedagogy symbiotically constitute the theoretical pillars upon which degrowth pedagogies toward ESD are fundamentally built, which are presented in the next section.

3.3. The Five Degrowth-Informed Pedagogical Approaches

In this section, the five core pedagogical categories that form the analytical foundation of this thesis are introduced. These categories are drawn from the foundational works of Getzin and Singer-Brodowski (2016), and Kaufmann, Sanders, and Wortmann (2019), which, when considered in symbiosis, outline how degrowth approaches towards ESD can be developed and understood. These five categories include: (1) Situated and Action-Oriented Learning (problem-based learning), (2) Phases of Intense Reflection, (3) Re-definition of the Educator-Learner Role, (4) Critical Reflection on the Role of Educational Institutions, and (5) Politicization of Education.

The approaches, grounded in critical-emancipatory education, transformative learning, and critical pedagogy, are operationalised through the work of Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019), and are visually presented in Figure 2 below. Taken together, these categories represent what this thesis conceptualises and understands as

degrowth pedagogies or degrowth-informed pedagogies, terms which are used synonymously throughout, forming the degrowth pedagogical framework that analytically guides this thesis.

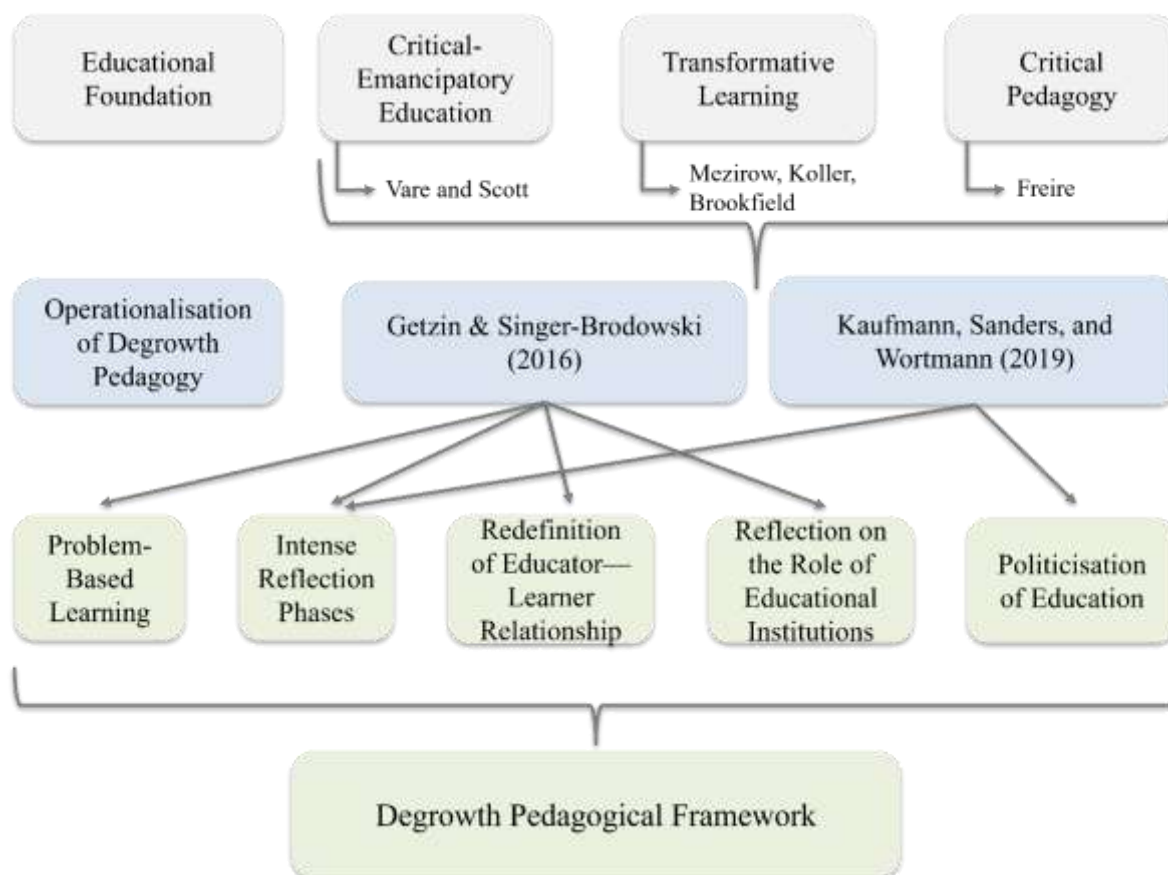


Figure 2. The Degrowth Pedagogical Framework (own illustration)

Before dissecting each category in detail, a brief clarification is needed regarding what is meant by pedagogy and how it relates to or differs from, didactics. While understanding pedagogy from its “Greek roots, meaning ‘to lead a child (from pais: child and ago: to lead)’” (Macedo 2014, 22 in Freire 2014), didactics refer more to the aims and methods of teaching and learning (Meyer 2007). Although Getzin and Singer-Brodowski (2016) refer to “Didaktische Ermöglichung”, translated here as “didactical facilitation”, both Kaufmann, Sanders, and Wortmann (2019) and Getzin (2019) consistently use the term pedagogy when discussing degrowth approaches to ESD. Given the conceptual overlap in how both terms are used across these works, and in the interest of analytical clarity and coherence, this thesis understands and

applies didactics and pedagogy interchangeably. Although educational scientists may justifiably throw up their hands in horror at such a merging, this choice is hopefully further excusable given the interdisciplinary nature of the thesis, having its roots predominantly within social, political, and sustainability sciences. With that settled, each degrowth-informed pedagogical approach can now be introduced and, when appropriate, reflected against the theoretical anchors of transformative learning and critical pedagogy.

3.3.1. Situated-, Action-Oriented-, and Problem-Based Learning, or all of them?

The first degrowth-informed pedagogical approach toward ESD centres on problem-based learning (PBL). PBL focuses on co-creatively finding solutions to complex, ‘wicked’, real-life, and open-ended problems, such as sustainability issues including climate change (Cross and Congreve 2021), that learners can relate to in their everyday lives. Under the PBL umbrella, Getzin and Singer-Brodowski (2016) further include action-oriented and situated learning. Whilst the former refers to hands-on experiential learning (Kolb 1984), the latter signifies education that is embedded within specific local environments encouraging real-life engagement (Lave and Wenger 1991). These approaches facilitate exploratory and participatory forms of learning without prescribing definitive answers. Instead, they point to collectively created and decided steps of change, enabling students to experience agency and self-efficacy (Getzin and Singer-Brodowski 2016).

Furthermore, these situated, and action-oriented learning approaches facilitate the interplay between reflecting on the issue at hand, while simultaneously becoming active in collectively finding solutions. This amounts to Freire’s (2014) idea of praxis that is facilitated by a ‘problem-posing’ approach to education. While textually similar to PBL, problem-posing education goes further by encapsulating Freire’s broader understanding of education as a liberatory and political practice. Within it, he negates instrumental understandings of education,

or what he brands as the ‘banking model of education’ (Freire 2014), where teachers simply ‘deposit’ their expert knowledge into obedient and verdant learners (Fitzpatrick 2024). By contrast, Freire bets on non-hierarchical learning that situates real-life problems within the lived experiences of learners, recognising them as expressions of systemic oppression and aiming toward counter-hegemonic practises that enable liberation.

Confronting complex and open-ended problems, however, can also provoke disorienting dilemmas that destabilise learners meaning-giving perspectives (Mezirow, 2018). While such dilemmas are imperative for any transformative learning and the adoption of new frames of reference (Singer-Brodowski 2016), they can also lead to discomfort, defensiveness, or even rejection (Mälkki 2019). Examples include confronting social injustices or the suffering of non-human beings (Getzin and Singer-Brodowski 2016), necessitating ‘safe enough spaces’ for transformative learning obligatory (Singer-Brodowski et al. 2022). Taken together, situated-, action-oriented-, and problem-based learning form the first core category of degrowth-informed pedagogies. They facilitate learners’ self-efficacy, collective solution-finding, and eventually, the envisioning of alternative social imaginaries contributing to social-ecological change.

3.3.2. Intense Reflection Phases

Coming to the second category of degrowth pedagogies, Getzin and Singer-Brodowski (2016) underline that PBL in isolation does not allow for a significant shift of meaning perspectives. Instead, it must be accompanied by intense reflection phases, during which the disorientation caused by a dilemma is historically situated and critically discussed within groups. Indeed, growing up as part of a global elite with high individual consumption patterns (Getzin and Singer-Brodowski 2016), and imperial modes of living (Wissen and Brand 2021), may lead learners to recognise themselves as ‘oppressors’ (Prádanos 2015), where “their beliefs have

consequences that negatively affect the oppressed” (Allen and Rossatto 2009, 178), eventually resulting in cognitive dissonance (Selby 2015).

It is thus of fundamental importance that such reflection is conducted collectively in safe spaces with trained educators (Kaufmann, Sanders, and Wortmann (2019); Getzin and Singer-Brodowski 2016). This ensures that disoriented learners are not left isolated or retracted from the original meaning perspective (Mälkki 2019). Instead, through shared dialogue with similarly mixed-up peers, learners can co-creatively identify actionable solutions. Such intense and dialogical reflection of structures of oppression and privileges relates to Freire’s elementary idea of critical consciousness or conscientisation. Here the learner realises not only her role in structures of inequalities or unsustainabilities, but also their systemic causes and entrenchment (Fitzpatrick 2024). Such consciousness is, however, not a one-time event, but a lifelong learning process (Kopnina and Bedford, 2024), which, when connected to socio-political action, becomes liberatory, or ‘*libertação*’ (Freire 2014).

3.3.3. Re-defining the Educator-Learner Role

For the third category of degrowth pedagogies toward ESD, a fundamental reimagining of the conventional roles of teacher and student is imperative. These forms of education, as seen in instrumental ESD1 and Freire’s critique of the banking model, often engrain hierarchical learning environments where the student is left to uncritically memorise deposited expert knowledge for competitive evaluations, without critically questioning its validity or their own position within the system (Fitzpatrick 2024). As a result, responsibility may be individualised while structural root causes remain unchallenged and perpetuated, which is exactly the kind of education that degrowth pedagogies seek to transcend.

In contrast, and from a Freirean perspective, learning should follow a dialogical understanding where the teacher meets the learner at eye level, becoming herself reciprocally (re)-educated

throughout the process. It is here where the learner is recognised not as a passive recipient, but as someone “who in turn while being taught also teach” (Freire 2014, 67). This approach seeks not only to break with the traditional transmissive notion of teaching and the competition culture (Kaufmann, Sanders, and Wortmann (2019) but also to create non-hierarchical and safe learning environments where transformative learning can be facilitated (Getzin and Singer-Brodowski 2016).

Facilitation is key in this context, as such education must never be instrumental resulting in pre-defined outcomes, including, for instance, concepts advanced by degrowth itself (Getzin 2019; Getzin and Singer-Brodowski, 2016). Rather, it should leave it up to the critically reflected learners to co-creatively or individually, but autonomously, decide on appropriate redresses. In practice, this may involve a shift from lecture-based teaching to participatory learning with co-designed curricula (White 2024). Such an approach ensures that learning processes are relatable, relevant, and actionable, rooted in the lived experiences of learners (Freire 2014), supporting both personal and societal transformation.

3.3.4. Critical Reflection on the Role of Educational Institutions

Getzin and Singer-Brodowski’s (2016) fourth and final degrowth-informed pedagogical approach to ESD centralises on and challenges formal educational institutions as reproducing sites of dominant ideologies, particularly the growth paradigm (Stoddart et al. 2021; Sterling 1996; Sommer and Welzer 2014). This is because mainstream formal educational institutions follow broadly the banking model of education based on performance logic and competitive pressures (Getzin and Singer-Brodowski 2016), resulting in “educated individuals who are docile and employable” (Fitzpatrick 2024, 73). Education functions here as a tool of social reproduction (Sterling 1996), reinforcing the oppressive, unequal, and unsustainable system within which it is embedded, rather than critically challenging it.

This cycle of education reproducing unsustainability is, however, not inevitable, as education is a socially constructed, human-made institution, and thus transformable (Freire 2014). Accordingly, and from a Freirean perspective, if formal educational institutions would recognise critical pedagogical approaches including problem-posing- and dialogical learning embracing critical consciousness, they could shift away from reproducing structural oppression toward enabling emancipation. Such emancipatory shift could align further with reorienting the educational system away from the commodification of knowledge, the prioritisation of productivity and employability, and the marginalisation of local or Indigenous knowledge (Kopnina 2020a; 2020b; Escobar 2020; Andreotti 2016).

While such critical pedagogical practises do exist, they are mostly confined to small-scale non or informal educational settings (Kaufmann, Sanders, and Wortmann 2019), remaining predominantly and exclusively available to the most privileged (Prádanos 2015). However, for such spaces to contribute meaningfully to systemic transformation, they must forge connections between each other and utilise windows of opportunity to permeate and influence formal educational institutions with practised degrowth pedagogies (Kaufmann, Sanders, and Wortmann (2019).

3.3.5. Politicisation of Education

This then leads to the fifth and final category of degrowth pedagogies, which extends Getzin and Singer-Brodowski's (2016) framework by introducing the imperative of politicising education. This approach recognises that "education is political" (Fitzpatrick 2024, 73) yet fundamentally separate itself from any instrumental or indoctrinating tendencies. Instead, it reveals and understands essential power asymmetries as the root cause of socio-ecological injustices (Kaufmann, Sanders, and Wortmann (2019), as well as learners' own potential role

in perpetuating these injustices, ultimately facilitating collective action and political engagement.

Indeed, degrowth pedagogies must never politically indoctrinate the “right, or morally correct knowledge” (Getzin and Singer-Brodowski 2016, 43, self-translated). Rather, their role is to facilitate the development of conscientisation, a critical awareness of socio-political and ecological injustices that empowers learners to autonomously identify suitable redressive actions. This shift toward becoming “political agents of transformation, rather than as transmission belts for society’s reproduction” (Dobson and Bell 2006, 15 in Prádanos 2015), is fundamental in addressing the often-experienced political ineffectualness and feelings of powerlessness (Kaufmann, Sanders, and Wortmann 2019), that especially young people face.

Such politicisation is particularly relevant given the depoliticised nature of ESD (Huckle and Wals 2015). By explicitly politicising sustainability discourses, degrowth pedagogies point to ESDs’ sore spots, such as individualisation of sustainability efforts, highlighting their ineffectualness for addressing the root causes of socio-ecological injustices, including neo-liberalised growth imperatives capturing social imaginaries (Getzin 2019). Redressive examples include the autonomous forging of connections with civil society and social movements (Kaufmann, Sanders, and Wortmann (2019), ultimately enabling learners to envision and pursue alternative futures that liberate social imaginaries and drive meaningful socio-ecological change.

Having now thoroughly introduced and discussed these five degrowth-informed pedagogical categories, the following section synthesises them into a coherent conceptual framework. The resulting analytical lens enables an examination of how, and in which aspects, nonformal ESD initiatives reflect, challenge, or refine degrowth-informed pedagogies that aim to emancipate social imaginaries and facilitate socio-ecological transformation.

3.4. Conceptual Synthesis

Having now thoroughly introduced and discussed these five degrowth-informed pedagogical categories, this brief section synthesises them into a coherent conceptual framework. This synthesis is described in Table 2, highlighting the conceptual links between the degrowth-informed pedagogical approaches, critical pedagogy, and transformative learning.

Table 2. Overview of Degrowth-Informed Pedagogical Approaches, Critical Pedagogy and Transformative Learning

Degrowth-Informed Pedagogical Approaches	Critical Pedagogy⁴	Transformative Learning⁵
Situated-, Action-Oriented-, and Problem-Based Learning ^{1, 3}	<ul style="list-style-type: none"> • Problem-posing education • Praxis (reflection and action) 	<ul style="list-style-type: none"> • Meaning perspectives shape perceptions of the world
Phases of Intense Reflection ^{1, 2, 3}	<ul style="list-style-type: none"> • Conscientisation through praxis 	<ul style="list-style-type: none"> • Disorienting dilemma questions previous meaning perspective
Re-definition of the Educator–Learner Role ¹	<ul style="list-style-type: none"> • Critical dialogue • Educator as facilitator and co-learner • Horizontal relationships 	<ul style="list-style-type: none"> • Joint critical reflection of disoriented meaning perspective within small groups
Reflection on the Role of Educational Institutions ¹	<ul style="list-style-type: none"> • Education as political • Critique of banking education • Awareness of institutional reproduction of inequality 	<ul style="list-style-type: none"> • Testing of new meaning perspective
Politicisation of Education ^{2, 3}	<ul style="list-style-type: none"> • Education as a practice of liberation • Linking personal and political awareness 	<ul style="list-style-type: none"> • Integration of new meaning perspective into one's own life

		<ul style="list-style-type: none"> • Linking individual transformation to collective action
¹ Getzin and Singer-Brodowski (2016) ² Kaufmann, Sanders, and Wortmann (2019) ³ Getzin (2019) ⁴ Freire (2014) ⁵ Singer-Brodowski (2016a) summarising Mezirow (2018), Brookfield (2000; 2012), and Koller (2012)		

Each degrowth-informed pedagogical approach finds resonance with specific concepts of Freire’s critical pedagogy, such as problem-posing- and dialogical education, praxis, critical conscientisation, or socio-political liberation. Simultaneously, the framework aligns with transformative learning’s focus on perspective transformation through disorienting dilemmas, critical reflection, and the integration of newly gained perspectives into social contexts to foster social-ecological change. To operationalise this framework and examine how degrowth pedagogies manifest in practice, the following chapter outlines the research design and methodology. More specifically, chapter 4 details the qualitative approach adopted for investigating the selected case study through multiple data collection methods, while also aiming to keep your possibly meandering reading interest engaged with deeper-reaching philosophical worldviews, personal critical reflections and positionality.

CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY

This chapter outlines the research design and methodological framework for finding responses to how degrowth-informed educational approaches are integrated into nonformal educational contexts with a particular theoretical focus on transformative- and critical pedagogies. To achieve this, the thesis employs a qualitative case study approach focusing on a nonformal ESD initiative with the aim to gain deep insights into how its educational approaches may contribute to the liberation of social imaginaries and thereby support the envisioned social-ecological transformation through degrowth.

The chapter is structured as follows: First, the guiding worldviews of the thesis are briefly described covering its ontological and epistemological foundations. Second, the qualitative methodological approach is introduced and justified, highlighting its strength for the critical reflective examination of complex educational phenomena. Hereunder, the chosen descriptive and exploratory case study of WeltTellerFeld is established and justified. Third, the multi-method data collection is portrayed, where each data collection approach is explained separately, contributing in a triangulated symbiosis to the increased reliability and validity of the conducted research. Thereafter, and fourth, the qualitative content analysis section outlines the analytical lens applied to the collected data. Lastly, the chapter closes with ethical research principles including my positionality and reflexivity.

4.1. Ontological and Epistemological Foundations

Say what? Ontology and epistemology can be broadly understood as ways of looking at the world, together forming a certain ‘worldview’ (Creswell and Creswell 2018). While ontology concerns how reality is perceived, epistemology describes how knowledge is produced and

validated (Crotty 2020). These philosophical foundations are central to shaping educational approaches and this thesis as a whole.

Building on the significance of critical-emancipatory education established in the literature review, this thesis argues that any degrowth-informed approach to Education for Sustainable Development (ESD) must be rooted in a critical-emancipatory conception of ESD (referred to as ESD2 earlier). This orientation is inherently tied to a ‘socio-constructivist, transformative’ worldview (Jickling and Wals 2008), providing the philosophical grounding for the thesis. Accordingly, while being rooted within a constructivist epistemology seeing that reality, knowledge, education, and learning are socially constructed through human interactions, practices, and experiences (Creswell 2014; Huckle 2017; Jickling and Wals 2008), the worldview of this thesis extends beyond pure constructivism. It further embraces a transformative worldview that highlights the need to transform the unsustainable status quo (Creswell and Creswell 2018), and “confront social oppression at whatever level it occurs” (Mertens 2010 in Creswell and Creswell 2018, 47).

This transformative worldview aligns closely with the normative (Kallis et al. 2018; Sandberg, Klockars, and Wilén 2019) and transformative nature of degrowth itself (Buch-Hansen and Nesterova 2023). Indeed, degrowth not only highlights the structural cause of current socio-ecological crises but simultaneously offers visions and actionable pathways towards their conversion, promoting equitable (non)-human thriving (Schmelzer, Vetter, and Vansintjan 2022; Parrique 2024b).

4.2. A Qualitative Methodological Approach

These constructivist, normative, and transformative worldviews directly inform the choice of a qualitative methodological approach. This is because qualitative research appears most suitable to examine the ‘complex and messy business’ (Jickling and Wals 2008) of education, enabling

a deep understanding of how degrowth pedagogical approaches shape nonformal ESD initiatives.

It allows delving deeply into educators' and learners' perceptions, beliefs, practices, and interactions (Denzin and Lincoln 2017). As unfolding learning processes and pedagogical interpretations are highly contextual and shaped by social interactions (Wals 2011), qualitative inquiry gives the tools to understand not only explicit intentions, but also implicit assumptions and contradictions that learners and educators face when being involved in degrowth-informed transformative learning experiences (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019).

Qualitative research further explicitly acknowledges my embeddedness and positionality as influential elements within the research process. The identified normative and transformative nature of degrowth that transcends onto myself and the research is thus methodologically validated through the qualitative study's clarification of critical self-awareness and interpretation of the results (Creswell and Creswell 2018). A qualitative research strategy in sum then supports critical reflexive insights into how and in which aspects of degrowth pedagogies are reflected challenged or refined within existing nonformal ESD practises. All well, but how and where could then any degrowth-informed educational approaches become practised within ESD?

4.2.1. An Exploratory and Descriptive Single Case Study Approach

It is here and under this qualitative framework where the single-case study of the nonformal ESD initiative becomes introduced. Case studies are well-suited to qualitative research, seeking an 'in-depth' (Yin 2017) understanding of complex social phenomena, such as education (Jickling and Wals 2008), in their authentic real-life circumstances. Since this research explores how degrowth-informed pedagogical practices emerge, are negotiated, and critically reflected

within a particular nonformal educational initiative, the case study design follows an exploratory and descriptive nature (Yin 2017). It is exploratory in the sense that it investigates the reflection of degrowth pedagogies within ESD practises where empirical research remains relatively nascent (Getzin 2019). Simultaneously, it is descriptive in providing a detailed and ‘thick description’ (Geertz 2008) of the pedagogical complexity, educators’ reflections, and the dynamics of transformative learning within the selected nonformal educational initiative. While the qualitative, exploratory, and descriptive single-case study design aligns well with the research objectives, it has not been the case that the initiative under study was chosen for pure methodological or theoretical reasons *ex-ante*. Rather and reversely, the connection to the case has emerged beforehand, resulting in the initiation of the conducted research here.

4.2.2. A Nonformal Educational Initiative: ‘WeltTellerFeld’

Indeed, the connection to the nonformal educational initiative WeltTellerFeld (WorldPlateField) emerged out of a completed research internship. Situated on the outskirts of Vienna, Austria, the initiative offers learners and visitors a tangible, hands-on experience on the complex interconnections of the global food system. Spanning approximately 3,000 square meters, the initiative’s field is designed to represent the agricultural land required to sustain the average dietary habits of an Austrian citizen. Visually demonstrating the proportions of land used for various food categories, such as plant-based versus animal-based products, WeltTellerFeld thematises societal and ecological challenges including biodiversity loss, climate change, diseases linked to unhealthy diets, and injustices in global trading relations amongst many more. Educational formats include interactive guided tours and workshops tailored to a wide range of age groups, from primary school children to adult learners. Given its integration of global learning, food system education, and socio-ecological challenges through participatory, action-oriented, and experiential methods, WeltTellerFeld presents a compelling

case for investigating whether and how degrowth-informed pedagogies are reflected and practised within nonformal ESD.

This is particularly the case because during my internship, I became aware that many of WeltTellerFeld's educational approaches harmonize with principles advanced by degrowth particularly, regenerative agriculture (McGreevy et al. 2022; Nelson and Edwards 2020; Guerrero Lara et al. 2023), which is facilitated through exploratory and place-based experiential learning in natural settings (Fitzpatrick, Parrique, and Cosme 2022; White 2024). A particular novelty of WeltTellerFeld is that its educational activities are embedded within natural environments that have been widely recognized as highly supportive of learning objectives (Mann et al. 2022; Beery and Jørgensen 2018), and well-being (Hartig et al. 2014). This place-, and nature-based approach to education is becoming ever-relevant to address the drastically increasing 'nature deficit disorder' (Louv 2013) affecting children and society at large.

While WeltTellerFeld actively engages in ESD through various interactive learning workshops, ESD is not its sole educational focus. Rather, ESD is integrated as part of a broader framework that includes Global Learning and Global Citizenship Education (UNESCO 2025). Most centrally, however, WeltTellerFeld places a strong emphasis on food systems education, exploring topics that closely align with food-related degrowth approaches, including agroecology (Homs, Flores-Pons, and Mayor 2020) and food sovereignty (Roman-Alcala 2017).

It has thus been a methodological decision to focus on ESD and its intersection with degrowth as the analytical focus while acknowledging WeltTellerFeld's connection to other educational frameworks. The rationale for this focus is that ESD is held to be a 'vehicle' for enabling socio-ecological transition (UNESCO 2018), which is however fundamentally challenged both by degrowth and critical ESD scholarship merging on the claimed oxymoron of sustainable

development (Latouche 2010). Precisely because of this tension, ESD presents a critical space for contestation, reinterpretation, and potential transformation (Kaufmann, Sanders, and Wortmann 2019) making it a relevant site for applying the thesis's critical degrowth lens (Getzin and Singer-Brodowski 2016). Against this background and given that parts of WeltTellerFeld align with degrowth perspectives on education and agri-food systems, the initiative holds the potential as a site for degrowth pedagogical practice. Yet, it remains unclear, in which aspects and how degrowth-informed pedagogical practices, aimed at liberating social imaginaries and fostering socio-ecological change, explicitly or implicitly shape its ESD activities.

4.3. Data Collection Methods

To find empirical responses to this question, a multi-method qualitative data collection strategy is used. By combining document analysis, semi-structured interviews, and field observations, this qualitative approach conforms to methodological triangulation, allowing insights to be cross-validated across multiple data sources (Yin 2017; Flick 2018; Creswell and Creswell 2018). The following sections outline each data collection method in detail.

4.3.1. Qualitative Documents Analysis

The primary data collection method covers qualitative document analysis, which is a widely used research technique to enable the systematic examination of written material identifying meanings (Bowen 2009; Prior 2008). Structuring the approach further, qualitative content analysis of selected texts is employed to organise and systematically code selected educational content (Gläser-Zikuda, Hagenauer, and Stephan 2020). The combination of these analytical techniques allows for both an interpretative exploration of thematic content and a structured categorization of key pedagogical elements. A purposeful sampling strategy guides the document analysis to materials directly relevant to the research focus (Palinkas et al. 2015;

Creswell and Creswell 2018). The analysis encompasses two distinct categories of documents: (1) internal educational materials that have been obtained with WeltTellerFeld's agreement, and (2) publicly available secondary sources that provide external perspectives on the initiative's pedagogical approach.

Internal educational materials include WeltTellerFeld's educational concept paper and workshop-specific documents describing its overarching pedagogical perspective and educational objectives. These materials serve as the primary document data sources, as they most accurately represent WeltTellerFeld's formalized self-understanding and pedagogical approach. The significance of these documents lies in their independence from the research process, as they have been produced without my influence, reducing the potential for researcher and response bias, and thereby enhancing the credibility and reliability of the findings (Creswell and Creswell 2018). The educational concept paper outlines WeltTellerFeld's pedagogical orientation, while workshop-specific documents operationalize these principles for different target groups. The main audience groups consist of school children, starting from the sixth grade (approximately twelve years old), though workshops are also conducted for younger children (starting from age seven) as well as for (young) adults.

In addition to internal documents, the analysis incorporates secondary materials (Prior 2008), in the form of publicly available research posters produced by Master's students at the Central European University. These posters examine various aspects of WeltTellerFeld's pedagogical purpose, adaptability, engagement strategies, and learning environment, integrating excerpts from interviews conducted with its trainers. While acknowledging potential limitations utilising these external posters referring to for instance restricted access to the interviews' full transcripts, they nonetheless present valuable insights on the trainers' educational practise and how these are perceived in an academic context. Furthermore, the analysis of secondary materials includes an external book chapter on critical economic and sustainability education,

where the educational approach and didactic positioning of WeltTellerFeld are described within a context of transformative economics education.

The complete selection of educational material is reflected in Table 6 in [Appendix C](#), categorising the documents based on their type, description, target group, and length. By focusing on these internal documents and secondary research materials, the analysis assesses whether degrowth-informed educational principles are explicitly embedded within WeltTellerFeld's formal educational materials or instead emerge implicitly through pedagogical practice. Indeed, the implementation of educational practices largely depends on how trainers interpret and apply the educational concept and specific workshop materials in practice (Biesta, Priestley, and Robinson 2015). Accordingly, the document analysis is supplemented with semi-structured interviews with the teachers giving first-hand accounts on how pedagogical approaches are enacted and interpreted within WeltTellerFeld.

4.3.2. Semi-Structured Interviews

Semi-structured interviews represent a fitting method to investigate the pedagogical interpretation and practise of teachers (Atkins and Wallace 2012; Gubrium et al. 2012; Brown and Danaher 2019). Conducting such interviews enables an exploration that is “deeper into people's experiences” (Halperin and Heath 2020a, 313), particularly suited for analysing WeltTellerFeld's trainers' understandings and practices of ESD. Through flexibly integrating defined- and open-ended questions (Bryman 2012), semi-structured interviews allow the comparison of the trainers' responses when structured by the themes emerging out of the theoretical framework. This structured, yet exploratory approach allows thus the collection of rich, detailed accounts of educators' pedagogical practices and educational objectives while examining how these align, or contrast, with degrowth-informed principles in teaching.

In addition to interviewing three core trainers from WeltTellerFeld, one expert interview was conducted prior to the case study. This conversation served as an initial entry point into the underexplored intersection of degrowth and education. It included discussions on suitable theoretical frameworks, degrowth-aligned pedagogical approaches, and the broader state of research in this field. While the expert interview was originally intended primarily as a background input to guide the research, its relevance to the case study of WeltTellerFeld became more apparent over the development of the research process. Particularly as new pedagogical dimensions emerged inductively, and issues related to funding contexts surfaced, parallels between the experts' experiences and those by WeltTellerFeld became evident (see [Section 6.1.2](#); [Section 6.1.3](#); [Section 6.3](#))

Following this exploratory phase, the empirical focus turned to interviewing educators directly involved in the initiative. Purposeful sampling (Palinkas et al. 2015) is employed to identify WeltTellerFeld's most relevant educators, focusing on their role, engagement, and experience in teaching. The study predominantly selects experienced educators, as their longstanding involvement in the initiative allows a more critical reflection of their continuous teaching practises. Interviews are preferably conducted in-person, but also remotely, depending on trainers' availability. The interviews are conducted in the language most comfortable for the trainers, predominantly German, and are audio-recorded with informed consent before being transcribed verbatim for analysis (Bryman 2012) (see [Section 4.5](#) for further details on consent). The details of the conducted interviews, including the number of educators, their teaching experience, the mode of interview, and the language used, are summarised in Table 3. The number of interviews is confined to 3, guided by the principle of data saturation where no substantial new insight emerged thereafter (Guest, Bunce, and Johnson 2006).

Table 3. Overview of Interviews

	Expert Interview	Interview 1	Interview 2	Interview 3
Experience	/	3.5 years	3.5 years	2 years
Mode	Online	Online	In-person	In-person
Date	06.01.2025	14.04.2025	17.04.2025	23.04.2025
Language	German	German	German	German
Duration	30 min	1 hour	1 hour	1h 20 min

While semi-structured interviews capture educators’ interpretation and practical implementation of the educational concept including the eventual integration of degrowth pedagogies, they nonetheless reflect self-reported experiences inherently shaped by their perceptions and biases (Brinkmann and Kvale 2018). Moreover, the interviews do not capture the real-life interaction between trainers and learners, limiting the understanding of how WeltTellerFeld’s pedagogical approaches unfold in practice. Accordingly, and to address this limitation, the next section introduces the method of field observations where teacher and student’ interactions are directly observed.

4.3.3. Field Observations

To complement and triangulate insights gained from the document analysis and semi-structured interviews (Yin 2017), field observations are carried out to directly observe which aspects and how degrowth pedagogies are reflected, challenged, or refined within WeltTellerFeld’s ESD practices. Observations provide valuable empirical data that go beyond teachers’ self-reported narratives collected through interviews, offering first-hand insights into the “how’s and why’s of human behavior” (Guest, Namey, and Mitchell 2013, iv).

Precisely, given the interactive and participatory nature of WeltTellerFeld's educational settings, a combination of participant and non-participant observation is employed (Yin 2017; Creswell and Creswell, 2018; (Halperin and Heath 2020b). In the trainer-facilitated workshops, I am adopting a non-participant observer role (Guest, Namey, and Mitchell 2013), so that teaching and learning unfold naturally without my direct involvement. While acknowledging that complete detachment from participants' lifeworld may never be fully achievable (Haraway 1988), this direct observer approach (Yin 2017) aims to minimize my influence on the interactions between educators and learners, allowing a realistic examination of eventual reflection of degrowth pedagogies.

Beyond these learner-oriented classes, the scope of observation extends to an introductory day for new teachers and a Train-the-Trainer workshops , where I am adopting a participant-observer role (DeWalt and DeWalt 2011). This more active participation enables an inside perspective to WeltTellerFeld (Yin 2017), invaluable for understanding, not only how new trainers are socialized into its pedagogical approach, but also whether there exist distillable differences between new and experienced educators. Moreover, the Train-the-Trainer workshops enable an immersion into how WeltTellerFeld explains, legitimises, and disseminates its educational and pedagogical approaches to external participants.

Observations across these settings are structured by observation protocols ², ensuring systematic, consistent, and comparable data collection (Halperin and Heath 2020b; Yin 2017). The performed field notes will centralise on the trainers' practised pedagogies contrasting these with within the theoretical framework distilled degrowth-informed educational approaches. Throughout this process, keeping a high level of reflexivity is essential to acknowledge and

² See Appendix D for an example of an observation protocol.

reflect my influence on the observed settings (Finlay 2002; Halperin and Heath 2020b; see [Section 4.5](#) on further ethical research considerations).

Although the initial research design planned for both non-participant and participant observation across multiple educational settings, due to ethical and logistical constraints, the final observations focused exclusively on adult-centred formats. This is because, on the one hand, the time limitations in getting institutional approval significantly constrained this research, while on the other, the high ethical requirements of studying minors proved difficult to meet. Accordingly, the observational focus shifted toward training formats involving only adult participants (educators and external trainers) including an introductory session for new trainers and a Train-the-Trainer workshop as described in Table 4. Despite this shift, the observations still provide rich empirical insights and a ‘thick description’ (Geertz 2008) of how and whether degrowth-informed pedagogies are reflected within WeltTellerFeld’s educational approach.

Table 4. Overview of Field Observations

Observation Session	Type of Observation	Context	Participants	Duration	Observational Focus
Session 1	Participant observation	Introductory schooling day for new teachers	New trainers, old trainers, myself	8 hours	Socialisation into the pedagogical approach, reflection of degrowth-informed educational methods
Session 2	Participant observation	Train-the-Trainer workshop	Trainers, participants, myself	6 hours	Pedagogical and Methodological approaches, communication to outside pedagogics and multipliers

The following Figure 5 synthesises the multi-method data collection process applied in this case study, illustrating how document analysis, field observations, and semi-structured interviews served as complementary sources of empirical insight. This methodological triangulation not only strengthens the research's overall validity (Yin 2017; Creswell and Creswell 2018) but also lays the foundation for the subsequent qualitative content analysis outlined in the next section.

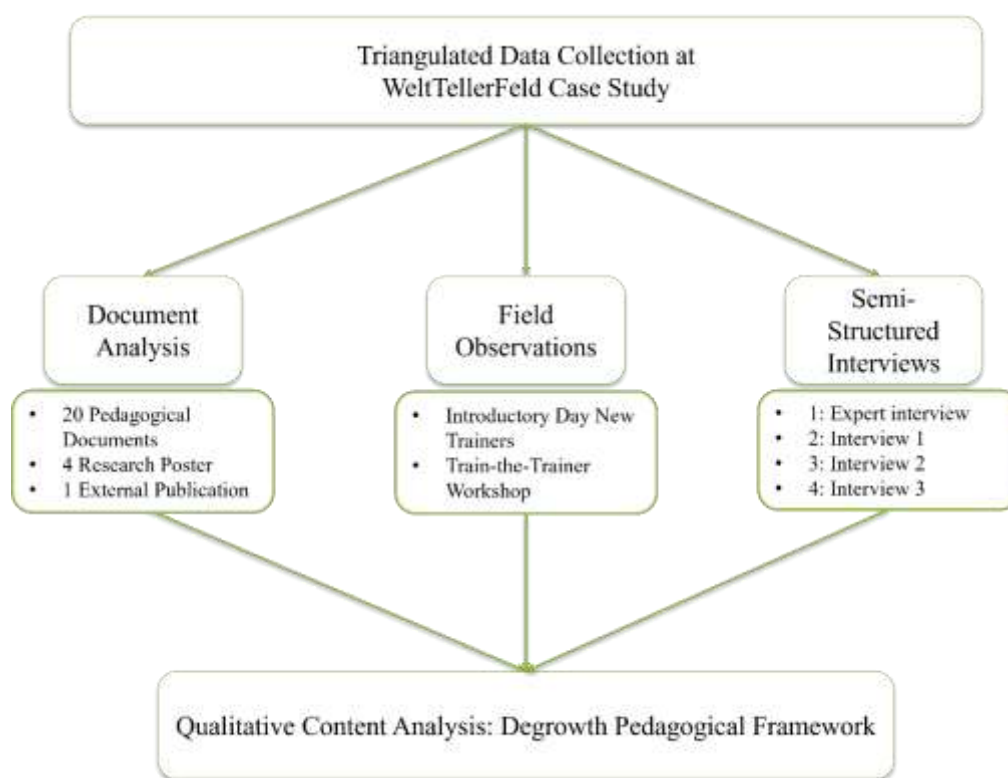


Figure 3. Triangulated Data Collection Methods at WeltTellerFeld (own illustration)

4.4. Data Analysis

Having systematically collected qualitative data through document analysis, semi-structured interviews, and field observations, this thesis uses Qualitative Content Analysis (QCA) as its analytical approach (Mayring 2014; Kuckartz 2014; Creswell and Creswell 2018). QCA enables a systematic, yet flexible, analysis across all three data sources, structuring the collected

data according to categories, codes, or themes³. This approach harmonises with a deductive application (Mayring 2014) of the degrowth pedagogies identified within the theoretical framework, while simultaneously allowing inductive openness to incorporate new insights emerging from the data (Kuckartz 2014). Again, stay put! Deductive simply refers to the application of categories to the data at hand, which are directly derived from a theory or conceptual framework (Mayring 2014). Inductive, conversely, describes that the categories or codes emerge from analysing the data without having a pre-defined set of themes (Kuckartz 2014). The performed QCA in this thesis follows a “deductive-inductive code construction” (Kuckartz 2014, 62; Kuckartz 2019). This means that coding begins with a deductive application of a-priori categories identified in the theoretical framework and is then refined through inductive insights gained throughout the process.

4.4.1. Deductive and Inductive Category Definition

An a-priori category development is employed, based on and derived from the developed theoretical framework, which focuses on degrowth-informed educational approaches. These categories are clearly defined based on the developed theoretical concepts and are presented in Table 5 below.

Table 5. The Degrowth Pedagogical Framework: Deductive Categories and Inductive Extension

Category	Definition / Description	Theoretical Source
Situated-, Action-Oriented-, and Problem-Based-Learning	Learning processes grounded in real-life, complex, and locally embedded social-ecological problems. These advance experiential learning through the interplay of action and	Getzin and Singer-Brodowski (2016)

³ For the purpose of this thesis, these terms will be used interchangeably. Note, however, that these are considered to signify significantly different concepts (see Kuckartz, 2014).

	reflection (praxis), encouraging agency and self-efficacy.	
Phases of Intense Reflection	Critical and collective reflection phases allow learners to examine and potentially shift their meaning perspectives or social imaginaries, often triggered by disorienting dilemmas.	Getzin and Singer-Brodowski (2016); Kaufmann, Sanders, and Wortmann (2019); Getzin (2019)
Re-definition of the Educator-Learner Role	Shift from hierarchical knowledge transmission to dialogical learning, where educators become facilitators and co-learners, supporting learner autonomy and critical questioning.	Getzin and Singer-Brodowski (2016)
Reflection on the role of educational organizations	Reflecting on and eventually challenging the role of formal education reproducing ideologies including growth imperatives and exploring potential alternative institutional designs.	Getzin and Singer-Brodowski (2016)
Politicisation of Education	Recognising education as political while advancing critical consciousness (conscientisation), empowering learners to understand and become active in addressing socio-political and ecological injustices.	Kaufmann, Sanders, and Wortmann (2019); Getzin (2019)

Emotional, Motivational, and Humour-Based Learning	The use of emotional resonance, motivation, humour, and appreciation to facilitate deeper engagement, reflection, and agency. This includes fostering curiosity, empathy, and a sense of joy, while also acknowledging and constructively addressing difficult emotions such as frustration, guilt, or sadness. Trainers actively create emotionally safe learning spaces, offer encouragement, and avoid moralising tones.	Inductively derived during data analysis
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4.4.2. Deductive-Inductive Coding

Following the deductive categories, all collected data including educational documents, interview transcripts, and field observation notes are systematically coded using NVivo for computer-supported QCA (Mayring 2014). The theory-derived categories are operationalised into explicit coding definitions allowing consistent cross-source comparison (Kuckartz 2014). As such, the analysis is sensitive to how pedagogical ideas or educational practises are expressed differently across the various data sources, enabling a comparison between what is documented, said, and done.

This operationalisation is formalised within a code book⁴ that delineates the coding criteria, including clear definitions and anchoring example indicators, allowing transparency and replicability of the analysis (Halperin and Heath 2020c). Coding occurs at the level of meaningful units (Mayring 2014), covering sentences or short passages that represent ideas relevant to the predefined categories, and overlapping codes are applied when data segments

⁴ See [Appendix B](#) for the detailed code book.

align with multiple categories. Whereas the majority of data is analysed within its original German language, deductive application of categories formulated in English⁵ required persistent reflection of arising translation differences.

Although the coding process is primarily guided by the deductive categories, it remains open to inductive modification (Mayring 2014; Kuckartz 2014). Segments of data that do not align with the predefined categories but emerge across the dataset prompt the creation of new (sub)categories, allowing the codebook to evolve in response to gained insights. In this process, an additional category emerged inductively, capturing the role of emotional, motivational, and humour-based learning. This category has been developed in response to reoccurring patterns across the data, highlighting the relevance of affective engagement including both positive (humour or encouragement) and challenging emotions (frustration or discomfort), in facilitating critical reflection and the learning process overall. The final coding structure includes Emotional, Motivational, and Humour-Based Learning, which has been added to Table 5 and the codebook, providing the analytical basis for the presentation of the findings in the Results and Discussion chapter.

4.5. Research Ethics

Having previously briefly mentioned the alignment of this thesis with ethical research principles, this section expands on these considerations in greater detail. As the nature of this research is grounded in a constructivist and transformative worldview and a critical-emancipatory understanding of education, it inherently recognises ethics as relational, situational, and deeply intertwined with questions of power, positionality, and agency (Haraway 1988; Fien 1997; Creswell and Creswell 2018).

⁵ Note here however that categories one to four, as formulated by Getzin and Singer-Brodowski (2016), were originally developed in German.

It is in this vein that the thesis is guided by a constant commitment to care, reflexivity, and mutual respect, not only in relation to WeltTellerFeld but across all stages of the research. Given the qualitative nature of this research, but also its normative and transformative orientation, it becomes imperative to reflect on research ethics that affect WeltTellerFeld, but also my own embedded positionality that deeply shapes the way I collect, present and interpret gained findings.

4.5.1. Ethics and WeltTellerFeld

Given that degrowth, as this thesis' guiding analytical lens, is anything but an unpolarised, politically neutral, and objective concept (Demaria et al. 2013; Schmelzer, Vetter, and Vansintjan 2022), its application to the case study and those involved requires careful reflection. Since degrowth is strongly associated with critiques of capitalism, it may provoke resistance from government bodies, particularly those on which nonformal educational initiatives often rely for funding (Selby & Kagawa, 2011; Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019). Accordingly, a close identification with degrowth might pose reputational or funding risks to the initiative. However, such has been discussed with WeltTellerFeld where permission to name the initiative was granted. Nonetheless, ethical safeguards remained in place to protect the individuals involved. All interviewees have been anonymised, and all internal documents, audio recordings, transcripts, and field notes are stored securely on password-protected devices with access restricted solely to myself.

Additional ethical precautions include that, prior to all data collection, informed consent was obtained from all educators involved in the interviews and field observations. Participants were clearly informed about confidentiality, anonymity, voluntary participation, and their explicit right to withdraw from the study at any stage without consequence (Brinkmann and Kvale 2018; Yin 2017). For field observations within large groups (25+ people), informed consent was

obtained verbally, while providing written information outlining the thesis' rationale, methodology, and objectives. In contrast, when field observations took place within smaller groups (5–10 people), and for all conducted semi-structured interviews, both verbal and written consent were obtained. All ethical procedures adhered closely to Central European University's ethical research guidelines and received approval from the university's Ethical Research Committee prior to the start of data collection.

4.5.2. Positionality, Reflexivity, and Privileges

Taking up a constructivist, normative, and transformative stance within critical social and sustainability sciences, the thesis claims neither neutrality nor objectivity, viewing all knowledge as situated and shaped by values, experiences, and power relations (Haraway 1988; Kothari et al. 2019; Escobar 2018; Fien 1997). As such, my interest and involvement with degrowth, both as an area of academic inquiry and a socio-political project, fundamentally shape the way this research has been performed and how its findings are interpreted.

At the same time, my positionality as a white, cisgender male student in Europe situated and benefitting from Western academic structures amounts to significant privileges. The resulting access to educational opportunities and freedom to research a topic such as degrowth is emerging out of and situated within a capitalist, Westernised academic system. As such, any criticisms towards it and reinterpretations of it are inherently constrained by it, not reflecting any other educational realities or knowledge beyond it. Indeed, the tension that emerges here is that of critically questioning the dominant educational system perpetuating socio-ecological and economic injustices, while simultaneously benefitting significantly from it through the receiving of multiple study stipends, enabling this research in the first place. Acknowledging this paradox of concurrent critique and complicity is fundamental for this thesis, and any of its findings must be regarded against this condition. Following Kaufmann, Sanders, and Wortmann

(2019), I echo the recognition that “trying to pluralize perspectives from a position that is ‘White and academic’ is difficult” (932). Any discussions and approaches to socio-ecological transformations must remain cognisant of questions of positionality, privileges, power, epistemic injustices and historical exclusions of knowledge production (Fricker 2007).

In addition to these structural considerations, I also bring a more personal layer of positionality through my prior involvement with WeltTellerFeld as a former intern. While it allows me to obtain deep-reaching insights, it simultaneously necessitates a constant reflection between the roles of being a researcher and an engaged individual. Embracing a consistently critical and reflective stance on how my positionality shapes not only data collection, interpretation, and analysis, but also my engagement with participants, is imperative for this thesis. Positional entanglements, especially arising from my dual role as a researcher, former intern, and engaged individual, are carefully navigated throughout the research. Using strategies such as dialogical interviews, participant feedback, and constant critical reflexivity (Brinkman and Kvale 2018; Freire 2014; Creswell and Creswell 2018), aim to create a mutually respectful and conducive research atmosphere when engaging in on-the-ground research.

Although the research has received no external financial support, I recognise that writing this thesis emerges from a position of privilege. The simple acknowledgement of such privilege is however not enough, relegating the advantaged position towards becoming active in finding responses for addressing identified socio-ecological crises (Neubauer 2025). This responsibility aligns with the transformative nature of this research, to which the thesis aims to make a meaningful contribution. At the same time, it is important to recognise that, despite these ethical and methodological commitments, certain limitations remain inherent to this research design. These are critically examined in the Discussion chapter in Section [6.4 Limitations and Methodological Reflections](#). Without pre-empting these considerations, however, the following chapter first presents the empirical findings.

CHAPTER FIVE: RESULTS

In this chapter, the empirical results from the multi-method qualitative analysis, covering document analysis, field observations, and semi-structured interviews at WeltTellerFeld, are presented. The subsequent analysis is structured according to the five deductively derived degrowth pedagogies introduced in the theoretical framework including: 1) Situated, Action-Oriented, and Problem-Based Learning, 2) Phases of Intense Reflection, 3) Re-definition of the Educator-Learner Role, 4) Critical Reflection on Educational Institutions, 5) Politicisation of Education. In addition, one inductive category, Emotional Learning is added in between the second and third category, reflecting the emergence of a new pattern identified during the coding process.

Each section opens with a brief reference to the theoretical literature underpinning the respective pedagogical approach, followed by an analysis of how and in which aspects WeltTellerFeld's Education for Sustainable Development (ESD) practices reflect, challenge, or refine degrowth-informed pedagogical approaches. The analysis synthesises empirical insights, supported by illustrative quotes and examples from all data sources to highlight WeltTellerFeld's educational approaches. Empirical references are provided via footnotes, clearly indicating the data source. The original German quotations corresponding to these references are compiled in [Appendix C](#) and can be cross-referenced using the [G#] markers. While the presentation of results here aims to remain primarily descriptive and grounded in the data, I acknowledge that qualitative analysis always includes some form of interpretation, particularly, in the selection, organisation, and contextualisation of the empirical material. Followingly, interpretive analysis, theoretical reflection, and critical discussion of these findings are reserved for the subsequent Discussion chapter.

5.1. Problem-Based, Action-Oriented, and Situated Learning

One of the aims of degrowth-informed pedagogical approaches is to guide learning by helping students find solutions to relatable problems through hands-on, exploratory methods within a relevant and contextualised environment. Such aims to create an experiential learning space, where students can both reflect on and act upon the issues at hand, and foster a sense of self-efficacy, which is significant not only for individual but also for collective transformations toward socio-ecological change (Getzin and Singer-Brodowski 2016).

For WeltTellerFeld, the focus on problem-based, action-oriented, and situated learning is already present in the initiatives' conceptualisation. This focus runs through WeltTellerFeld's entire educational understanding and approaches, a foundation that is outlined in the educational concept paper centralising on "action-oriented" or "hands-on learning".⁶ Similar orientation has been confirmed by the interviews and field observations, where the interactive and perceptible educational element is key through a "holistic educational approach"⁷, with "learning via self-experience and movement".⁸ WeltTellerFeld follows here a constructivist pedagogy that is inspired by Pestalozzi's maxim of learning with "head, heart and hand".¹

5.1.1. Problem-based learning

At WeltTellerFeld, problem-based learning is often embedded in playful and interactive formats that lead to critical reflection on pressing sustainability challenges, as evidenced by some of the activities covered in this paragraph. Importantly, the discussed problems are tailored to the "living worlds"⁹ of the participants so that they can relate to the issues within their everyday lives while finding direct application of co-creatively identified solutions. Examples include

⁶ Educational Concept Paper Short, Ref. 4, [G1]

⁷ Interview 1, Ref. 6; [G2]

⁸ Protocol, 29_03, Ref. 3; [G3]

⁹ Educational Concept Paper Long, Ref. 16; [G4]

letting learners trace the origins of their last meal or position themselves on an imaginary spatial axis to indicate levels of food waste or gardening experience.¹⁰ The outcomes of the learners' own experiences and habits are then collectively reflected in terms of their socio-ecological impacts, while offering low-threshold actions towards their redress through, for instance, choosing seasonal and regional food, reducing meat consumption, or avoiding food waste.

The thematization of further issues such as food- and climate justice, biodiversity loss, or land use is addressed through interactive formats including simulation role plays like the “Climatebingo”¹¹, where learners are invited to interact with one another finding a peer who, for instance, “[has] been to a climate demonstration”¹¹ above or “is vegan or eats a vegetarian diet”.¹² Another critical example is the method of inviting learners to stand inside a one-square-meter area, which simulates the living conditions of twenty conventionally raised chickens.¹³ Through this distinctive spatial metaphor, learners are encouraged to simultaneously physically and emotionally imagine the lives of these chickens, culminating in discussions on meat consumption, industrial agriculture and animal welfare. While these methods are neither purely cognitive nor aim to be “moralising”¹⁴, they are meant to guide the learners to find entry points into sustainability challenges.

Importantly, these challenges are not treated as endpoints, but as starting points intended for critical discussion and solution-oriented thinking. Representative for such an approach is WeltTellerFeld's aim to implement a “solution-oriented rather than a problem-centred approach”¹⁵, against the “negative background of years of problem- and disaster-focused communication”.¹⁶ Interviewee 2 echoes this, noting both the importance and the difficulty of

¹⁰ Workshop for Adults; Basic Workshop 1

¹¹ School Workshop, Three W's, Document 3

¹² School Workshop, Three W's, Document 3

¹³ Observation Protocol 09_04, Ref. 6

¹⁴ Educational Concept Paper Short

¹⁵ Educational Concept Paper, Long, Ref. 22; [G5]

¹⁶ Educational Concept Paper, Long, Ref. 42; [G6]

“stepping out of the problem-oriented context and moving more towards the solution”.¹⁷

Accordingly, problem-based learning is not solely understood as creating problem awareness, but also as the commencement point from which constructive solutions can be collectively identified and acted upon.

5.1.2. Action-Oriented Learning

For WeltTellerFeld, action-oriented learning represents the most fundamental educational philosophy and approach. This is because almost all of its learning approaches are in principle connected to hands-on, physical, experiential, sensory, and empowering experiences.¹⁸ This takes the shape of learners planting, weeding, or harvesting, utilising agricultural tools or simply their hands, during workshops that are typically divided into a theoretical part covering the respective themes, accompanied by an agricultural part where the “chatting stops and the real action begins”.¹⁹

The relevance of such practical work is underscored by its perceived deeper resonance with learners compared to more passive, classroom-based learning.²⁰ One trainer explains that “the most effective learning happens through [the] hands ‘into the brain’”²¹, suggesting that learning through physical action enables stronger internalisation of knowledge. At the same time, the resonance and accessibility of theoretical topics are occasionally questioned, particularly given the abstract and complex nature of sustainability challenges such as land use in food systems.²² However, these are designed to be counterbalanced by the agricultural components of the workshops, which help to “make it really tangible and perceptible”.²³ The action-oriented

¹⁷ Interview 2, Ref. 11; [G7]

¹⁸ Educational Concept Paper, Long, Ref. 7; [G8]

¹⁹ Observation Protocol 29_03, Ref. 9; [G9]

²⁰ Interview 2, Ref. 6

²¹ Interview 1, Ref. 4; [G10]

²² Interview 2

²³ Interview 2, Ref. 3, 4; [G11]

learning approach is however not confined exclusively to the agricultural parts of the workshops or education. Further practical learning methods include responding to guiding questions by physically positioning oneself along an imaginary spatial axis to reflect on experiences, engaging in movement-based energisers, or exploring the field independently in small groups using educational signboards as prompts.

5.1.3. Situated Learning

The situated learning component is the last elementary component of WeltTellerFeld's pedagogical approach. Across all data types, references highlight its place-based multi-sensory learning environment in contrast to conventional classroom sources.²⁴ WeltTellerFeld aims to make complex sustainability topics "*be-greifbar*" (comprehensible), not only in the sense of being understandable but literally graspable through physical action on-site.²⁵ This focus on place-based education is described by trainers as a response to a broader perceived "societal disconnection from food systems".²⁶ One educator refers to this in terms of 'Entfremdung' (alienation), noting: "We live in a society where there are no or hardly any points of contact between food production and consumption. [...] It's all totally alienated."¹⁸

WeltTellerFeld strives to address this disconnect by creating tangible, experiential points of contact (Berührungspunkte) between the learners, and the food systems, represented through the field, that nourish them.²⁷ As such, the field site is described as "always open and freely and publicly accessible [where] anyone can go [...], free of charge"²⁸, and is seen by trainers as a space where such reconnections can occur across age groups and backgrounds. One educator further noted that some learners rarely spend time outdoors, and suggested that for these

²⁴ Interview 2, Ref. 6

²⁵ Educational Concept Paper, Long, Ref. 1

²⁶ Interview 2, Ref. 1; [G12]

²⁷ Interview 1, Ref. 1

²⁸ Interview 1, Ref. 1; [G13]

students, simply wandering through the fields is “much more important than getting the facts that like two-thirds of agricultural land is for animal food production”.²⁹ This form of exploration, where learning is understood to occur through experience and curiosity, is consistently described in interviews as having particular relevance for learning processes and their success overall.³⁰

This notion of situatedness is described not only in terms of physical space but also in relation to the learners’ own life situations. According to the concept paper, content and methods are “consistently adapted to the respective target group’s “life topics” and “living worlds”.³¹ This learner-centred contextualisation is linked to examples of everyday-applicable solutions, which are intended to be easily implemented in learners’ daily lives. The empirical findings across the data sources indicate, that by combining physical and relational situatedness, WeltTellerFeld seeks to make its education relevant, accessible, and actionable, allowing learners to connect rather abstract sustainability challenges such as climate change, biodiversity loss, or land degradation to their own experiences and practises.

Although these problem-based, action-oriented, and situated learning approaches have here been presented individually, it is important to emphasise that within WeltTellerFeld’s educational activities, they appear to converge significantly. An illustrative example is the chicken density exercise, where critical thinking of the food system (problem-based), is merged with incentivised physical positioning (action-oriented) while it takes place on the premises of the agricultural learning field (situated). This convergence exemplifies WeltTellerFeld’s holistic educational approach in relation to the first degrowth-informed pedagogical approach.

²⁹ Interview 3, Ref. 1; [G14]

³⁰ Interview 3, Ref. 3-4; [G15]

³¹ Educational Concept Paper, Long, Ref. 13, 14; [G16]

5.2. Phases of Intense Reflection

Building on the second category of degrowth-informed pedagogical approaches, this section focuses on phases of intense reflection, which typically follow problem-based learning activities. These reflection phases are designed to supportively engage learners in the discussion of disorienting or unsettling issues (Getzin and Singer-Brodowski 2016). The aim is to foster a shared awareness of the problems at hand while centring learners' own roles within these, ultimately, contributing to a shift in meaning perspectives or social imaginaries and prompting corresponding action.

These phases of intense reflection are deeply embedded in WeltTellerFeld's educational approach, aiming to instil a sense of contemplation, while simultaneously offering pathways toward self-efficacy. As one educator highlights, the focus is not primarily on conveying factual knowledge, but rather on the non-moralising "stimulation of critical thinking and reflecting".³² Across a variety of formats, learners are encouraged to engage in individual introspection and collective meaning-making. In the workshop, "Why, How Much, From Where"³³ below, for instance, learners are invited to respond to reflective prompts such as "What do I want and can I realise it?"³³ below, "What will I tell others"³³ below, or "What fascinated/frightened me".³³ These questions encourage learners to process both the theoretical and practical dimensions of their experience at the learning site and to consider whether they see any personal actions resulting from it.

Importantly, when sensitive, potentially disorienting and emotionally charged issues, such as meat consumption or social injustice, are addressed, trainers aim to guide the process by "quickly turning the corner to motivation".³⁴ A telling example is a learner who felt discouraged

³² Interview 3, Ref. 1, 2, 4, 5; [G17]

³³ Workshop Three W's, Document 1, Ref. 3; [G18]

³⁴ Interview 2, Ref. 13; [G19]

because they wanted to eat chicken nuggets after having explored the problems of industrial poultry farming, and was able to reframe this as an opportunity to opt for plant-based nuggets, fostering a sense of agency and self-efficacy.³⁵ The underlying pedagogical strategy is to collectively acknowledge, confront, and address any emerging negative emotions, while simultaneously using their “force to reinterpret [the experience] constructively”.³⁶

Moving these reflections from the individual level of “What can, and will I do?”³⁷, to collective questions such as “What should we do as a class?”³⁷ above and “What should companies and politics do, if the entire world were listening[?]”³⁷ above, signifies a deliberate shift toward discussing the different forms and levels of agency and responsibility involved in addressing socio-ecological challenges. These reflections leaning more towards systemic structures are also well integrated during workshops themselves, where the ‘cocoa trading simulation game’ is a striking example.³⁸ Here learners take on the roles of cocoa farmers, while only a few act as chocolate traders, representing the unequal trading conditions of the global cocoa market. The simulation aims to deliberately evoke emotions such as stress, discomfort, or even guilt, letting learners experience the powerlessness of cocoa farmers, which is intensified by trainer comments such as “you cannot buy food if you don’t sell [cocoa]”.³⁹

These experiences which can serve as “shock moments”⁴⁵ below for the learners, are intentionally not left unprocessed, so as not to “leave the people standing in front of the hole”.⁴⁰ They are used as entry points for collective and critical reflection. Within these reflections, more systemic issues, such as global trade injustices shaped by “(neo) colonial practices”⁴¹, are broken down into more accessible components through guiding questions like “How was the

³⁵ Interview 2, Ref. 9

³⁶ Interview 2, Ref. 4; [G20]

³⁷ Workshop Three W’s, Document 1, Ref. 1; [G21]

³⁸ Workshop Fair & Climate Friendly, Document 3

³⁹ Observation Protocol 29_03, Ref. 2; [G22]

⁴⁰ Interview 2, Ref. 10; [G23]

⁴¹ Observation Protocol 29_03, Ref. 1; [G24]

situation for the farmers, traders, and are you satisfied with the results[?]”.⁴² This reflective process is then brought back to learners’ everyday realities through simple, relatable questions like “Who likes to eat chocolate?”⁴³, an approach intended to situate global injustices within students own lived experience. The goal here is to open up a space where learners may recognise their own privileges and prejudices before these can be critically questioned and dismantled through what has been described as “reflective empathy”.⁴⁴

When learners are confronted with sensitive issues that touch on their own positionalities, a key question emerges: are they moved at all, and if so, to what extent, in their meaning perspectives or social imaginaries? Interviewees describe a wide spectrum of responses, from brief “aha experiences”⁴⁵ to moments where the impact remained elusive or difficult to grasp, with uncertainty expressed about the durability of such reflections. Interviewee 3, for example, believes that such moments “cannot but be thought-provoking”⁴⁶, even if the effect is not immediately visible. In contrast, interviewee 2 observes signs of learner engagement and eventual shifts of meaning perspectives each time but questions the long-term effect, noting that the initial emotional and cognitive response often “evaporates and is overplayed”.³⁶ On the resulting question of lasting impact, interviewee 1 recalls, in contrast again, meeting a school class that attended a workshop half a year ago where half of the class “knew exactly who I was, what we talked about, [...] [and] what we did”.⁴⁷

The disorientation that arises from discussing these sensitive issues is, at times, deliberately provoked through specific methods. As interviewee 2 explains, “you want to be disruptive, you want to disturb, and you actually want to deliberately provoke the shock up to a certain point”⁴⁸,

⁴² Workshop Fair & Climate Friendly, Document 3

⁴³ Workshop Fair & Climate Friendly, Document 3; [G25]

⁴⁴ Observation Protocol 29_03, Ref. 7, 8

⁴⁵ Interview 2, Ref. 2; [G26]

⁴⁶ Interview 3, Ref. 10; [G27]

⁴⁷ Interviewee 1, Ref. 6; [G28]

⁴⁸ Interview 2, Ref. 8; [G29]

aiming to uncover learners' "cognitive dissonances".⁴⁸ above This process of disorientation is also metaphorically described as "pulling back the curtain"⁴⁹, stressing however, that although it may occur intentionally and is willingly provoked, it needs to be apprehended and translated into a constructive form.⁵⁰ Since it is argued that "it is not enough to know something, because knowledge in itself doesn't lead to action"⁵¹, value-free and supportive guidance towards the collective finding of alternative solutions aims to "achieve this feeling of 'it's my business', not an 'I know something', but an 'I want something'".⁵² Once the learners realise that it is their own "desire" or "reasoning" if they "don't buy the meat, buy the organic version or, prefer the Austrian item"⁵³, the intended learning process is considered successful.

The collective development of alternative solutions further expands the reflection process, often through playful imagination and utopian exercises. For the cocoa trade simulation, for instance, learners are prompted with questions like "how can we imagine a fair cocoa trade[?]"⁵⁴, encouraging them to imagine cocoa markets free of child labour, unequal trade relations, or (neo)colonial production structures.⁵⁵ Further methods include a "supermarket of the future"⁵⁶, a "dreaming method"⁵⁶ above, or the imagining of an "ideal world"⁵⁷ below, where the learners, but also the trainers themselves, are invited to share and concatenate their ideas, always adding "yes, and..."⁵⁷, resulting in co-creatively imagined realities. On the imagining of an ideal world, an example includes "a society that is a bit slower, because everything is interconnected [...],

⁴⁹ Interview 2, Ref. 8; [G30]

⁵⁰ Interview 2, Ref. 4

⁵¹ Interview 2, Ref. 10; [G31]

⁵² Interview 2, Ref. 9; [G32]

⁵³ Interview 2; [G33]

⁵⁴ Observation Protocol 29_03, Ref. 5; [G34]

⁵⁵ Observation Protocol 29_03, Ref. 1

⁵⁶ Observation Protocol 09_04, Ref. 3

⁵⁷ Interview 3, Ref. 3

[and] if you start living like this, you do not need so many material things and somehow see the wealth in everything and stop this rushing around.”⁵⁸

5.3. Emotional, Motivational, and Humoristic Learning

Beyond these deliberately initiated phases of critical reflection, another significant pedagogical dimension emerged inductively from the data: the role of emotional, motivational and humoristic learning. While at times overlapping to some extent with the category of intense reflection phases, this dimension captures how emotional engagement, humoristic approaches, and the fostering of motivation are deliberately used, aiming at safe and empowering learning environments. The following section outlines the empirical results of this category before a theoretical and critical discussion in the succeeding [Section 6.1.3](#) of the Discussion chapter.

The emotional, motivational, and humoristic learning approach is enshrined in WeltTellerFeld’s very understanding of education, and its implementation. Representative of this is the addition of humour to the learning by head, heart, and hand, in reference to Pestalozzi (see [Section 5.1](#)), arguing that a “humorous attitude makes it easier [...] to critically question [...] food consumption and avoid a moralising tendency”.⁵⁹ Based on this maxim, motivation and fun are intended to inspire sustainable action, particularly in the context of reducing environmental impacts.⁵⁹ above On the often sensitive topic of meat consumption and livestock farming, one approach trainers use to avoid provoking defensive reactions is to incorporate irony or humour. By making light of the situation, educators aim to ease the weight of the challenges discussed, so that learners do not feel attacked or become closed off to the topic.⁶⁰

This use of humour forms part of a broader motivational approach aimed at addressing the emotional weight and perceived frustration that especially young learners experience when

⁵⁸ Interview 3, Ref. 3; [G35]

⁵⁹ Educational Concept Paper, Short, Ref. 1; [G36]

⁶⁰ Interview 2, Ref. 9

confronted with complex sustainability challenges such as climate change, food system impacts, and land degradation including biodiversity loss.⁶¹ While acknowledging “that the transitions occurring momentarily are not easy”⁶², importance is ascribed to creating a space where learners “feel secure”⁶³ and where collective open-minded engagement is both encouraged and supported.⁶⁴ Here the learning is predicated on honesty and voluntariness, allowing students to “look away”⁶⁵. Simultaneously, it is aimed to motivationally point towards low-threshold actionable solutions that learners may implement within their everyday lives such as food, dietary, and consumption changes.⁶⁶

While emotional reactions are sometimes intentionally provoked⁴⁸, they also often emerge more naturally, when sensitive topics, such as meat or cocoa consumption, are addressed, particularly when these are associated with injustices that directly confront learners' own privileges.⁶⁷ On the method of visually demonstrating the living space of conventionally held chicken, reflexive questions like “imagine you were the chicken, how would you feel?”, or the more personalised “how would your pet feel if it had the same space as a farm animal?”⁶⁸, are used to deliberately shift the discussion “from a factual to an emotional level”.⁶⁹ Both negatively and positively connoted emotions, such as sadness, humour, or motivation, are considered “strong impulses for learning successes”⁷⁰, with one trainer noting that “building something emotional always lasts longer”.⁷¹ Although interviewee 1 argues that negative emotions tend to resonate more strongly with learners⁷², it is only so if learners’ reactions are

⁶¹ Educational Concept Paper, Long

⁶² Interview 3, Ref. 11; [G37]

⁶³ Research Poster 4, Ref. 2

⁶⁴ Interview 3, Ref. 8, 11, 12; Interview 2, Ref. 2

⁶⁵ Interview 3, Ref. 1; [G38]

⁶⁶ Educational Concept Paper, Short, Ref. 1; Research Poster 3, Ref. 2

⁶⁷ Observation Protocol 29_03, Ref. 2; Observation Protocol 09_04, Ref. 2

⁶⁸ Observation Protocol, Ref 5.; Interview 2, Ref. 6; [G39]

⁶⁹ Interview 2 Ref. 6; [G40]

⁷⁰ Observation Protocol 09_04, Ref. 6; [G41]

⁷¹ Observation Protocol, 09_04, Ref. 10; [G42]

⁷² Interview 1, Ref. 7, 8

non-judgmentally and responsibly intercepted and guided.⁷³ Rather than relying on so-called “disaster pedagogy”⁷⁴, the acclaimed objective is to transform such emotional reaction into motivational momentum, supporting learners in overcoming any potential arising paralysis.⁷⁵

This inspiration for motivational action is also metaphorically described as the “kind[ling] of little flames”.⁷⁶ Such sparks are believed to be more easily ignited when teaching does not rely solely on factual knowledge, which, as one trainer put it, “usually bounces off at some point”⁷⁷, but instead targets learners’ emotional perception points, providing “more air for the little flame”.⁷⁷ above Reaching these emotional perception points is also seen as crucial for what one interviewee referred to as “pulling back the curtain”⁷⁸, a metaphor for moments when learners confront unsettling insights or see a topic in a radically new light. In such moments, the importance of not leaving learners alone in their disorientation is strongly emphasised.⁷⁹ The educational process instead aims to tie the emotional impact to redressive solutions, often through reflexive questions like “How would you like it to be?”⁸⁰ that invite learners to “to draw their own utopia”.⁸² below

These arising emotions are aimed to be acknowledged and collectively worked through by asking, “how would we like this negative feeling to go away so that it is no longer necessary in the future”.³⁶ above Utopian approaches like these are seen as “much more effective than dystopias”⁸¹ because they sustain motivation and “create this desire, not the aversion, not this ‘no, I do not want that’, but [...] awaken the longing.”⁸² WeltTellerFeld’s emphasis on

⁷³ Observation Protocol 09_04, Ref. 6; Interview 2, Ref. 9; Interview 1, Ref. 6

⁷⁴ Interview 1, Ref. 7; [G43]

⁷⁵ Interview 2, Ref. 20

⁷⁶ Interview 2, Ref. 3; [G44]

⁷⁷ Interview 2, Ref. 8; [G45]

⁷⁸ Interview 2, Ref. 15; [G46]

⁷⁹ Interview 2, Ref. 13; Observation Protocol 09_04, Ref. 7

⁸⁰ Interview 2, Ref. 6; [G47]

⁸¹ Interview 2, Ref. 19; [G48]

⁸² Interview 2, Ref. 20; [G49]

emotional engagement is perhaps best summarised by one trainer's statement: "if you allow all emotions, the good as well as the difficult, they become easier to process, making life richer and more beautiful."⁸³

5.4. Re-definition of Trainer-Learner Roles

This section continues with the results of the third degrowth-informed pedagogical approach, which refers to the redefining of traditional teacher-learner roles towards more dialogical and participatory learning that takes place on eye level (Getzin and Singer-Brodowski 2016). Here, learners' knowledge, experience, and positionalities are integrated into the learning process, acknowledging where learners are standing, while engaging them actively to co-create responses to collectively identified challenges.

To understand WeltTellerFeld's approach to trainer and learner roles, it is helpful to begin with the initiatives' educational conceptualisation as outlined in its workshop materials and concept papers. Here, not only learning but education as a whole is framed as participatory, with "learning and teaching [being] organized along the lines of a dialogue".⁸⁴ For this to unfold effectively, it must be reflected not only in the "dialogical attitude of the facilitator"⁸⁴ above but also in the themes and materials used. Dialogical questions such as "Why do you think that?"⁸⁵ or "What was your last meal?"⁸⁶, seek to appeal to learners' positionalities, "picking them up where they stand"⁸⁷. In this sense, WeltTellerFeld aims to move away from teacher-led monologues and instead foster "real questions and conversations"⁸⁸, leading to "collective decisions of the problem conditions".⁸⁹

⁸³ Interview 3, Ref. 3; [G50]

⁸⁴ Educational Concept Paper, Short, Ref. 5; [G51]

⁸⁵ Interview 3, Ref. 3; [G52]

⁸⁶ Workshop for Adults; [G53]

⁸⁷ Educational Concept Paper, Long, Ref. 3; [G54]

⁸⁸ Observation Protocol 29_03, Ref. 8; [G55]

⁸⁹ Observation Protocol 09_04, Ref. 5; [G56]

Through this interrogative approach, trainers aim to distil “the state of knowledge”⁹⁰ within the learning group, while also trying to identify the themes and topics that “excite”⁹¹ the students. The learning process is considered to be most fruitful when the learners themselves “shape the educational formats through their input”⁹², finding their own explanations and conclusions “through what they have experienced”.⁹³ Guiding the learning process according to students’ own interest and enthusiasm is believed to lead to the most meaningful outcomes.⁹⁴ As one interviewee put it, learners are no longer simply “Teilnehmer:innen” (participants), but rather “Teilgeber:innen” (contributors)⁹⁵, bringing their own valuable knowledge, stories, and “needs, will and views of the world”⁹⁶ into the workshop.

Whereas these participatory and dialogical forms of education seek to fully integrate the learners, they simultaneously hinge starkly on a particular conceptualisation of the trainers’ role. This understanding holds that the trainer, the learner, and the content are “in a relationship with each other [...] characterised by mutual dependencies”⁹⁷, with the learner and trainer specifically engaged in a “dialogical relationship”.⁹⁸ Interviewees stress a departure from more traditional and hierarchical teacher-learner understandings, towards an “authentic and on eye-level”⁹⁹ relationship. Whereas learners are not considered to be mere participants⁹⁵, trainers themselves are believed to be “companions”¹⁰⁰ or “enablers”¹⁰¹, aiming towards the empowerment of learners “igniting their flame”.¹⁰² This relational approach is grounded in

⁹⁰ Observation Protocol 09_04, Ref. 3; [G57]

⁹¹ Interview 3, Ref. 5

⁹² Educational Concept Paper, Short, Ref. 5; [G58]

⁹³ Workshop Fair & Climate Friendly, Ref. 1; [G59]

⁹⁴ Interview 3, Ref. 5

⁹⁵ Interview 1, Ref. 7; [G60]

⁹⁶ Interview 3, Ref. 2; [G61]

⁹⁷ Educational Concept Paper, Short, Ref. 6; [G62]

⁹⁸ Educational Concept Paper, Long, Ref. 12; [G63]

⁹⁹ Educational Concept Paper, Long, Ref. 16; [G64]

¹⁰⁰ Interview 1, Ref. 10; [G65]

¹⁰¹ Interview 3, Ref. 8; [G66]

¹⁰² Interview 2, Ref. 3; [G67]

“mutual respect”¹⁰³, “appreciation and trust”¹⁰⁴, aims to create safe, non-judgemental spaces that foster a “greater desire to learn and confidence to explore boundaries”.¹⁰⁵

The effort to “keep the hierarchy as flat as possible”¹⁰⁶, and to avoid “talking down to people [or] [...] imposing anything on anyone”¹⁰⁷, is complemented by the recognition that “there has to be some form of hierarchy and a clear division of roles”.¹⁰⁸ This “tension”¹⁰⁹ is described as an “exciting balancing act”¹¹⁰, one that involves “clearly drawn boundaries”¹¹¹, while remaining adaptable to context.¹¹¹ above An illustrative example is trainers’ handling of a particularly hot summer day: Instead of strictly insisting that learners continue with the workshop program, trainers aim to tease out the boundaries of participation, probing learners’ willingness while offering breaks and encouragement. Ultimately, there is a strong belief that “people are basically good”¹¹² below, and that by “encouraging critical and independent thinking”¹¹² below, learners are capable of “coming up with good solutions for society as a whole.”¹¹²

5.5. Reflection on the Role of Educational Organizations

This final degrowth-informed pedagogical approach, as outlined by Getzin & Singer-Brodowski (2016), focuses on critically questioning the value, legitimacy, and effectiveness of formal educational systems and institutions. In this category, it is reflected how schools or universities may engage in the perpetuation of performance logic and competitive thinking, thereby reinforcing the growth paradigm within learners’ social imaginaries. In contrast,

¹⁰³ Observation Protocol 29_03, Ref. 11; Interview 1, Ref. 5, 6

¹⁰⁴ Interview 3, Ref. 11

¹⁰⁵ Interview 2, Ref. 11; [G68]

¹⁰⁶ Interview 2, Ref. 2; [G69]

¹⁰⁷ Interview 2, Ref. 2; [G70]

¹⁰⁸ Interview 3, Ref. 9; [G71]

¹⁰⁹ Interview 3, Ref. 7

¹¹⁰ Interview 3, Ref. 12; [G72]

¹¹¹ Interview 3, Ref. 12; [G73]

¹¹² Interview 3; [G74]

alternative educational approaches are seen as enabling a shift away from the (social) reproduction of knowledge in the sense of Freire's (2014) 'banking model of education', and toward more critical, emancipatory, dialogical, and problem-posing forms of learning. These approaches aim to support the liberation of learners, and ultimately, when acted upon, contribute to the contestation and transformation of structural injustices.

WeltTellerFeld understands itself as an "extracurricular and publicly accessible learning location"¹¹³ that distinguishes itself from formal educational formats "thanks to the setting, the nonformal learning environment, and the defined basic attitudes".¹¹³ above Whereas this describes the learning space as 'extracurricular', typically visited by school classes as part of excursions, it is nonetheless seen as embedded within broader "school setting, where the teacher is also present".¹¹⁴ This presence of formal educators, who may "at times have certain expectations"¹¹⁴ above, is considered potentially beneficial for the on-site learning process, particularly when the teacher is highly motivated and has prepared the students well.¹¹⁵

At other times, however, educators at WeltTellerFeld observe what they describe as the "mannerisms of the teacher ruling with an iron fist"¹¹⁶, which may negatively impact the learning experience. In some cases, formal teachers have been seen to "answer questions for the children"¹¹⁷, a behaviour that is attributed to their desire for the class to make a good impression or to feelings of "shame when the children do not know something."¹¹⁸ During field observations on the 29th of May, a roundtable discussion with new and experienced trainers at WeltTellerFeld focused on situations in which the actions of accompanying schoolteachers significantly interfered with the workshops. Counterstrategies discussed included consciously

¹¹³ Educational Concept Paper, Long, Ref. 2; [G75]

¹¹⁴ Interview 3, Ref. 1; [G76]

¹¹⁵ Interview 1, Ref. 11

¹¹⁶ Interview 1, Ref. 7; [G77]

¹¹⁷ Observation Protocol 29_03, Ref. 4; [G78]

¹¹⁸ Interview 1, Ref. 12; [G79]

avoiding the internalisation of teachers' potential prejudices toward students, clearly defining roles to reinforce the nonformal nature of the learning environment, and carefully managing the authority of teachers during the sessions.¹¹⁷ above¹¹⁹

Regardless of WeltTellerFeld's extracurricular nature, it is believed that formal educational systems nonetheless exert influence on the nonformal learning experiences that take place on site.¹²⁰ When asked whether trainers observe particular notions of learning among visiting school classes¹²¹, interviewee 2 remarks that there has never been a workshop without traces of "competitive thinking and the idea that one's own performance is measured by the performance of others".¹²² Such benchmarking is believed to be "ubiquitous"¹²² abovein formats linked to formal education and is described as "a barrier to learning, when it is no longer about the topic, but about supposedly handling the topic better than the others".¹²³ To counteract this mindset, trainers often explicitly state: "Hey everyone, it's not about performance, it's about you learning something"¹²⁴, while also acknowledging the limited ability "to get that out of people's heads in two and a half hours".¹²⁵ While interviewee 3 aims to personally "move as far away possible from the performance mindset"¹²⁶, they also acknowledges that competitive educational approaches can hold some value.¹²⁶ aboveThey stresses, however, that the workshops at WeltTellerFeld are "for once not about performance, but simply about discovering and learning through play and developing curiosity".¹²⁷ Nevertheless, certain formats do incorporate competitive elements, such as the cacao trading simulation game, where the competition

¹¹⁹ Observation Protocol 29_03, Ref. 1; [G80]

¹²⁰ Interview 2, Ref. 5

¹²¹ Interview-Guide 17_04

¹²² Interview 2, Ref. 5; [G81]

¹²³ Interview 2, Ref. 6; [G82]

¹²⁴ Interview 2, Ref. 5; [G83]

¹²⁵ Interview 2, Ref. 6; [G84]

¹²⁶ Interview 3, Ref. 4; [G85]

¹²⁷ Interview 3, Ref. 4; [G86]

between the simulated roles of the traders and farmers is designed to help learners understand the unequal power dynamics that govern the global cocoa trade.¹²⁸

Another influence of formal education on the unfolding of WeltTellerFeld's workshops becomes apparent when student visits are embedded within a broader school curriculum. In such cases, interviewee 3 notes a noticeable "feeling that students have mainly learned the facts"¹²⁹, citing examples such as the statement: " 'You should eat less meat because there is too much CO₂ in the atmosphere' ".¹²⁹ above These kinds of statements are, however, perceived by trainers as overly abstract, lacking connection to personal meaning, lived experiences, and action.¹³⁰ Similarly, there has been an observation concerning the visiting students that "many skills and competencies are simply lost and cannot be lived out because the opportunities are so limited, or become limited, especially within the city".¹³¹ Such skills refer to simple gardening, but also the getting one's hands dirty¹³², where interviewee 1 remarks being "really shocked how little the children know and recognise"¹³¹ above, remembering one instance: "I had to explain what a deer is; now, try to describe a deer to a person who has no idea what a deer is, so I was very challenged for a moment".¹³³

Redressive solutions include allowing students to "feel more and have more experiences, not necessarily only within the school".¹³⁴ However, for such changes to unfold, it is believed that "if nothing is done at a structural level, then you can forget about it"¹³⁵, leading to the expressed need that "school can also be rethought".¹³⁵ above This need is reflected in the fact that many students arriving at the field express happiness that there are "no [school] lessons"¹³⁶, with

¹²⁸ Interview 3, Ref. 5

¹²⁹ Interview 3, Ref. 3; [G87]

¹³⁰ Interview 3, Ref. 3; [G88]

¹³¹ Interview 1, Ref. 2-4; [G89]

¹³² Observation Protocol, 29_03

¹³³ Interview 1, Ref. 5; [G90]

¹³⁴ Interview 1, Ref. 1; [G91]

¹³⁵ Interview 1, Ref. 10; [G92]

¹³⁶ Interview 1, Ref. 6; [G93]

interviewee 3 remarking, that, back then, “everyone hated school”.¹³⁷ The reason for such hatred is considered to arise out of the forcing of people to “do and perform something that they actually do not want to”¹³⁷ above, representative of the “common thread in our society”.¹³⁷ above

Realising that “it does not have to be like that, [where] one could go to school with a lot of joy”¹³⁷ above, interviewee 2 recalls positive experiences with alternative pedagogical approaches such as Montessori- or Outdoor schools with elements of self-organisation, freedom of subject choice, time management, and supportive and free learning.¹³⁸ Here perceiving “how poor we are as a Western society”¹³⁹, interviewee 3 points towards Indigenous Communities as a contrast, where togetherness, community, and the relationship with nature reflect an entirely different psychological orientation.¹⁴⁰

5.6. Politicisation of Education

This final thematic section presents findings related to the fifth and last degrowth-informed pedagogical approach, the politicisation of education, as conceptualised by Kaufmann, Sanders, and Wortmann (2019). Within this category, education is considered to be inherently political, inhabiting the role of exposing structural injustices, power asymmetries, and the identification of learners’ own roles and privileges within those structures. From this recognition of systemic socio-ecological inequalities, pedagogical efforts aim to foster a sense of self-efficacy and socio-political agency, paving the way for transformative engagement and the imagining of alternative realities.

¹³⁷ Interview 3, Ref. 7; [G94]

¹³⁸ Interview 2, Ref. 4

¹³⁹ Interview 3, Ref. 9; [G95]

¹⁴⁰ Interview 3, Ref. 9

At its core, WeltTellerFeld positions itself as a behaviour-oriented educational space that aims to incentivise action through individual dietary change.¹⁴¹ This focus stems from the initiative's emphasis on the local-to-global socio-ecological impacts of food systems, particularly, those shaped by Western consumption patterns and standards.¹⁴² Changing these is believed to represent a course of action that is directly relevant and implementable within the “living worlds”⁹ above of the learners, and especially, seeks to counter the frustration and powerlessness that many young people experience when confronted with the climate crisis.¹⁴³ Accordingly, it is considered especially important to “empower them to take action in their own everyday lives”¹⁴⁴ through dietary choices that “have impacts on global resources”.¹⁴⁵

At the same time, trainers acknowledge the limitations of this approach, particularly for young learners, who often do not make “consumption decisions independently [...], they just eat what's available at home or at school”.¹⁴⁶ Nonetheless, in cases where students are in a position to make independent dietary decisions, these “small step”¹⁴⁷ changes are believed to initiate “sustainable change in habits and attitudes”¹⁴⁸, potentially amplified by imitation and bystander effects.¹⁴⁸ Through this, young people are encouraged to “get into action”¹⁴⁹ below and become the “decision-makers of tomorrow”¹⁴⁹ below, setting new standards for a “good life beyond the ideology of the capitalist market economy”.¹⁴⁹

Whereas these individual-centred consumption changes are initially framed as positive in terms of individual health, but also socio-ecological integrity, they are simultaneously linked to and situated within broader systemic contexts, including political, economic, and institutional

¹⁴¹ Interview 2, Ref. 8

¹⁴² Educational Concept Paper, Long

¹⁴³ Educational Concept Paper, Long, Ref. 20, 22

¹⁴⁴ Educational Concept Paper, Long, Ref. 23; [G96]

¹⁴⁵ Educational Concept Paper, Long, Ref. 8; [G97]

¹⁴⁶ Interview 2, Ref. 6; [G98]

¹⁴⁷ Observation Protocol 09_04, Ref. 3

¹⁴⁸ Educational Concept Paper, Long, Ref. 10; [G99]

¹⁴⁹ Educational Concept Paper, Long, Ref. 14; [G100]

structures. WeltTellerFeld deliberately strives to draw the bow from the “individual level” to the “school and class”, and then further toward the societal, systemic, and political level.¹⁵⁰ It tries to facilitate this through reflective prompts such as “what can policy makers and companies do to help everyone eat healthier and protect the environment”¹⁵¹, “what can you wish for or demand from companies or politicians”¹⁵², or “What rules could be made so that healthy eating and environmental protection are possible for everyone”.¹⁵¹ above Important is the perceived connection between “bottom-up pressure and signals through individual action”¹⁵³, and the “top-down” structures, accompanied by a systemic, albeit apolitical, identification of structural injustices.¹⁵⁴ Examples range here from more food related thematised action-options such as “sourcing food from ‘alternative’ sources such as food coops, community supported agriculture, or farmers’ markets”¹⁵⁵, to the supporting of (local) initiatives and organisations such as food councils, but also supply chain laws.¹⁵⁵ above The resulting aspiration toward “becoming active”, and engaging politically is intended to enact lasting change in the framework conditions for “food sovereignty”¹⁵⁶ and a “more sustainable food system”.¹⁵⁷

While WeltTellerFeld’s educational concept clearly articulates a theoretical link between individual action and broader systemic and structural conditions, its practical implementation appears to take shape in more varied ways. A case in point is the sensitive issue of excessive meat consumption, where interviewees stress that it is primarily addressed through its impact on learners’ individual health, rather than its socio-ecological consequences, which are perceived as more abstract and less tangible compared to the lower threshold of “taking care of

¹⁵⁰ Workshop, For Adults, 13, 20; Interview 3, Ref. 9;

¹⁵¹ Workshop Three W’s, Document 2, Ref. 4; [G101]

¹⁵² Workshop Three W’s, Document 2, Ref. 2; [G102]

¹⁵³ Observation Protocol, 09_04, Ref. 2; [G103]

¹⁵⁴ Observation Protocol, 09_04, Ref. 5-7

¹⁵⁵ Workshop, For Adults, Ref. 13; [G104]

¹⁵⁶ Observation Protocol, 09_04, Ref. 1

¹⁵⁷ Workshop, For Adults, Ref. 18; [G105]

one's own health".¹⁵⁸ When the linkage between excessive meat consumption and negative health implications is successfully established, learners may then be inclined to draw further links themselves, such as "factory farming really isn't that cool, is it? Or for the climate crisis, it's not good at all either".¹⁵⁸

This may lead to the realisation that the land that livestock farming currently exhausts is anything but definitive, but rather subject to deliberation, decision-making, and potential reinvention.¹⁵⁹ below These reflections are closely linked to the utopian elements introduced earlier in the sections on intense reflection and emotional learning, where learners are invited to imagine what could be done with the space liberated from livestock farming if "everyone eats a vegan or plant-based diet".¹⁵⁹ Responses range from a "forest, meadow, but also building houses"¹⁵⁹ above, further encouraging learners to think through not only desirable alternatives but also the actions required to realise such collectively imagined futures.¹⁶⁰

Returning to the initial focus on individual health impacts, interviewee 2 remarks that remaining and arguing solely on the level of personal health risks understates one's responsibility, which must be reconnected to the "structures and the impact on others in your individual decision".¹⁶¹ These individual decisions and their intended changes through, for instance, altered consumption patterns, are considered to be WeltTellerFeld's main "didactical principle".¹⁶² This is because, according to the trainers, the workshops for school students are not primarily about "changing the structures with your commitment or the way you walk through the world"¹⁶¹ above but rather about underlining that individual "consumer decisions have political character".¹⁶² above However, the limitations of individual consumer actions are openly

¹⁵⁸ Interview 3, Ref. 1; [G106]

¹⁵⁹ Interview 3, Ref. 7; [G107]

¹⁶⁰ Observation Protocol, 09_04, Ref. 8

¹⁶¹ Interview 2, Ref. 11; [G108]

¹⁶² Interview 2, Ref. 10; [G109]

acknowledged in the teaching experiences shared by the interviewees. Learners frequently express doubts such as “you can do so little as an individual”¹⁶³, “but if only one person changes something, what's the point”¹⁶⁴, to “I personally can't do anything anyway. It's a political question”¹⁶⁵.

Such questions are thought to arise primarily among older learners, who are assumed to have had greater exposure to the prevailing system¹⁶⁶ below, in contrast to younger learners who “haven't yet got to know the system so well”.¹⁶⁶ Trainers attempt to address these doubts through various strategies. These include acknowledging feelings of powerlessness, such as stating “there are so many things that we cannot influence at all and we can hope that something will change”¹⁶⁷, while simultaneously pointing to tangible action options, such as signing petitions¹⁶⁸ or becoming active in existing initiatives or organisations.¹⁶⁹ Another approach involves openly and sarcastically confronting misconceptions, such as: “If we now believe that we are saving the world by buying organic tomatoes in summer that come from Austria, then unfortunately not”.¹⁷⁰ Such statements serve to highlight the importance of developing a sense of consciousness, sensibility, and connection to thematised problem-situations, aiming toward a hoped-for “recognition [of] what I can really do myself”.¹⁷⁰ above

Furthermore, while it is acknowledged that one must “consider the circumstances, the political structures and the power relations in the food system to create contexts and offer explanations”¹⁷¹, WeltTellerFeld's main imperative is not to place these issues at the center, but rather to focus on the role of the individual within them. However, an exclusive emphasis on

¹⁶³ Interview 3, Ref. 14; [G110]

¹⁶⁴ Interview 1, Ref. 4; [G111]

¹⁶⁵ Interview 3, Ref. 4; [G112]

¹⁶⁶ Interview 2, Ref. 4-5; [G113]

¹⁶⁷ Interview 1, Ref. 5; [G114]

¹⁶⁸ Interview 1, Ref. 6

¹⁶⁹ Interview 3, Ref. 2, 14

¹⁷⁰ Interview 1, Ref. 6, 7; [G115]

¹⁷¹ Interview 2, Ref. 8; [G116]

the individual and consumption is also seen as problematic, especially because, as one trainer put it, “when it comes to systemic solutions, the move towards consumption only helps very little.”¹⁷² An illustrative example involves here deliberately shifting away from the environmental footprint, which may “de-motivate due to a high footprint”¹⁷³, towards the environmental handprint, which is framed as a “motivating concept to get into action”¹⁷⁴, and engage politically.¹⁷⁵

The thematisation of the individual versus the systemic is also described as an “area of tension”¹⁷⁶ below, since addressing more structural issues is seen to “go beyond the scope of the workshop if I were to talk about systemic solutions with the students who are here for two and a half hours”.¹⁷⁶ below As a result, educators often prefer to remain on the personal level, where “the threshold [is] much lower if you go for personal solutions”.¹⁷⁶ If the line is, however, being drawn to the systemic level, which is rather the exception¹⁷⁷ or mainly confined for older learners¹⁷⁸, it is believed to always be contingent on the context and the learning group, particularly their prior knowledge and whether they are “open, fit, have understood the principle and are not overwhelmed by the extra element”.¹⁷⁹ Avoiding cognitive or emotional overload is seen as a fundamentally important pedagogical principle. One trainer describes how “90% of the knowledge of the educator remains unspoken, and that it is only the 10% that is conveyed because it would be too much or distract from where the learner is standing at the moment”.¹⁸⁰ Ultimately, the very existence, space, and educational practise of WeltTellerFeld, where “thousands of students pass by every year and get excited, and inspired to think”¹⁸⁰, is

¹⁷² Interview 3, Ref. 8; [G117]

¹⁷³ Observation Protocol 09_04, Ref. 4; [G118]

¹⁷⁴ Observation Protocol 09_04, Ref. 3; [G119]

¹⁷⁵ Educational Concept Paper, Long, Ref. 4

¹⁷⁶ Interview 3, Ref. 9; [G120]

¹⁷⁷ Interview 3, Ref. 17; Interview 1

¹⁷⁸ Interview 1, Ref. 4

¹⁷⁹ Interview 2, Ref. 11; [G121]

considered a form of “systemic change in itself”¹⁸⁰, that, for non-overwhelming reasons, however, remains “invisible to the students”¹⁸⁰, so that “they do not have to grapple with it”.¹⁸⁰

5.7. A Well-deserved Synthesis and What’s Next

Congratulations! You (almost) made it through the results chapter. To briefly conclude this journey and summarise the empirical findings presented, the preceding sections have explored which aspects and how WeltTellerFeld’s educational practises reflect, challenge or refine degrowth pedagogies. It has become clear that the degrowth-informed pedagogical approaches, together with an inductively added didactic dimension, do not exist in isolation, but rather converge in practice, reflecting WeltTellerFeld’s holistic educational philosophy.

Problem-based, action-oriented, and situated learning form the core of the initiative’s experiential and place-based educational model. These approaches are closely connected and often lead naturally into phases of intense reflection, where critical thinking, problem awareness, and utopian imagining are central. Additionally, the inductively identified pedagogical approach of emotional, motivational, and humoristic learning, underlines the importance of allowing feelings and affective engagement as part of the learning process. These emotional approaches also inform WeltTellerFeld’s understanding and realisation of trainer-learner roles, which are based on dialogical relationships at eye level, while, at times, still maintaining certain degrees of role differentiation that enable the co-identification of problems as well as potential solutions. Such marks a deliberate departure from more hierarchical dynamics often observable within formal educational institutions. The role of such institutions becomes particularly apparent within the educational work of WeltTellerFeld through the universal presence of competitive thinking and performance logic, which, although occasionally acknowledged for their value, are largely seen as barriers to meaningful learning

¹⁸⁰ Interview 3, Ref. 12; [G122]

and as something the trainers consciously seek to overcome. Finally, the politicisation of education surfaces in efforts to connect incentivised individual action changes with broader systemic conditions through food-related engagements, political and collective actions, and largely, the very existence and practice of WeltTellerFeld itself.

The following [Discussion chapter](#) will now critically engage these findings in light of the merged theoretical framework of degrowth pedagogies, transformative learning, and critical pedagogy. It aims to examine how and in which aspects WeltTellerFeld's educational practice reflects, challenges, or refines this framework, and to explore the resulting implications for how such pedagogical approaches can contribute to the emancipation of social imaginaries and support socio-ecological transformation.

CHAPTER SIX: DISCUSSION

This chapter critically reflects the empirical findings presented in Chapter 5 by situating them within the broader theoretical framework of degrowth pedagogies, transformative learning, and critical pedagogy. By placing the empirical insights in dialogue with the theoretical framework, the discussion illuminates *which aspects and how WeltTellerFeld's Education for Sustainable Development (ESD) practices reflect, challenge, or refine the degrowth-informed pedagogical approaches*. In doing so, the chapter addresses the broader conceptual aim of understanding what kind of education can meaningfully contribute to the emancipation of social imaginaries. To this end, it explores the potential of degrowth-informed pedagogical approaches to liberate these imaginaries from the grip of the dominant growth paradigm and to support processes of socio-ecological transformation.

Rather than revisiting each degrowth-informed pedagogical category in isolation the discussion proceeds in four main steps. [Section 6.1](#) synthesises the empirical findings through the lens of the five theoretically derived degrowth pedagogical approaches, exploring how WeltTellerFeld's practices reflect, refine, or diverge from these categories. This analysis is enriched by engagement with literature from degrowth, transformative learning, and critical pedagogy, thereby grounding the interpretations theoretically and situating them within the respective research context. Particular attention is given to the inductive emergence of emotional learning and utopian imagination as additional pedagogical dimensions, both of

which offer new pathways for education in the context of degrowth. [Section 6.2](#) then weaves these insights together to explicitly address the research question and evaluate whether WeltTellerFeld may be understood as a case of ‘real-existing’ degrowth pedagogy. Based on this synthesis, [Section 6.3](#) distils key theoretical and practical contributions of this research, outlining their significance for degrowth education, educators and educational institutions. Finally, [Section 6.4](#) closes the chapter by offering a critical reflection on the methodological limitations of this thesis, including case selection, my positionality’s influence, practical experienced challenges, and analytical scope, pointing to avenues for further research.

6.1. Degrowth Pedagogies in Practice: Between Aspiration and Reality

The following discussions examine how the empirical and practical insights from WeltTellerFeld relate to the degrowth-informed pedagogical approaches outlined in the theoretical framework. It is important to underline that neither the observed overlaps nor the contrasts reflect the deliberate decisions of WeltTellerFeld to adopt or implement a degrowth-informed educational philosophy. Indeed, there is no evidence that WeltTellerFeld explicitly frames and understands its pedagogical approach through the lens of degrowth. Nonetheless, significant empirical resonances emerge, ranging from content-related themes such as the importance of plant-based diets, agroecological and regenerative agriculture, and food sovereignty, to more implicit and explicit critiques of capitalism, consumption cultures, limits to growth, the finiteness of resources, and the redefinition of the ‘good life’ through principles of climate and distributive justice, sufficiency, and frugality. These themes, recurrent across interviews, field observations, and educational documents, closely reflect core concerns in the degrowth literature, particularly in relation to food systems (Homs et al. 2021; Roman-Alcalá 2017), but also in the broader systemic critique of capitalism, adherence to ecological boundaries, and efforts to redefine what makes up a good life (Schmelzer, Vetter, and Vansintjan 2022). While these resonances primarily pertain to educational content, which, for

reasons outlined in Section [6.4.4](#), is not the main focus of this thesis, the succeeding analysis centres instead on WeltTellerFeld's pedagogical practices, which are what ultimately render such content meaningful. Accordingly, and rather than assuming full harmonisation between WeltTellerFeld's educational practices and the degrowth-informed pedagogical approaches, the following sections are structured around each pedagogical category, bringing the empirical material into dialogue with key literature from degrowth, critical pedagogy, and transformative learning. Such an approach enables an analysis of how the theoretically conceptualised degrowth-informed pedagogical approaches are reflected, refined, and challenged within WeltTellerFeld's educational practice.

6.1.1. All in one: WeltTellerFeld's integrated understanding of Problem-Based, Action-Oriented, and Situated Learning

The empirical results related to this first degrowth-informed pedagogical approach demonstrate that problem-based, action-oriented, and situated learning lies at the very heart of WeltTellerFeld's educational philosophy and practises. This is immediately apparent in its conceptual understanding of education, which centralises on hands-on learning that is grounded within the "living worlds"⁹ of its learners, with relevant problems and solutions identified collectively, and situated in an outdoor agricultural environment. The importance placed on the contextual relevance of learning that is relatable to learners' identities links directly to Freire's (2014) idea of problem-posing education, where the lived experiences of learners provide the basis of any educational engagement. Interestingly, although WeltTellerFeld starkly centralises this situated element in its educational approach, interviewee 3 describes a delicate balance between following learners' natural curiosity, believed essential for learning success, and adhering to more structured workshop guidelines, wishing at times more freedom to manoeuvre and simply follow students' natural interest.^{30,127}

This curiosity, especially fostered by WeltTellerFeld's nature-based environment, directly counters what has been termed the 'nature deficit disorder' (Louv 2005), a condition that trainers repeatedly observe.^{28,133} A telling example is the learners' experienced sense of alienation from food systems and nature more broadly, both of which, while essential for their nutrition, have become increasingly disconnected from their everyday lives. As a result, many of the basic competencies needed to sense, value, and reconnect with the environment have been lost, not only within formal education but across society more broadly.^{125,131} For degrowth and critical ESD scholars, it is exactly this condition that reflects the issue of human-nature separateness, identified as the root cause of socio-ecological crises and their engraftment (Escobar 2015; Getzin 2019; Selby 2015; 2017; Berryman and Sauv   2016).

Accordingly, WeltTellerFeld's on-site visualisation of agricultural food production and the creation of experiential points of contact with nature both find strong resonance in degrowth and critical ESD literature (White 2024; Selby 2015; Getzin 2019; Wals 2011). At times, trainers even consider these physical and sensory experiences to be met with deep resonance and are thus more impactful than the cognitive content being taught.²⁹ They also recognise the limitations of conveying abstract and 'wicked' problems, such as the impacts of food systems or climate change (Cross and Congreve 2021), within the constraints of a short workshop. Nonetheless, even these short moments are intentionally designed by WeltTellerFeld to incentivise self-efficacy and counter feelings of helplessness, primarily through linking learning to accessible low-threshold action options, equally identified as immensely important by Getzin and Singer-Brodowski (2016).

This shift from a purely problem-oriented, or in Freire's words, problem-posing approach, to a more "solution-oriented approach"¹⁵, represents a deliberate pedagogical decision by WeltTellerFeld, which yet reaches its limits in practice. Interviewees describe the experienced difficulty "to step out of the problem-oriented context and move more towards the solution"¹⁷,

where it often remains uncertain whether learners truly feel empowered after workshops. While this uncertainty cannot be fully resolved with the available empirical insights, some indications of longer-term impacts do exist, for instance, one trainer recounted that several students clearly remembered the workshop content even months after its occurrence. Nevertheless, WeltTellerFeld's educational philosophy and practices align closely with the first degrowth-informed pedagogical category as outlined by Getzin and Singer-Brodowski (2016). At the same time, the initiative expands this approach by placing explicit emphasis on the dual importance, and challenge, to foster learner empowerment and self-efficacy through low-threshold actions. This resonates with Getzin and Singer-Brodowski's (2016) call to instil a "belief in a future that can be shaped" (p. 43, self-translated), where WeltTellerFeld encourages learners to see themselves as "decision-makers of tomorrow."¹⁴⁹ Ultimately, the initiatives' approach reflects the first stage of Freire's notion of praxis by initiating learning through concrete, action-oriented experiences, which are then deepened through critical reflection supporting the development of critical thinking and reflecting, or *conscientização* (critical consciousness) (Freire 2014).

6.1.2. Phases of Intense Reflection: From Awareness to Utopian Imagination

Building on this, the development of critical consciousness requires that action be accompanied by continuous reflection, embedded in an iterative process where each informs the other. For Getzin and Singer-Brodowski (2016), such intense phases of reflection, the focus of the second degrowth-informed pedagogical category, are imperative for enabling learners to shift their meaning perspectives and thus become deeply engaged with socio-ecological issues.

Within WeltTellerFeld's conceptualisation and educational practice, phases of reflection are considered integral to any unfolding learning process. The aim is not to impose moralising facts or beliefs, as is often the case with instrumental approaches to ESD (Vare and Scott 2007), but

rather to inspire critical thinking and reflection harmonising more with critical-emancipatory education (Sterling 2010; Wals 2015). This becomes especially important when addressing broad and, at times, sensitive issues, such as meat consumption, child labour, or other socio-ecological injustices, that are closely linked to learners' own positionalities and privileges (Getzin and Singer-Brodowski 2016). The emotional and cognitive “shocks” experienced by students in these moments are, to some extent, deliberately provoked and relate directly to Mezirow's (2009; 2018) concept of disorienting dilemmas, which, when meaningfully facilitated, can serve as entry points for transformative learning experiences (Singer-Brodowski 2016; 2022; Singer-Brodowski et al. 2022).

These shocks or moments of disorientation, what interviewee 2 describes as “pulling back the curtain”⁴⁹, are considered necessary for triggering ‘cognitive dissonances’.⁴⁰ Such dissonances are believed to sustain the engrailment of unsustainabilities (Sommer and Welzer, 2014; Selby 2015) and obstruct meaningful socio-ecological transformation (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022). By drawing direct links, for instance, between individual chocolate consumption and exploitative conditions in the cocoa industry, or between animal products and livestock mistreatment, WeltTellerFeld deliberately encourages learners to reflect on the ecological and societal consequences of their everyday consumptions and actions. To prevent that these dissonances lead to learner rejection and interdiction (Mälkki 2019), or worse, to further alienation and compensatory consumerism (Getzin 2019), WeltTellerFeld intervenes through collective and non-judgmental discussions of redressive possibilities. These range from more responsible individual consumption choices to systemic considerations that inspire collective imagining of socially and ecologically just alternatives.

A fundamental question that arises when discussing these at times disorienting dynamics is whether learners' meaning perspectives or their social imaginaries can, in fact, be significantly altered. Interviewees responses on this matter range from clear indications of change to

observations of complete absence, suggesting that such transformation is heavily constrained by the limited duration of exposure to WeltTellerFeld’s educational setting. Following, these learning experiences may better be understood as entry points for transformative learning, eventually incentivising critical thinking and consciousness. Assuming, however, that learners can indeed be moved in their meaning perspective or social imaginary, it remains puzzling what informs or replaces the previously held views or imaginaries. This question is particularly relevant within the degrowth literature, which argues that any socio-ecological transformation depends on liberating the social imaginary from its entrenchment in the growth paradigm (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022).

Yet, since degrowth education adheres to a critical-emancipatory understanding, rather than an instrumental one (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann 2019), it cannot prescribe fixed solutions or normative endpoints. This results in a significant pedagogical paradox: while degrowth education aims to enable the transformation of social imaginaries in the direction of socio-ecological change, it must simultaneously refrain from prescribing what a new imaginary looks like and what it entails.

Interestingly, while this conundrum also surfaces within WeltTellerFeld’s educational practises (explored further in the [Section on Trainer-Learner Relationships](#)), the initiative nonetheless points toward a potential resolution. One approach involves connecting the disorientation and discomfort evoked by discussion of socio-ecological injustices, such as livestock welfare or disproportionate effects of climate change, to imaginative simulation games that invite learners “to draw their own utopia”⁸⁰, so that any present discomfort is “no longer necessary in the future”.³⁶ This incentivised form of utopian thinking strongly resonates with degrowth (Kallis 2018; Kallis and March 2015), which embraces collectively imagined futures, while not prescriptive, are guided by normative principles such as sufficiency, care or autonomy (Parrique 2019). These co-created and autonomously imagined alternative realities offer the

orientation for newly emancipated social imaginaries capable of guiding socio-ecological transformation.

It can thus be argued that WeltTellerFeld's educational understanding and practises closely align with the second degrowth-informed pedagogical category of intense reflection phases. While the sustainability of its impact on shifting learners' meaning perspectives or social imaginaries remains open to deliberation, WeltTellerFeld's practises, nonetheless, expand the category in twofold senses: First, they point to the relevance of introducing an additional degrowth-informed pedagogical approach centred on utopian learning, a need supported by both empirical findings and the expert interview, which highlight the role of utopian thinking in enabling transformative learning in the context of degrowth. Second, they have given rise to the inductive identification of a new pedagogical dimension discussed next: emotional, motivational, and humoristic learning.

6.1.3. Allowing Emotions for Richer Learning... and Life

Indeed, emotional, motivational, and humoristic learning emerged consistently across all data sources as a significant pedagogical dimension at WeltTellerFeld. The findings show that this dimension is not only recognised in theory by the initiative as central to successful learning but is also deliberately implemented in practice. Its relevance was also highlighted during an initial expert interview conducted prior to data collection and analysis, which emphasised the value of engaging with emotions, especially when addressing complex socio-ecological crises.

The significance of emotional engagement in WeltTellerFeld's practises is perhaps best illustrated by one trainer's description of "using emotions in a targeted way to pull back the curtain".⁴⁹ As discussed previously, this drawn curtain can be interpreted as a disorienting dilemma; an entry point for critically reflecting on and discarding entrenched meaning perspectives, ultimately enabling the co-creation of alternative understandings. Notably, the

emotions deliberately invoked during workshops are not limited to discomfort, dissonance, or sadness when addressing privilege-infringes themes. They also include positive affective elements such as joy, humour, or empowerment, all of which aim to establish a safe, non-moralising learning environment. This motivational approach is intentionally directed towards sparking the curiosity within learners so that they themselves feel the desire to become active in varied ways, ranging from dietary alterations to socio-political engagement.

Admittedly, the role and significance of emotions in education and (transformative) learning are far from new (Grund, Singer-Brodowski, and Büssing 2024), specifically when thematising ‘polycrises’-tainted topics. This thesis, therefore, does not claim originality in foregrounding emotional learning, rather, it emphasises its notable absence in the degrowth-informed pedagogical framework. One reason for this omission may lie in the legacy of formal educational institutions and scientific paradigms that prioritise rationality and the measurability of outcomes (Selby and Kagawa 2010), often excluding emotional engagement (Muraca 2007; 2015a). This trend is echoed in the reflection of interviewee 3, who describes how “impoverished” we as Western “advanced” societies have become by embracing pure rationality while marginalising emotions, further engraining a dynamic that reinforces a hegemonic human–nature dualism identified as a root cause of ongoing socio-ecological crises (Selby 2015; 2017; Berryman and Sauvé 2016).

Inspiration is contrastingly seen in cultures of Indigenous communities that place human-nature harmonisation and community centre stage, embracing ‘pluriversal perspectives’ (Escobar 2015) that reconnect not only with food production but also with each other and the more-than-human world. Further guidance for such communal and nature-based reconnection can be found in Freire’s (2014) idea of humanistic love, where sincere learning and education “cannot exist [...] in the absence of a profound love for the world and for people” (89). Cultivating such ethical love and a “commitment to others” (Freire 2014, 89) and the world may result in a

strengthened ignition of learners' curiosity and longing to become actively engaged in redressing identified injustices.

Such recognition of emotional and relations dimensions in education may contribute not only to the emancipation of social imaginaries but, when accompanied by proportionate action (further discussed in the [Section on the Politicisation of Education](#)), to meaningful socio-ecological transformation. In a Freirean sense (2014), this would ultimately amount to *libertação*: The liberation of both learners and society from the oppressive growth paradigm that hinders genuine socio-ecological transformation (Muraca 2015b; Asara et al. 2015; Schmelzer, Vetter, and Vansintjan 2022). Implementing such measures could build on WeltTellerFeld's existing commitment to emotional learning, an aspect already highlighted in the results chapter and perhaps best summarised by one trainer's inspiring reflection: "if you allow all emotions, the good as well as the difficult, they become easier to process, making life richer and more beautiful".⁸³

6.1.4. Not a Teacher, Not a Friend? Navigating Trainer-Learner Boundaries

Freire's idea of love can also be interpreted as being reflected in WeltTellerFeld's approach to trainer-learner relations, which represents the third degrowth-informed pedagogical approach. The initiative's emphasis on "mutual respectful relations"¹⁰³ between learners and trainers has been constantly underlined across all data sources, with appreciation and trust further describing what is seen as essential for engaging with learners. Furthermore, WeltTellerFeld's ambition to move away from hierarchical dynamics toward relationships that are "authentic and on eye-level"⁹⁹ resonates not only with Getzin and Singer-Brodowski's (2016) emphasis on a discursive space free from domination, drawing on Habermasian ideals, but also with Freire's (2014) dialogical understanding of education. The trainer, more aptly described as a facilitator or enabler, is seen as being in a "dialogical relationship"⁹⁸ with the learner, one that

also contributes to the trainers' own learning, shifting their role from mere participants to contributors.⁹⁵ This strongly echoes Freire's (2014) concept of "co-intentional education" (69), in which both trainer and learner engage in the collective construction of meaning. At WeltTellerFeld, this is exemplified when learners and trainers jointly define the conditions of the problems while collaboratively identifying redressive solutions.

Nonetheless, the initiatives' practice also refine the degrowth-informed pedagogical approach of rethinking learner-teacher roles in a significant sense. This pertains to the experienced reality described by one interviewee: when theoretical educational concepts are put into practise, it often becomes necessary that "there has to be some form of hierarchy and a clear division of roles".¹⁰⁸ It is believed that without some form of hierarchical structure guiding the workshops, if the trainer were merely a 'friend or entertainer' to the learners, they would simply not function. This observation resonates with the findings of Kaufmann, Sanders, and Wortmann (2019), who equally highlight the difficulty of entirely abandoning hierarchical learning settings, though for different reasons, namely the persistence of "deeply ingrained hierarchical and expert-led learning methods" (937). WeltTellerFeld aims to navigate this tension by clearly defining trainer-learner boundaries while allowing for situational flexibility, such as interrupting learners when necessary or playfully testing the limits of students' comfort zones.

Within this "balancing act", WeltTellerFeld places a strong emphasis on distancing itself from a purely instrumental understanding of teaching (Wals 2011; 2012) and instead moves toward an approach that can be interpreted as critical-emancipatory (Vare and Scott 2007). The initiative aims to go beyond the simple transmission of factual knowledge, characteristic of instrumental education or ESD1, which focuses on equipping learners with predefined knowledge and skills for sustainable development (Vare and Scott 2007) (See [Section 3.1](#)). It also seeks to move past Freire's (2014) critiqued banking model of education (see next Section), by instead stimulating "critical thinking and reflection".³²

This balancing act, between conveying foundational facts about sustainability challenges such as planetary boundaries or finiteness of resources (Kallis et al. 2025), and simultaneously fostering analytical thinking and “reflective empathy”⁴⁴, reflects the pedagogical paradox earlier discussed: the need to guide learners toward transformation without prescribing predetermined outcomes. WeltTellerFeld addresses this paradox through a non-moralising, non-judgemental approach, reflected in the acknowledgement that there is indeed an “agenda [...] that makes sure that the thinking somehow goes in that direction”¹⁸¹, yet without imposing conclusions or outcomes. Learners are instead encouraged to independently develop redressive action options. This aligns with degrowth-informed pedagogy, where education may be guided by factual grounding (e.g. planetary boundaries or resource finiteness; Richardson et al. 2023) or normative values (e.g. care, autonomy; Parrique 2019), but the ultimate decision on ecologically responsible thinking and action “is a judgement that needs to be made by the critically reflective learner” (Sterling 2010, 514).

That such open-ended outcomes are nevertheless believed to contribute meaningfully to socio-ecological change is expressed in Interviewee 3’s reflections, which point to a humanistic belief in learners’ inherent goodwill and moral agency, with the idea that they are naturally inclined to seek and co-create constructive solutions for the common good. This belief resonates strongly with Freire’s concept of love, wherein WeltTellerFeld’s dialogical learning is made possible and effective, through an underlying love for “the world, life, and people” (Freire 2014, 89).

6.1.5. From Iron Fists to a Pluriverse: Reimagining Formal Education

Moving on with the last degrowth-informed pedagogical approach derived from Getzin and Singer-Brodowski (2016), where the methods, roles, and objectives of formal educational

¹⁸¹ Interview 3; [G123]

institutions aim to be critically reflected and reimagined. The findings indicate that direct reflecting, challenging, and reimagining of formal educational systems are not explicitly addressed within WeltTellerFeld's educational formats and workshops. What does become apparent, however, is the ubiquitous presence of certain mental infrastructures, meaning perspectives, or social imaginaries, such as performance logic and competitive thinking, that are typically reproduced within formal educational settings (Getzin and Singer-Brodowski 2016). This is perhaps unsurprising, given that the all-encompassing growth imperative has captured our educational systems (Stoddart et al. 2021), aiming for docile and employable individuals serving and reproducing the socio-ecologically unjust and destructive system in which they are embedded (Fitzpatrick 2024).

This becomes apparent not only in the learning behaviour of WeltTellerFeld's students but also in the actions of accompanying schoolteachers, who at times respond to learner-directed questions themselves, fearing that their class may appear uneducated. The internalisation of competitive thinking is thus not only visible, and regrettably so, in the belief systems of young learners, but also among adult educators, reflecting how the growth imaginary eats its way from early life onward, gradually shaping how individuals learn, think and relate to the world. However, refining this critique of competitiveness, and thus also the fourth degrowth-informed pedagogical approach outlined by Getzin and Singer-Brodowski (2016), interviewee 3 points out that within WeltTellerFeld's educational practises, competitive learning formats can also hold pedagogical value. When used strategically, and subtly, without being at the centre of the learning experience, they can support learners in grasping complex issues like power asymmetries and structural injustices in a more approachable and comprehensible way.

Yet, trainers emphasise that WeltTellerFeld's educational practises can, at most, serve as a complement to formal education, whose prevailing importance for learners' development is acknowledged, while still underscoring the fundamental need to reimagine it. This perceived

complementarity, as expressed by trainers, is attributed to the time-bound and resource-constrained nature of small-scale nonformal educational formats alongside an expressed desire for increased (financial) resources for intensified and repetitive learner exposure at WeltTellerFeld. The need to reimagine formal education pertains then to its role in perpetuating the ‘nature-deficit disorders’ (Louv 2005), driven by overly rigid, rational, competitive, performance-oriented, and quantification-focused learning approaches. These approaches often marginalise sensory and emotional learning (Muraca 2007), further disconnecting students from their life-enabling environments, food systems, and even from one another. This structural critique is echoed in trainers’ observations that visiting learners are often equipped with factual knowledge yet lack elementary competencies and meaningful connections to implementable actions.

Accordingly, these learning outcomes starkly resonate with what Freire (2014) termed, and simultaneously criticised, as the ‘banking model’ of education, in which formal educational institutions and their teachers simply deposit expert knowledge into passive recipients for uncritical reproduction (Fitzpatrick 2024). It is exactly this kind of pedagogy that degrowth-informed educational approaches seek to transcend, and which WeltTellerFeld actively challenges by embracing a model more closely aligned with Freire’s (2014) concept of problem-posing education. Indeed, through learning approaches grounded in dialogue, problem orientation, action, solution-seeking, and situatedness, WeltTellerFeld not only supports alternative pedagogies but puts them into practice. Admittedly, not all of these methods may be directly transferable to formal education due to logistical or resource-related constraints. However, certain elements, such as elevating the status of sensory, emotional, and nature-based experiences (Kaufmann, Sanders, and Wortmann 2019; White 2024), while reducing the emphasis on commodified knowledge, productivity, and competitive measurability (Selby and Kagawa 2010), could be feasibly integrated into formal settings. Ultimately, as highlighted by

interviewees 2 and 3, there is even further value in embracing a pluriverse of knowledge (Escobar 2015), with emphasis specifically on local and Indigenous epistemologies that can help enrich our impoverished Western dualisms, both between humans and nature and among ourselves.

6.1.6. Who should do something? The (limited) Politicisation of the Individual versus the Systemic

This final section turns to discuss the findings of the last degrowth-informed pedagogical approach, which was added by Kaufmann, Sanders, and Wortmann (2019). This approach emphasises the role of the political within education, particularly in exposing and critically reflecting on oppressive power asymmetries and injustices, while fostering societal and political agency to counter them. For WeltTellerFeld, the empirical findings in this category reveal an interesting ambivalence that effectively captures the charged relationship between individual and systemic change. While the initiative's educational approach initially appears to centre on individual behaviour change, especially through thematising and visually illustrating the local-to-global impacts of Western diets, it simultaneously acknowledges that such actions are fundamentally constrained by broader systemic societal, economic and political structures, which are recognised to require equal transformation.

The rationale behind WeltTellerFeld's initial focus on individualised behaviour change is closely tied to its central thematic concentration: the socio-ecological impacts of food systems, particularly as they relate to individual dietary choices. These "low-threshold" actions, such as reducing excessive meat consumption, are believed to integrate more easily into learners' everyday lives and serve as entry points for broader ecologically responsible behaviour and action. WeltTellerFeld's placed relevance on these 'small-step' changes resonates with findings in the literature, which suggest that similarly "little steps" can help cultivate learners' self-efficacy in addressing socio-ecological crises (Amel, Scott, and Manning 2015). However,

for these small alterations to generate significant sustainability impact, they cannot remain isolated; rather, they must be expanded by encouraging others to follow suit or by being connected to broader societal and political engagement (Getzin 2019). This is precisely what WeltTellerFeld simultaneously aims to achieve, while also seeking to counter the perceived alienation, particularly among younger learners, that stems from feelings of ineffectiveness in the face of sustainability challenges, similarly identified by Kaufmann, Sanders, and Wortmann (2019). While Kaufmann, Sanders, and Wortmann (2019) advocate for addressing this through connecting learners with civil society initiatives and grassroots activism, WeltTellerFeld instead emphasises easily implementable dietary changes as motivational entry points for learners to eventually become change agents shaping alternative visions of a good life beyond the ideology of the capitalist market economy.

While individual behaviour-oriented actions and consumption changes, along with their socio-ecological impacts, are the primary focus of WeltTellerFeld's educational formats, the initiative simultaneously acknowledges that such actions are ultimately shaped and constrained by the broader societal, economic, and political structures. By drawing the line from the individual to the systemic, the initiative tries to underline that the emergence and escalation of sustainability crises are not caused solely by individual consumer behaviour, nor can their resolution rest solely on the shoulders of the learners. This distinction is of fundamental importance, as WeltTellerFeld's emphasis on individualised behaviour change risks perpetuating the broader tendency within mainstream Education for Sustainable Development (ESD) to individualise and depoliticise sustainability challenges (Huckle and Wals 2015). In an effort to forestall this tendency and to distance itself from an instrumental, ESD1-oriented approach (Vare and Scott 2007), one that tends to leave the root causes of socio-ecological crises largely unaddressed (Sterling 2010), WeltTellerFeld seeks to thematise agency beyond the (consumer) individual, extending it toward societal, economic, and political dimensions.

Importantly, when the level of the individual (consumer) towards the political becomes transgressed through, for instance, the offering of opportunities to become politically active by signing petitions or engaging with organisations, stark emphasis is placed on remaining apolitical, non-moralising, and neutral. Rather than reflecting a disregard for, or devaluation of, political or societal engagement, this approach suggests that WeltTellerFeld presents a socio-political action option without advocating for or imposing a specific outcome. This, once again, aligns with a critical-emancipatory understanding of education (Getzin and Singer-Brodowski 2016), in which learners are encouraged to independently determine where and how their political and societal engagement becomes meaningful, unlike in instrumental or indoctrinating models (Kaufmann, Sanders, and Wortmann 2019).

Ultimately, the dialectic tension between the individual versus the systemic in relation to their respective roles in enabling socio-ecological transformation represents a fundamental conundrum, not only within the broader degrowth and sustainability discourse (Buch-Hansen and Nesterova 2023) but also within WeltTellerFeld's educational practise. The tendency to individualise sustainability crises, long criticised in mainstream ESD (Jickling and Wals 2008; Huckle and Wals 2015), cannot be entirely dismissed in WeltTellerFeld's case, given its central, though justified, focus on individual behaviour, consumption, and dietary change. At the same time, the initiative explicitly seeks to counteract this tendency by linking incentivized bottom-up behavioural changes with top-down redressive action targeting collectively identified structural and systemic oppressions and injustices.

In a Freirean (2014) sense, WeltTellerFeld's education can meaningfully contribute to socio-ecological transformation only when action is combined with ongoing critical reflection that leads to praxis. This, in turn, fosters the development of critical consciousness and supports liberation from oppressive and destructive societal and environmental conditions. To conclude, and perhaps momentarily resolve the tension between WeltTellerFeld's role in the conundrum

of the individual versus the systemic, interviewee 3's compelling reflection captures its best: The initiatives' very existence and its practises that inspire learners to think and reflect critically, can itself be considered a subtle form of systemic change. Not in the sense of large-scale structural overhaul, but as a 'crack' (Wright 2010) within dominant economic, societal, and educational systems, without explicitly burdening learners with that realisation.

6.2. WeltTellerFeld as a Case of a 'Real-Existing' Degrowth Pedagogy? A Synthesis

This section returns to the central research question that guides this thesis: *In which aspects and how do WeltTellerFeld's Education for Sustainable Development (ESD) practices reflect, challenge, or refine degrowth-informed pedagogical approaches?* By bringing the empirical findings into dialogue with the five theoretically derived pedagogical categories, this section synthesises in what ways WeltTellerFeld's practises reflect key principles of degrowth pedagogy, where they challenge or stretch its categories, and how they refine or expand the pedagogical framework itself. The critical discussion of the previous sections reveals that, although WeltTellerFeld does not explicitly align itself with degrowth, many of its educational practises strongly resonate with the degrowth-informed pedagogical approaches. While problem-based, action-oriented, and situated learning form the core of WeltTellerFeld's educational philosophy, the initiative refines this category by placing particular emphasis on the importance, and the practical challenges, of moving from problem awareness to solution orientation. Ideally, this transition culminates in learners not only reconsidering their individual (consumption) behaviours but also feeling inspired and empowered to engage in broader societal and political transformation.

Similarly, phases of intense reflection are also imperative for WeltTellerFeld's education. These moments are used to collectively explore sensitive and disorienting socio-ecological

challenges, encouraging learners to critically consider their own roles in both the perpetuation and potential resolution of these issues. Admittedly, whether such reflection leads to shifts in learners' meaning perspectives or social imaginaries cannot be conclusively determined. The findings range from observable short-term impacts, though limited by time, to suggestions of long-term influence, and in some cases no discernible effect. What can, however, be stated with confidence is that these reflection phases have not only led to the inductive identification of an additional pedagogical approach, namely emotional learning but also point toward the emergence of a further potential category: utopian learning. By engaging learners in imaginative processes of envisioning alternative futures, WeltTellerFeld manages to navigate the pedagogical paradox of avoiding prescriptive outcomes while still normatively guiding learners to urgently needed socio-ecological transformations.

These learning processes are intentionally deepened by WeltTellerFeld through the deliberate inclusion, and provocation, of emotional engagement. When guided by an ethical form of love, such emotional responses can serve as a bridge toward overcoming societal and environmental oppressions, as well as the entrenched human-nature dualism, ultimately fostering socio-ecological thriving and harmonisation. That this kind of learning proves more effective when trainers move away from hierarchical instruction delivered with an 'iron fist' toward a model grounded in mutual respect, trust, and dialogical relationships has been clearly demonstrated in the findings related to the third degrowth-informed pedagogical approach. While WeltTellerFeld's educational philosophy strongly resonates with a redefined understanding of educator-learner relationships, it also specifies this category by highlighting a practical experience: trainers cannot completely dissolve hierarchy or become mere friends to learners. Rather, they must retain a degree of authority to provide structure and boundaries, though always guided by a profound love for the world and one another.

This relational approach also informs WeltTellerFeld's self-understanding as a nonformal and complementary educational space, in contrast to formal institutions that are perceived to perpetuate values like competition and performativity, values closely linked to the growth paradigm and embedded in dominant social imaginaries. Instead of calling for the complete abolishment of formal education, WeltTellerFeld refines the fourth degrowth-informed pedagogical category by demonstrating how such institutions may be reimagined: giving greater weight to sensory, hands-on, nature-based and emotional experiences, and drawing inspiration from often-marginalised local and Indigenous epistemologies rooted in a pluriversal worldview.

For such transformations to materialise, however, action is required, both on the individual and systemic level. WeltTellerFeld not only encourages low-threshold, individual behaviour changes but also seeks to foster socio-political engagement. Whether the initiative ultimately succeeds in this is difficult to determine, as it extends beyond the immediate learning experience. Yet what can be confidently stated is that WeltTellerFeld is deeply aware of the limitations associated with focusing on individual consumption behaviours. It therefore strives to draw the bow toward structural transformation, non-imposingly offering action pathways that engage broader societal and political change, even if such is not always feasible due to logistical constraints. In doing so, WeltTellerFeld adds a crucial refinement to the final degrowth-informed pedagogical category, the politicisation of education. It illustrates that such politicisation need not always be made explicit within educational content, which may risk overwhelming the learners. Instead, it can be subtly embedded in the very existence and practice of nonformal educational initiatives.

Accordingly, one can cautiously, yet confidently, conclude that WeltTellerFeld's ESD practises meaningfully **reflect** degrowth-informed pedagogical approaches. Especially with regard to problem-, action-, and situated-oriented learning, critical reflection, and dialogical trainer-

learner relations. At the same time, they **challenge** some assumptions within the framework, such as the full dissolving of hierarchies or the feasibility of politicising education within constrained nonformal learning formats. Crucially, the findings also point to several ways in which WeltTellerFeld's educational practises **refine** and expand the theoretical framework: by revealing the importance of emotional, motivational, and humoristic learning as a distinct pedagogical dimension, and by highlighting the emerging relevance of utopian imagination. To synthesise the multi-dimensional nature of these findings, Table 6 below maps the six degrowth-informed pedagogical categories against how WeltTellerFeld's ESD practices reflect, challenge, or refine them.

Table 6. How the Educational Practices of WeltTellerFeld Reflect, Challenge, and Refine Degrowth Pedagogical Approaches

Degrowth-informed Pedagogical Approach	Reflecting	Challenging	Refining
1. Situated / Action-Oriented / Problem-Based	WeltTellerFeld's nature-based, action-oriented, and learner-centred learning strongly reflects this category.	The challenge of moving from problem-based learning and awareness to solution-oriented learning and empowerment.	Stronger centralising on low-threshold and implementable solutions leaving learners empowered and self-efficacious.
2. Phases of Intense Reflection	Active integration of emotional and cognitive intense moments including disorientations or shocks for collective critical reflection.	Time constraints of workshops limit the depth of meaning-perspective transformation. Eventually arisen dissonance may spark resistance, rejection and reverting to the original meaning perspective, if not	Centralises safe and dialogical learning spaces with emotional openness and facilitation while encouraging the imagining of alternative futures.

		successfully intercepted.	
3. Emotional, Motivational, and Humoristic Learning (Inductive)	Emotions are intentionally used to foster engagement, motivation, and safe learning spaces; utopian exercises inspire visions of alternative futures.	Emotional depth and utopian scope can be constrained by the duration and format of workshops.	Emotional and utopian learning emerge as significant pedagogical approaches that foster meaning-making, empowerment, and critical-emancipatory engagement, making them valuable additions to the degrowth pedagogical framework.
4. Re-definition of Educator–Learner Role	Dialogical, respectful, and co-constructive trainer–learner relationships reflect Freirean co-intentionality.	Hierarchy cannot be fully dissolved in practice; trainers must retain some authority to ensure structure and boundaries.	Recognising the ‘balancing act’ of flattening hierarchies while maintaining pedagogical clarity and objectives.
5. Critique of Educational Institutions	Critique of competitiveness and performativity embedded in formal schooling.	Direct systemic critique of formal education is mostly implicit and not central to educational workshops.	Suggests ways to rethink formal education: more nature, emotionality, and plural knowledge. Also considering pedagogical methods to contravene values of performativity and competitiveness.
6. Politicisation of Education	Addresses structural injustices and power imbalances (trade, livestock, neo/post-colonialism). Aims to incentivise action beyond the individual.	Moving from individual to systemic level risks overwhelming learners, possibly resulting in resignation. The difficulty of opening systemic issues while not giving	Subtle, implicit, and non-moralising forms of politicisation are practised, avoiding overt ideological positioning while still framing the existence and work of WeltTellerFeld as inherently political

		easy ‘one-fits-all’ solution.	and contributing to systemic transformation.
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Importantly, although WeltTellerFeld does not explicitly identify with degrowth, the findings suggest that degrowth-informed educational practises do not require clear identification to be meaningful. Rather, they may simply emerge organically when experiential pedagogical practises are implemented, especially in nonformal educational contexts like WeltTellerFeld’s. In this sense, the initiative’s practical experiences and resulting empirical insights have not only substantiated but also refined and expanded the initially theorised degrowth pedagogical framework. The refinements suggest that degrowth pedagogy, when applied in real-world practice, cannot be seen as a fixed model but must remain open to evolution. This raises thus the question of whether WeltTellerFeld and its educational practises, may indeed be understood as a case of ‘real-existing’ (Kallis, Varvarousis, and Petridis 2022) degrowth pedagogy: not a perfect or idealised model, but a ‘living’ (Brossmann and Islar 2020) example that highlights the real-world challenges and creative potentials of putting degrowth-aligned educational principles into practice. What follows are critical insights for the empirical validity and improvement of theorised educational approaches in the context of degrowth, but also potential inspiration for broader educational practice and reproduction.

6.3. Theoretical and Practical Contributions

Indeed, the critically discussed empirical results suggest that the initial degrowth pedagogical framework can be meaningfully expanded through the inductively derived approach of emotional, motivational, and humoristic learning. While the relevance of emotional dimensions in education, especially in relation to sustainability challenges and transformative learning has been widely acknowledged (Mälkki 2019; Grund et al. 2024), such emphases have remained

largely absent from degrowth-specific educational approaches. This omission is puzzling, given that key values promoted in degrowth, such as care and frugality (Parrique 2019), deeply relate to emotions. Strikingly, it is precisely through such values that degrowth seeks to overcome the entrenched human–nature dualism and the individualisation of responsibility (D’Alisa, Deriu, and Demaria 2014; Muraca 2015a), both of which are seen as key drivers of the ongoing socio-ecological crises. Accordingly, any degrowth-informed educational approach would benefit from deliberately integrating space for emotional expression, and, when appropriate and effectively guided, even the mindful provocation of emotional responses, as a way to support transformative learning experiences, including shifts in meaning perspectives and social imaginaries. This is supported by practical observations from WeltTellerFeld, where emotional learning is considered a central pedagogical strategy to support learner process shifts in meaning perspectives and associated dissonances, while simultaneously incentivising motivation. As a result, the deliberate inclusion of emotional expression as part of the learning process may inspire replication across (non-)formal educational formats, not by dismissing emotions as irrelevant, but by recognising them as a significant literacy for developing critical consciousness.

Beyond emotional engagement, another dimension that surfaced across categories and data sources warrants further theoretical and practical attention: utopian imagination or learning. Although, and admittedly, not developed here as a separate pedagogical category, the empirical evidence for it is compelling, especially as degrowth itself is often described as a utopian project (Schmelzer, Vetter, and Vansintjan 2022). Methods used by WeltTellerFeld, such as “drawing your own utopia”, the “supermarket of the future”, or envisioning ideal worlds through reflective prompts, invite learners to explore change across both individual and systemic levels. Accordingly, the sheer imaginative games do not stop at the sole envisaging but also encourage learners to collectively identify the steps needed to realise the

envisioned alternatives. While this omission as a category may be viewed as a limitation due to its late recognition during analysis, it simultaneously offers a promising direction for future research and potential pedagogical replication in other (non-)formal education contexts.

Emotional and utopian learning may then be added to the initial degrowth pedagogical framework. Using the metaphor of a sunflower, Figure 4 below synthesises this now expanded framework with the central aim to liberate social imaginaries and thereby support socio-ecological transformation. This end goal is supported and surrounded by the degrowth-informed pedagogical approaches, comprising seven pedagogical petals in total: the five originally theorised approaches, complemented by the inductively derived dimensions of emotional and utopian learning. It is this empirically grounded and multidimensional framework that offers a nuanced response to the broader question of what kind of education might meaningfully contribute to the emancipation of social imaginaries and support socio-ecological transformation.

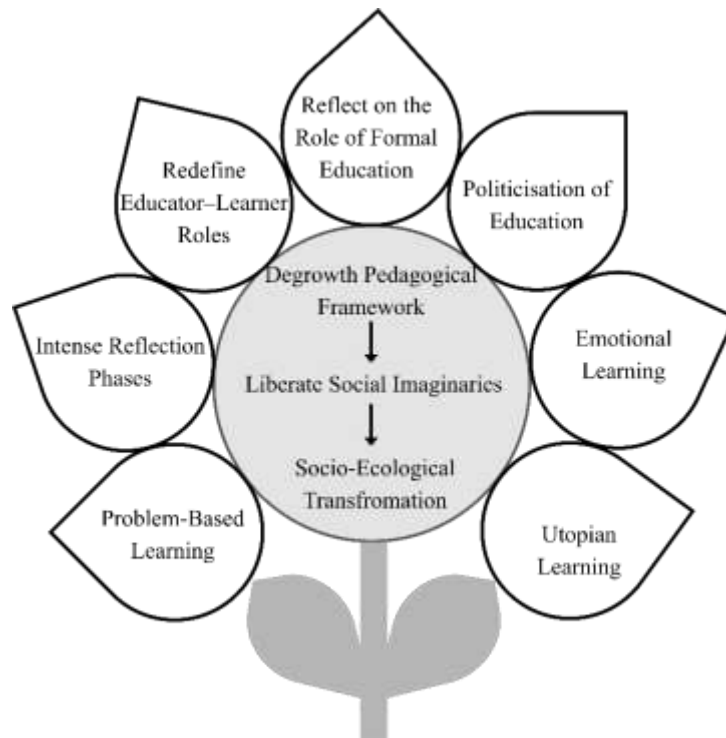


Figure 4. Sunflower Illustration of the Expanded Degrowth Pedagogical Framework (own illustration)

Closely connected to this is the broader question of how degrowth thinking can be meaningfully integrated into educational practice. The case of WeltTellerFeld demonstrates how degrowth-compatible education can be embedded within Education for Sustainable Development (ESD) without being explicitly named as such. This connects to Getzin and Singer-Brodowski's (2016) argument that degrowth-related educational practises should remain at the margins of ESD, deliberately so, to avoid resistance or funding restrictions that might arise from the perceived radicalism of degrowth' anti-capitalist associations. Such tendency was further confirmed in the initial expert interview, where it was noted that official funding applications tend to invoke broadly accepted terms like 'transformative learning' or 'social-ecological transitions' rather than degrowth itself. The case of WeltTellerFeld thus highlights that pedagogical practises can meaningfully align with degrowth principles even when not explicitly framed as such. In this sense, initiatives like WeltTellerFeld may be understood as examples of 'real utopias' (Wright

2010): practical, grounded experiments that herald alternative futures from within the ‘cracks’ of dominant economic, societal, and educational systems.

From a practical perspective, one such ‘crack’ may be found in early educational engagement. The observations of all interviewed trainers converge on a common insight: older learners often express feelings of political and systemic ineffectiveness, a sentiment that appears, however, far less prevalent among younger learners. This disparity, as observed by a trainer at WeltTellerFeld, is attributed to younger learners’ limited exposure to dominant systemic structures, in contrast to the prolonged immersion of older learners. As a result, younger learners’ imaginaries may be less shaped, or captured, by hegemonic ideologies such as the growth imaginary (Schmelzer, Vetter, and Vansintjan 2022). WeltTellerFeld’s empirical findings thus highlight the significant value of engaging learners in transformative educational experiences from an early age, which, so far, received too little scholarly attention (Blum et al. 2021; Bormann et al. 2022). Such early intervention could serve to counter the competitive thinking and performance logic, values that, as also observed within WeltTellerFeld’s workshops, have already been internalised by some learners and appear to be propagated through formal education (Getzin and Singer-Brodowski 2016). In their place, the initiative non-imposingly offers alternative imaginaries grounded both in factual realities, such as the planetary boundaries, and in normative values like caring for another and the planet, as well as frugality, elements that may be of interest to educational practitioners in other settings.

To conclude this section, one broader practical contribution must be added: the structural and logistical limitations that continue to restrict WeltTellerFeld’s reach and long-term impact. As highlighted across the interviews, these challenges include the issue of resources, specifically funding, where long-term continuity is uncertain, contributing to insecurities and the constraining of WeltTellerFeld’s full potential. Redress could here be multi-year or programmatic support, including EU-level opportunities, with which the project is secured in

the long term, allowing expansion in educational offers but also reach. Another limitation that repeatedly emerged is the one-off nature of most workshops which significantly limits the potential for deep and sustained learning, with trainers stressing the need for recurring visits to enable learners to engage meaningfully with complex socio-ecological challenges. Following Kaufmann, Sanders, and Wortmann's (2019) call to "identify accessible entry points within this institutional context" (939), one possible option could be building stronger partnerships with formal educational institutions through, for instance, integrating continued visits to WeltTellerFeld within curricula or developing long-term cooperation with school classes. Beyond these institutional levels, forming alliances with other nonformal education initiatives or even forging ties with social movements (Kaufmann, Sanders, and Wortmann 2019), could strengthen the collective voice for alternative, experience-based education by enhancing visibility and socio-political leverage.

6.4. Limitations and Methodological Reflections

Although this research has meaningfully contributed to understanding how degrowth-informed pedagogies are reflected, challenged, and refined within the Education for Sustainable Development (ESD) practices of a nonformal educational initiative, it is not without limitations. Throughout the process, the study has strived to adhere to the ethical and methodological commitments outlined in the [Research Design and Methodology Chapter](#). These limitations pertain both to methodological decisions embedded in the research design and to practical experiences and constraints encountered during the project, which will be critically reflected in this section.

6.4.1. Generalising from a Single, Potentially Biased Case Study?

To begin, the findings of this thesis pertain solely to the single, descriptive-exploratory case study of WeltTellerFeld, essentially limiting the generalisability of presented conclusions. Yet

while this is a constraint that not only characterises this thesis, but single-case qualitative studies in general (Yin 2017), it does not render its results and argument irrelevant to other educational contexts. On the contrary, the practical contributions discussed before, including, for instance, emotional or utopian learning with accompanied methodological approaches, may find autonomous interest, application and replication in various learning settings, despite emerging out of one specific nonformal educational context. Nonetheless, the contributions and recommendations remain not applicable in every educational context, format, and across geographical location, since they emerge out of a specific socio-cultural educational environment located within a Western “highly developed” country. Such limitation must be recognised when aiming for transferability to other educational contexts, with a potential need to adapt to contextual circumstances.

On another matter, the selection of the case of WeltTellerFeld was informed by my pre-existing connection and involvement, potentially introducing selection biases and affecting the neutrality of the interpretations. While objectivity in such normative and qualitative contexts, but even in general, can simply not fully be attained (Haraway 1988; Kothari et al. 2019; Escobar 2018; Fien 1997)), I still tried to critically reflect on my own positionality and how it may influence the obtaining of results but also their interpretation. Specifically relevant is here the pre-existing degrowth pedagogical framework which may created a confirmatory lens where I was more inclined to perceive alignments between WeltTellerFeld’s pedagogical practices and degrowth-informed educational approaches. Nonetheless, the emergence of new inductive categories such as emotional learning, and in the end also utopian learning, would instead counter such tendencies of confirmation and rather make a case for methodological openness. This has also been supported by the aim to triangulate the findings across the data types (documents, observations, interviews), giving particular attention to how the results differ between theoretical conceptualisation and practical implementation. This triangulation has not

been pursued merely for technical adherence (Flick 2014; Getzin 2019), but rather to enable in-depth insights into the case of WeltTellerFeld.

6.4.2. From the Impact of My Positionality to Epistemic Justice

These presented results and discussions, while approached with an intention toward neutrality, are inevitably shaped by my positionality, as outlined in the [Research Design Chapter](#), including a normative commitment to degrowth, socio-ecological transformation and a belief in education's emancipatory potential. Coming from a constructivist-transformative worldview, I acknowledge that my interpretations are situated and shaped by my personal values, assumptions, privileges and the broader research context. While this thesis and its empirical results recognise the importance of alternative and pluriversal epistemologies (Escobar 2015; Andreotti 2016), including local and Indigenous knowledge systems, its own conceptual and analytical foundations remain rooted in a predominantly white, academic, privileged, and Western context. Any conclusions, contributions, and recommendations derived from this work must therefore be read against this background. At the same time, this reflexive awareness highlights the need for sustained dialogue and complementarity with research emerging from less privileged contexts. Only with such dialogue can genuinely diverse epistemologies emerge, amplifying the voices of historically marginalised knowledge and thereby advancing epistemic justice (Fricker 2007).

6.4.3. Methodological Constraints in Practice

Beyond these epistemological and positional reflections, the research process was also shaped by more practical and methodological limitations. One major limitation was the absence of field observations of workshops involving schoolchildren, adolescents, and even adult learners. This was primarily due to the logistical complexity of obtaining ethical consent from each participating child's legal guardian while no adult-centred workshops were scheduled during

the research period. As a result, field observations were limited to these adult-focused sessions including the onboarding of new trainers, and a workshop where WeltTellerFeld presented its methods to outside teachers and pedagogues. Therefore, learner experiences could only be assumed through the reports of trainers rather than being directly observed. Yet, one interview took place immediately after a completed workshop, allowing the trainer to integrate concrete examples. These time constraints also limited the number of semi-structured interviews to three. While the initial aim was to allow the principle of data saturation to guide the number of interviews, it was difficult to confirm that saturation had been reached as further interviews could not be pursued due to the limited research timeframe. Additionally, all interviewees were affiliated with WeltTellerFeld, and two out of three identified as male, potentially narrowing the range of perspectives on the initiative's educational practice and impact, especially in regard to gender-sensitive pedagogical approaches. Another crucial methodological consideration pertains to a potential observer effect, where participants in interviews and field observations may alter their behaviour due to my presence. I tried to mitigate this by establishing a friendly, natural, and mutually respectful atmosphere when engaging in data collection, but also triangulation across the data sources, while my influence cannot be entirely excluded. Accordingly, all these limitations suggest directions for future research: including direct viewpoints from learners, engaging with formal schoolteachers, and paying closer attention to gender and other social identifiers in order to develop a more comprehensive, situated, and critically reflexive understanding how degrowth-informed pedagogical approaches are perceived and practised across different educational roles, perspectives, and genders.

6.4.4. From Knowing How to Walk To Choosing the Direction

A final reflection pertains to the deliberate methodological decision to prioritise pedagogical approaches (how something is taught) over educational content (what is taught). This decision aligns with the normative commitment of degrowth-informed education to remain faithful to

critical-emancipatory rather than instrumental education (Getzin and Singer-Brodowski 2016; Kaufmann, Sanders, and Wortmann (2019). Within critical-emancipatory education, how teaching is practised is considered central to enabling learners to reach Freire's (2014) critical consciousness, whereas predefined curricula and content are generally associated with instrumental education, or in Freire's words, the banking model of education. Indeed, critical pedagogy emphasises that educational content should not be predetermined, but rather should emerge from learners' own lived experiences, articulated and explored through dialogical processes (Freire 2014). Similarly, transformative learning, although initially triggered by content-related disorienting dilemmas, crucially depends on experiential reflection and critical discussions, guided by educators to achieve genuinely transformative experiences (Mezirow 2009; 2018).

Given that degrowth-informed education explicitly builds upon these critical and transformative pedagogies, this thesis intentionally analysed WeltTellerFeld's pedagogical approaches rather than its specific educational content. However, this should not undervalue or dismiss the importance of the content itself with certain themes such as planetary boundaries or agroecological knowledge at times highlighted in this thesis. Nor should this imply that all predetermined content inherently aligns with instrumental or banking education. Instead, the point is that pedagogy functions as the intermediating force through which content becomes meaningful, and also contested, ultimately enabling transformative critical consciousness and the liberation of social imaginaries captured by growth imperatives.

Importantly, it must be acknowledged that educational content can also perpetuate growth imaginaries, even within pedagogically progressive formats. The fact that this thesis has not analysed WeltTellerFeld's educational content in depth can accordingly be considered a limitation, as it does not identify how the taught content may support, or potentially undermine, the degrowth-informed pedagogical approaches. This limitation, however, points to avenues for

further research symbiotically examining how degrowth pedagogy and related content interact with one another, potentially offering more comprehensive insights into what kind of education fosters the emancipation of social imaginaries and, ultimately, supports socio-ecological transformation. All things considered, any education in the context of degrowth must carefully balance the choice of the appropriate content with the facilitation of critical-emancipatory learning, echoing what Sterling (2010), drawing on the Spanish poet Antonio Machado, describes as the importance of knowing both how to walk and in which direction. Ultimately, however, it is the learner who must decide the path. With this representative image, the discussion chapter concludes, paving the way for the final chapter. This concluding chapter summarises this thesis' main contributions and recommendations, situating them within their educational potential to liberate social imaginaries and support socio-ecological transformation.

CHAPTER SEVEN: CONCLUSION

“Education does not change the world. Education changes people. People change the world.”

— *Attributed to Paulo Freire*

While the introduction opened with David Orr's (2004; 2017) cautionary note on the potentially destructive force of education, warning that, without care, education may simply support us to wreak havoc on both the planet and ourselves, the quote attributed to Paulo Freire above instead signifies its transformative potential. For Freire, it is ultimately through people, those empowered by and actively shaping education, that genuine and lasting transformation becomes possible, enabling us to overcome the ongoing 'vandalization' of the Earth and the 'oppression' of one another. By placing Orr and Freire in dialogue, we can draw a full circle: if education can serve to reproduce environmental and social harm, it can also be reclaimed and reimagined

towards contributing to socio-ecological change. This thesis has explored how such reimagining may take shape in nonformal education for sustainable development (ESD), especially when informed and guided by pedagogical approaches rooted in degrowth, critical pedagogy, and transformative learning.

The motivation behind this stemmed from the realisation that although degrowth insists socio-ecological transformation requires the liberation of social imaginaries from growth imperatives (Muraca 2015b), precisely what kind of education could meaningfully contribute to this objective remained under-conceptualised. Moreover, there was a relevant empirical gap on how nonformal ESD initiatives might implement educational practices that align with the aims and values of degrowth. In response to these gaps, this thesis examined the case study of WeltTellerFeld, investigating *which aspects and how its ESD practices, reflect, challenge, or refine degrowth-informed pedagogical approaches*. In addressing this research question, the thesis not only assessed the applicability and resonance of existing degrowth-informed pedagogies but also explored how real-world educational practices might challenge or refine these conceptual approaches.

This brief, I promise (!), final chapter first summarises the main empirical findings in response to the research question, structured by the five degrowth-informed pedagogical categories developed in the theoretical framework. In doing so, it also revisits the inductively derived dimensions of emotional and utopian learning, which emerged as vital pedagogical extensions, and constitute the central theoretical contribution of this thesis. Taken together, these insights not only deepen theoretical understanding but also translate into practical contributions of this thesis. Building on these contributions, and the recognized limitations of this thesis, directions for future research are derived and recommended. Ultimately, the thesis closes with a reflective synthesis of the role of WeltTellerFeld's educational practice, and degrowth-informed

education more broadly, in fostering the emancipation of social imaginaries in times of intensifying socio-ecological (poly)crises, deepening global incertitude, and directionlessness.

7.1. A Summary of the Main Findings of this Thesis

Drawing upon and merging the pedagogical frameworks proposed by Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019), this thesis developed an analytical framework comprising five core degrowth-informed pedagogical approaches: (1) situated, problem-based, and action-oriented learning; (2) phases of intense reflection; (3) re-definition of educator–learner roles; (4) critical reflection on educational institutions; and (5) politicisation of education. The empirical analysis confirmed the practical relevance of these categories while simultaneously revealing how WeltTellerFeld’s ESD practises reflect, challenge and meaningfully refine them.

First, WeltTellerFeld’s educational philosophy strongly reflects the category of **situated, problem-based, and action-oriented learning**. Its approach is deeply grounded in experiential, outdoor, and learner-centred practices. Yet, the initiative concurrently refines this category by emphasising both the utmost importance and the practical difficulty of moving beyond mere problem identification and awareness, toward learner empowerment, where learners themselves develop motivation to become engaged. It is followingly essentially important to underline that WeltTellerFeld’s practises do not purely reflect, challenge, or refine degrowth pedagogies in isolation, but rather often engage simultaneously with all three modes, although to varying degrees. In that light, the initiative’s use of intense reflection phases appears to be aligned with a critical-emancipatory educational approach. These **reflection phases** allow learners to collectively confront disorienting dilemmas, potentially shift their meaning perspective or social imaginary, process emotional responses, and envision alternative realities. Nonetheless, WeltTellerFeld’s educational practice also challenges aspects of the degrowth

pedagogical framework, especially the assumed possibility of fully dissolving hierarchies between trainers and learners. Although the initiative cares **for trainer-learner relationships** guided by dialogical interaction at eye level, it maintains some degree of positional differentiation to set boundaries when needed. A similar pattern emerged in relation to the critical reflection on formal educational institutions where interviewees largely affirmed the complementary value of formal education rather than explicitly challenging it. Nevertheless, findings clearly underlined a crucial need for reforming formal education systems, specifically advocating greater attention to sensory, nature-based, and emotional experiences, potentially drawing inspiration from local, Indigenous, and pluriversal epistemologies. Interestingly, critique of formal educational systems emerged more implicitly through the recognition of their role in ingraining competitive thinking and performance logic within learners, thereby reinforcing the grip of the growth paradigm on young peoples' social imaginaries. A similar conflated perspective appeared regarding the fifth pedagogical approach, the **politicisation of education**. While WeltTellerFeld actively seeks to link individual behaviour changes to broader systemic considerations, the practical feasibility of explicitly politicising education in short-term, one-off workshops, particularly with young learners, is questioned. Despite these practical constraints, the initiative's presence and educational practice itself are considered inherently systemically meaningful, contributing implicitly to broader systemic shifts even if not always explicitly addressed within the workshops. Finally, the findings significantly expand the initial degrowth pedagogical framework. The empirical analysis revealed the emergence of an inductive pedagogical category: **emotional, motivational, and humoristic learning**. WeltTellerFeld. intentionally incorporates and provokes emotional engagement within its learning and reflection processes, perceived as essential not only for guiding shifts in learners' meaning perspectives following disorienting experiences but also for sparking curiosity and motivating social and ecological engagement. These emotional dynamics often serve as an entry

point into imaginative explorations of alternative realities and futures. These visions are also present within WeltTellerFeld's **utopian learning** practices, where learners are invited to imagine alternative realities or utopias in which socio-ecological challenges are either overcome or rendered obsolete.

7.2. Theoretical Contributions

It is these two additional pedagogical approaches, emotional and utopian learning, that represent the main theoretical contribution of this thesis, becoming integrated into the degrowth pedagogical framework. These findings expand the initial five pedagogical categories, as outlined by Getzin and Singer-Brodowski (2016) and Kaufmann, Sanders, and Wortmann (2019), to a total of seven approaches (see Figure 4 in [Section 6.3](#)). Accordingly, the findings underline that these pedagogical approaches and categories are not all-inclusive and static, but rather 'living' methods in constant fluctuation and advancement.

The relevance of **emotional learning** becomes apparent when altered meaning perspectives or social imaginaries are aimed to be normatively guided by values such as care, solidarity, or frugality, that are inherently connected to emotionality. When further linked with Freirean notions of humanistic and ethical love, emotional learning and resulting literacy have the potential to overcome the deeply ingrained separation between self, others, and nature, thereby contributing to a more holistic and harmonious vision of socio-ecological thriving. For such thriving to be, however, realised, learners must first be able to imagine what alternative realities might look like, relating to the second key theoretical contribution: **utopian learning**. Indeed, the approach of first imagining what would be necessary so that current socio-ecological crises become obsolete while then co-creatively reflecting on what would be required so that these visions become actual reality, presents a powerful pedagogical approach. Especially in the context of degrowth, which itself is at times described as a utopian idea (Kallis and March

2015), pedagogies that cultivate utopian literacy may support the emancipation of social imaginaries and thereby non-imposingly guide what could inform these liberated imaginaries. Doing so may overcome the pedagogical paradox of refraining from fixed outcomes while still guiding learners normatively toward the pressingly needed socio-ecological transformation.

7.3. Practical Contributions

Although emotional and utopian learning represents significant theoretical contributions towards degrowth-informed pedagogy, they simultaneously also entail the inherent capability to become practically applied across educational contexts. As demonstrated in WeltTellerFeld's practises, described in greater detail in the [Results chapter](#), these approaches may enrich both nonformal but also formal educational settings by countering their perpetuated fixation of rationality, performativity, and competitiveness. By giving space to emotional expression and utopian imagination, such pedagogies may challenge the dominant growth imaginary (Schmelzer, Vetter, and Vansintjan 2022), often instilled and sustained in mainstream education. Interestingly, while traces of the growth imaginary, such as competitive and performance-driven thinking, were already observable among younger learners, feelings of political and systemic disempowerment appeared only with older learners. As such, these findings affirm the value of engaging young learners early in transformative learning experiences that challenge growth imperatives and instead offer imaginaries grounded in caring for another and the planet.

Beyond these pedagogical insights, the case of WeltTellerFeld demonstrates that nonformal educational initiatives do not necessarily need to explicitly identify with degrowth to align with its principles in practice. This confirms Getzin and Singer-Brodowski's (2016) observation that degrowth-compatible education often emerges in niches rather than at the centre of formal education. In this light, the initiative may be considered to represent a 'crack' (Wright 2010)

within hegemonic economic, societal, and educational structures, practising alternative education harmonised with socio-ecological transformation and thriving. As a ‘real utopia’ or ‘real-existing’ degrowth, to become impactful beyond its direct sphere of influence, however, WeltTellerFeld may want to explore even deeper cooperation with formal schools with recurring educational expositions. Expanding such sphere further could entail forging connections between alike nonformal educational initiatives for mutually conducive dialogue, but also social movements, connecting thereby the ‘cracks’ in the system for combined support for socio-ecological transformation.

7.4. Directions for Further Research

Building on these theoretical and practical contributions, as well as the limitations outlined in [Section 6.4](#), several directions for future research can be derived. To begin with, although emotional and utopian learning emerged inductively as significant pedagogical dimensions in this study, further research is needed to ground these approaches more systematically in degrowth literature, critical pedagogy, and transformative learning. Conceptualising and developing these as formal pedagogical categories could contribute to the refinement of degrowth-informed education and validate their broader applicability in other education contexts. Their integration into comparative case studies would also test the relevance and adaptability of the proposed degrowth pedagogical framework beyond the single case of WeltTellerFeld, addressing thereby concerns of limited generalisability. Another crucial direction lies in incorporating the perspectives of the learners themselves. This thesis focused on educational documents, trainer perspectives, and field observations, leaving a significant gap in understanding how children and youth actually experience, interpret, and respond to degrowth-informed pedagogies. Similarly, the perspective of formal educators has not been addressed in this research. Future studies could explore how teachers within formal institutions perceive the degrowth-informed pedagogical categories and whether they view them as feasible

or desirable to become integrated into formal educational settings. This would not only broaden the understanding of potential overlaps between formal and nonformal education but also inform strategies for degrowth-informed education entering formal educational spheres eventually becoming institutionalised (Kaufmann, Sanders, and Wortmann (2019). In addition, the role of gender and other intersectional factors remains underexplored in this thesis. Future research could examine how degrowth-informed pedagogy is perceived, enacted and received across different social identities and positionalities. Investigating how these pedagogies function in both formal and nonformal settings, and how this varies across cultural, geographical, and especially non-Western contexts, would further contribute to building a more inclusive and pluralistic understanding of degrowth education. Finding inspiration from historically marginalised and excluded knowledge such as those from local and Indigenous communities could further enrich the degrowth pedagogical framework and underline their pluriversal epistemologies from which ‘impoverished’ Western education has so much to learn. Finally, future studies could integrate the here analysed and expanded degrowth-informed pedagogical approaches with a systematic analysis of educational content. Such an angle could give insight into how certain contents reinforce or challenge the degrowth pedagogies as it may only be in their harmonious combination that meaningful transformative learning succeeds. Ultimately, it is through a careful balance between non-instrumental, factually grounded content and critical-emancipatory pedagogies that degrowth education can support the liberation of social imaginaries from the grip of the growth paradigm and open up possibilities for socio-ecological transformation.

7.5. From Self-Irony and ‘Cracks in the System’ to a Concluding Radical Hope

Is it not ironic, that although the findings of this research emphasise, amongst many more, the relevance of experiential, sensory, hands-on, nature-based, and emotional learning, I have

written this thesis predominantly in a purely academic manner, in closed-off rooms educating my lone self on sustainable development and degrowth? Luckily there have been intermediating events including nature-based field observations and interviews allowing reconnecting not only to the environment but also to people. This in itself may support the argument made here to rethink and reimagine formal education, including higher education, acknowledging, however, that this research and I have immensely benefitted from its status quo. Being yet not the main focus of this thesis, I would like to draw this project to an end by orienting its results within the broader realm of degrowth, education, and socio-ecological change in times of deepening incertitude, polycrises, and lack of direction.

While this research began with the identification that socio-ecological transformation necessitates the emancipation of social imaginaries from growth imperatives, education has been identified as a critical leverage point for enabling this aim. With the case study of WeltTellerFeld, this thesis demonstrated that even insignificant-appearing small-scale educational initiatives and their equally minor-seeming incentivised changes, are meaningful in wide-reaching processes of transformation. Acknowledging that the necessity of fully liberated imaginaries may overstretch WeltTellerFeld's individual sphere of influence, presented findings nevertheless highlight that its sheer existence and educational practise sets and offers impulses for such to get in motion. In this sense, the initiative and its practises may indeed be understood as a 'crack in the dominant system', a 'real utopia', non-imposingly offering prefigurative alternative realities in the here and now. Out of such conceptualised and practised education may emerge a form of empowerment and self-efficacy igniting learners' desire and agency against ever-worsening socio-ecological crises. Connecting the anthropological optimism expressed by one interviewee with Freire's (2014) trust in a world "in which it will be easier to love" (29) offers not only a sense of actionable hope, but also a

compass for learners to find their own roles and pathways within desperately needed social-ecological transformation.

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APPENDICES

Appendix A

Table 7. Overview of Selected Documents

Document Type	Sub-Document	Description	Target Group	Page Length
Educational Concept Paper	Long version	Overarching Educational Concept Paper	Educators	22
	Short Version	Overarching Educational Concept Paper	Broad public	7
Basic Workshop 1	1.	Interactive on-site workshop combining	From 12 Years	3

		sensory engagement, field exploration, and practical agriculture tasks.		
	2.	Worksheet for learner-guided exploration of the field site with reflection prompts based on signage and layout.	From 12 Years	2
	3.	Simplified worksheet for learners to navigate and observe thematic areas of the learning garden; includes visual and quiz elements.	From 12 Years	1
Basic Workshop 2	1.	A play-based, guided learning activity for children aged 7–11, combining agricultural work with a participatory global learning rally.	Children (7–11 years)	4
Fair & climate-friendly	1.	Workshop on global supply chains and local food production combining a field tour, critical role play, and practical agriculture activities.	From 11 Years	3
	2.	Background information on basic terms for	From 11 Years	11

		games on food system supply chains, and term lottery.		
	3.	A roleplay-based learning module where participants simulate unfair global trade dynamics between cocoa farmers and traders.	From 11 Years	11
For Adults	1.	Guide for adult visits during site tours including talking points, interactive elements, and climate-health-food system connections.	(Young) Adults	16
School Workshops	Biodiv 1	Workshop plan introducing students to biodiversity in agriculture. Combines movement, observation, games, and group reflection.	From 11 Years	3
	Biodiv 2	Interactive workshop on biodiversity using species cards, movement games, field exploration, and a food web simulation.	From 11 Years	4
	Cook 1	Hands-on workshop combining seasonal	From 11 Years	3

		fieldwork and collaborative cooking to explore climate-friendly and fair food practices.		
	Three W's 1.	Interactive classroom workshop linking personal food choices to global supply chains and climate impacts through games, reflection, and group work.	From 12 Years	2
	Three W's 2.	A participatory classroom workshop on the climate impact of food systems.	From 11 Years	4
	Three W's 3.	Learners interact through a bingo game linking personal food habits to broader themes like sustainability, food origins, and climate justice.	From 11 Years	1
Easy Language	1.	Trainer guide for using accessible language during educational sessions.	From 11 Years	2
	2.	Reflective training guide on pedagogy, group dynamics, and managing challenges during educational workshops.	From 11 Years	12

Field workshop School		Interactive field tour exploring food systems, biodiversity, and climate impacts through hands-on and discussion-based stops.	From 11 Years	4
Welcome		Introduction to the WeltTellerFeld.	Visitors	1
Research Poster	1.	Poster summarizing student-led research on how experiential learning at WeltTellerFeld fosters environmental awareness, with a key focus on rebuilding nature connection.	Educational Initiative, Academics, Civil Society	1
	2.	Poster presenting research on how flexibility and improvisation in WeltTellerFeld workshops enable tailored, inclusive, and responsive teaching for diverse groups.	Educational Initiative, Academics, Civil Society	1
	3.	Poster exploring how WeltTellerFeld fosters purposeful learning by connecting children with nature through hands-on agriculture, games, and	Educational Initiative, Academics, Civil Society	1

		reflective experiences.		
	4.	Poster investigating how engagement at WeltTellerFeld is fostered through sensory learning, hands-on tasks, and authentic settings, with recommendations for trainers.	Educational Initiative, Academics, Civil Society	1
External Publication	Book Chapter (Public)	A chapter in a public-facing publication on critical economic and sustainability education. The chapter presents the educational approach and didactic positioning of the initiative in the context of economic transformation.	Educators & interested public	3

Appendix B

Table 8. Code Book

Category	Definition/ Description	Coding Criteria	Empirical examples
Situated-, Action-Oriented-, and Problem-Based Learning <i>Situiertes-, handlungsorientiertes- und problemorientiertes Lernen</i>	Learning processes grounded in real-life, complex, and locally embedded social-ecological problems. These advance experiential learning through the interplay of action and reflection (praxis), encouraging	Passages describe learning that is hands-on, place-based, experience-driven or involves real-world problems. Evidence of learners engaging in actions or projects that connect to social-ecological realities.	“Die Schülerinnen und Schüler lernen das Feld selbständig kennen durch Orientierung am Plan und Beobachtung“ (Workshop materials). "Hands-on activities can foster connection with nature." (Research Poster)

	agency and self-efficacy.		
<p>Phases of Intense Reflection</p> <p><i>Phasen intensiver Reflexion</i></p>	Critical and collective reflection phases that allow learners to examine and potentially shift their meaning perspectives or social imaginaries, often triggered by disorienting dilemmas.	Descriptions of structured or informal reflection (individual or group-based). Reflections that touch on personal values, worldviews, emotional reactions, or systemic critiques.	<p>“rollenspiele wie der walk of privilege→“kategorien im kopf ablegen“ →nicht so leicht, viel wichtiger ist es erstmal überhaupt das verstehen oder erkenntnis für eigene privilegien aufzubauen →erst dann können sie abgelegt werden” (Reflective notes of field observation)</p>
<p>Re-definition of the Educator-Learner Role</p> <p><i>Neudefinition der Rolle der Lehrenden und Lernenden</i></p>	<p>Shifts away from hierarchical and unidirectional teaching toward more dialogical, participatory, and learner-centred approaches. Educators act as facilitators and co-learners. The learner’s knowledge, emotions, and lived experience are actively acknowledged and shape the learning process. Emphasis is placed on trust, responsiveness, and co-creation of meaning.</p>	<p>Examples where educators avoid traditional, top-down knowledge transmission and instead foster dialogical, participatory, and un-hierarchical learning. The prior knowledge, interests, and lived experiences of learners are valued and integrated. Learning content is flexibly adapted to the learner’s background or interest. Mutual learning between educators and learners.</p>	<p>“Ich sehe mich eher als eine Begleitung am Feld, eine Begleitung, die manchmal viel quatscht und manchmal auch nicht also.“ (Interviews)</p> <p>„[...] ich sprech nicht mehr von Teilnehmer:innen, sondern von Teilgeber:innen“. (Interviews)</p> <p>„Gruppe erklärt sich selbst was etwas ist“ (Field observations)</p>
Reflection on the role of educational organizations	Explicit or implicit reflections on the limitations, blind spots, or	Descriptions or reflections that question the structure, culture, or everyday	„Ich find Schule extrem wichtig. Schule darf aber auch neu gedacht werden, [...]

<p><i>Reflexion der Rolle von Bildungsorganisationen</i></p>	<p>structural constraints of formal education systems. Covering critical perspectives on how schools reproduce dominant norms and logics such as competitive pressure, and logics of performance and productivity. Non-formal educational spaces as complementary or transformative alternatives where different approaches to school settings are tested.</p>	<p>practices of formal schooling. This includes criticism of school settings as rigid, stressful, or disconnected from real life, through, for instance, performance pressure, competition, or lack of hands-on learning. The role of teachers</p> <p>as well as contrasts or complementarities drawn between school settings and the learning environment at the WeltTellerFeld are also included.</p>	<p>wenn sich auf struktureller Ebene nichts tut, dann kann man sie vergessen ja“ (Interviews)</p> <p>„Lehrpersonal antwortet für kinder→“lass mal lieber die kinder antworten“ (Field observations)</p> <p>„Die meisten, die haben Vormittag kommen, sind happy, dass es keinen Unterricht gibt.“ (Interviews)</p> <p>„Schüler*innen sind ständig gefordert, weil sie immer selbst lernen müssen“ (Educational Material)</p>
<p>Politicization of Education</p> <p><i>Politisierung der Bildung</i></p>	<p>Recognising education as political while advancing critical consciousness (conscientisation), empowering learners to understand and become active in addressing socio-political and ecological injustices.</p>	<p>Statements that frame learning as political, systemic, and structural, rather than solely individual.</p> <p>Highlighting structural injustices, power relations, or the role of politics, policy and the economy. Learners are encouraged to reflect own their position within</p>	<p>“Wenn die ganze Welt zuhören würde, was würdest du den Menschen sagen? (Educational Material)</p> <p>„[...] was sind Dinge, die von der Politik und von Unternehmen wollt, dass sie verändern?“ (Educational Material)</p> <p>„[...] all the topics that are very personal for the students as well</p>

		these structures, including their privileges and end entanglement in power asymmetries. Opportunities to explore political agency, imagine alternative realities or futures, and explore forms of collective action or systemic change.	when it comes to consumption and rethinking our capitalistic, like society. (Research Posters)
<p>Emotional, Motivational, and Humour-Based Learning</p> <p><i>Emotionales, motivierendes und humorvolles Lernen</i></p>	<p>Using emotional resonance, motivation, humour, and appreciation to facilitate deeper engagement, reflection, and agency. This includes fostering curiosity, empathy, and a sense of joy, while also acknowledging and constructively addressing difficult emotions such as frustration, guilt, or sadness. Trainers actively create emotionally safe learning spaces, offer encouragement, and avoid moralising tones.</p>	<p>Practices that consciously or implicitly evoke emotional responses, foster motivation, or use humour, appreciation, and curiosity to support learning. Includes both positive and difficult emotions (joy, empathy, guilt, frustration) as opportunities for affective engagement and critical reflection. Emotionally safe learning environments that aim to strengthen learner agency, while avoiding moralising tones.</p>	<p>“Wir fügen den drei H’s von Pestalozzi (Herz, Hirn und Hand) noch ein viertes ‚H‘ hinzu, und zwar den Humor – lachend und motivierend lernt es sich leichter.” (Educational Material)</p> <p>„Wie heißt das in eurer sprache, mit haustieren arbeiten, →wie würde sich euer haustier fühlen, wenn es den gleichen platz hätte wie ein nutztier“ (Field observations)</p> <p>„Traurig, emotional berührt, dann versuche ich einfach ganz schnell eine Kurve hin zur Motivation zu kriegen und spare mir die Hardcore Fakten. Die müssen dann nicht sein, weil es hat dann</p>

			eh schon einen Impact.“ (Interviews)
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Appendix C

Original German Quotations of the Results Chapter

[G1] Original: „Handlungsorientiert /Hands-on‘: Als didaktisch-methodisches Konzept aus der konstruktivistischen Didaktik und ganzheitliche Form der interaktiven Vermittlung. Je be-/greifbarer die Inhalte, desto eher sind sie verständlich und anwendbar. Die Schlagworte von Pestalozzi, mit ‚Kopf, Herz und Hand‘ finden auch im Bildungskonzept des WeltTellerFelds Einzug.“, (Educational Concept Paper Short, Ref. 4)

[G2] Original: „Aber es wird ganz anders ankommen, als wenn ich da mich mit was auseinandersetze, was ich riechen, schmecken, spüren kann, und es ist ein holistischer Bildungsansatz, finde ich.“ (Interview 1, Ref. 6).

[G3] Original: “Selbsterfahren→bewegung um zu lernen“ (Observation Protocol, 29_03, Ref. 3).

[G4] Original: „Herausforderungen und Handlungsoptionen werden passend zu den Lebenswelten der Besucher*innen aufgezeigt“ (Educational Concept Paper Long, Ref. 16).

[G5] Original: “Dabei liegt der Fokus auf lösungsorientierter anstatt problemzentrierter Herangehensweise.“, Educational Concept Paper, Long, Ref. 22

[G6] Original: „Aufgrund der jahrelangen Problem und katastrophenfokussierten Vermittlung ist es überdies oft negativ konnotiert“, Educational Concept Paper, Long, Ref. 42

[G7] Original: “Ich merke aber auch, dass ich als Person mich immer wieder ermutigen muss, aus dem problemorientierten Kontext auszusteigen und mehr in Richtung Lösung zu gehen.“, Interview 2, Ref. 11

[G8] Original: “Praxisorientiert, erfahrungsbezogen und handlungsbefähigend“, Educational Concept Paper, Long, Ref. 7

[G9] Original: “→einpflanzen→wirkliches tun, quatschen aufhören“, Observation Protocol 29_03, Ref. 9

[G10] Original: „am besten lernt man ja quasi über die Hand ins Gehirn“, Interview 1, Ref. 4

[G11] Original: „Und, da tut sich auch was. Ich find, das merkt man natürlich nicht bei allen. Und ich glaub auch, dass aus meiner Erfahrung bis jetzt der landwirtschaftliche Part da mehr Chancen bietet, weil es eben nicht rational Gedanklich irgendwas abwickelt, was abstrakt bleibt, sondern es macht etwas wirklich erfahrbar und Spürbar“, Interview 2, Ref. 3, 4

[G12] Original: „Also ich glaub der Hauptgrund, warum diese Entfremdung stattfindet ist ja, weil man den Bezug verliert. Wir leben in einer Gesellschaft, wo es keinerlei oder kaum Berührungspunkte zwischen Nahrungsmittelproduktion und Konsum gibt. Also, das ist alles total entfremdet.“, Interview 2, Ref. 1

[G13] Original: „Und ich finde das halt gut, dass am [WeltTellerFeld] da ein Ort ist, der immer offen ist, der frei zugänglich ist. Jede Person kann hin, es ist kostenfrei. Und große kleine, Junge und ältere Menschen können dort mit Natur und auch Landwirtschaft in Berührung kommen.“, Interview 1, Ref. 1

[G14] Original: „Und manchmal, finde ich das viel wichtiger, als dass die Fakten mitbekommen, wie zwei Drittel der landwirtschaftlichen Fläche ist ein tierische Lebensmittelproduktion also. Interview 3, Ref. 1

[G15] Original: „Für mich ist diese Erfahrung am Feld und das Tun in der Natur sehr wichtig. Dort lernt man nur durch Erfahrung – es ist sehr freies Lernen, Lernen nach dem, worauf man gerade neugierig ist. Ich glaube wirklich, dass man am meisten lernt, wenn man seiner eigenen Neugier folgen kann, ja“, Interview 3, Ref. 3-4

[G16] Original: „Zur zielgruppengerechten Vermittlung müssen die Lebensthemen und Lebenswelten der jeweiligen Zielgruppe bei der Entwicklung der Bildungsformate mitgedacht werden [...] Die Lernziele, Inhalte und Methodik werden somit stets an die jeweilige Zielgruppe angepasst.“, Educational Concept Paper, Long, Ref. 13, 14

[G17] Original: „Damit damit die also gar auch nicht so damit die Fakten verstehen, die ich vermitteln will, aber vor allem dieses kritische Denken anregen [...] Und dieses kritische Denken zu fördern,[...] Und dieses kritische reflektieren und nachdenken.“, Interview 3, Ref. 1, 2, 4, 5

[G18] Original: „Was wollen und können sie umsetzen? - Was ihnen in Erinnerung bleibt. - Was sie weitererzählen werden. - Was fasziniert/erschreckt hat.“, Workshop Three W's, Document 1, Ref. 3

[G19] Original: „Traurig, emotional berührt ist dann versuche ich einfach ganz schnell eine Kurve hin zur Motivation zu kriegen und spare mir die Hardcore Fakten. Die müssen dann nicht sein, weil es hat dann eh schon einen Impact.“ Interview 2, Ref. 13

[G20] Original: „Aber wir können uns jetzt gemeinsam die Frage stellen, wie wir es uns wünschen würden, so dass dieses negative Gefühl in Zukunft nicht mehr nötig ist. Also das irgendwie so verpacken also durchaus. Es sehen, es ansprechen und es würdigen in dem Moment und die Kraft dann aber verwenden, um es konstruktiv umzudeuten. Ein kleines bisschen. Ich finde, das macht total Sinn, das so zu machen.“, Interview 2, Ref. 4

[G21] Original: „Worldcafe: - Was kann und WILL ich tun? - Wir als Schule/Klasse tun? - Was soll Politik & Unternehmen tun? - Wenn die ganze Welt zuhören würde..?“, Workshop Three W's, Document 1, Ref. 1

[G22] Original: „Ihr könnt euch nicht ernähren wenn nicht verkauft“, Observation Protocol 29_03, Ref. 2

[G23] Original: „weil es es nützt ja nichts nur zu zerrütteln um dann vor dem Loch die Personen irgendwie stehen zu lassen. Interview 2, Ref. 10

[G24] Original: „Postkoloniale strukturen ohne reflexion? →koloniale lieferkette mitansprechen“, Observation Protocol 29_03, Ref. 1

[G25] Original: „Wer isst gerne Schokolade?“, Workshop Fair & Climate Friendly, Document 3

[G26] Original: „Man sieht es jedes Mal. Aber ich sehe auch vielleicht nicht jedes Mal, aber sehr häufig, dass es verfliegt. [...] Das heißt, es ist ein kurzer Moment, ein kurzer Schock oder ein kurzes aha Erlebnis, das dann überspielt wird.“, Interview 2, Ref. 2

[G27] Original: „Also mein Gefühl sagt ja, aber ich kann es nicht sehen. Ich sehe da nicht direkt, dass das so oder so Einsicht entstehen, aber mein Gefühl sagt mir, dass es nicht anders kann, als dass das irgendwie zum Nachdenken anregt“, Interview 3, Ref. 10

[G28] Original: „Ja also ich glaub, wir haben schon einen Impact. Ich glaub bei manchen schon sehr. Also ich hatte das Glück, dass ich neulich zufällig in einer Schule über ein anderes Projekt auf eine Klasse getroffen bin, die ich schon mal ein halbes Jahr vorher am Feld hatte. Das heißt, die kannten mich schon und da hab ich dann so nachgefragt und die konnten sich echt erstaunlich gut erinnern, so Fifty Fifty ein Paar hatten keine Ahnung mehr, wer ich bin ein Paar wussten, wer ich bin. Also ganz genau, wer ich bin und auch, worüber wir gesprochen haben, die konnten sich erinnern, was wir gemacht haben.“, Interviewee 1, Ref. 6

[G29] Original: „Also man will schon disruptiv sein, man will stören und man will den Schock eigentlich bis zu einer gewissen Grenze bewusst provozieren, weil er wahrscheinlich wichtig ist um diese, ich weiß nicht, inwiefern das bei Kindern ein Rolle spielt, aber bei Erwachsenen spricht man sehr oft von der kognitiven Dissonanz, sodass man theoretisch einen Wert hat, aber trotzdem eine Handlung, regelmäßig wenn nicht ein Leben lang, durchführen kann die diesem Wert nicht Entspricht“, Interview 2, Ref. 8

[G30] Original: „Und das heißt, ein riesiger Vorhang ist davor, und die Emotionen kann man gezielt einsetzen, um den Vorhang fallen zu lassen – aber eben, um auch auf das Folgethema zurückzukommen. Du darfst halt nicht den Vorhang fallen lassen und die Personen dann alleine

lassen – das ist ein bisschen fahrlässig. Also, wenn der Vorhang fällt, dann musst du auch da sein und das anleiten. Das versuche ich halt so gut ich kann“, Interview 2, Ref. 8

[G31] Original: „Also es es reicht nicht, etwas zu wissen, weil das Wissen an sich mündet nicht ins Tun“, Interview 2, Ref. 10

[G32] Original: „Ja, ich mache es bewusst, aber ich versuche es halt auch in ein gewissen verantwortungsvollen Art und Weise zu machen und halt als Mittel, um dann. Im Endeffekt dieses Gefühl zu erreichen, von es geht mich etwas an, nicht ein ich weiß etwas, sondern ich möchte etwas“, Interview 2, Ref. 9

[G33] Original: „Es muss halt irgendwie ein... im Idealfall entsteht bei den Schülerinnen nach dem Workshop ein eigenes Bedürfnis oder ein persönlicher Anlass, dass man es nicht mehr machen mag – dass man entweder kein Fleisch mehr kauft, die Bio-Variante wählt oder, keine Ahnung, jetzt österreichische Produkte bevorzugt, weil man weiß: Bei den ausländischen Sachen ist es so und so. Also es muss wirklich ein Bedürfnis werden.“, Interview 2

[G34] Original: „wie können wir uns gerechten kakaohandel vorstellen“, Observation Protocol 29_03, Ref. 5

[G35] Original: „Ich wünsch mir eine Welt, die ein bisschen, oder eine Gesellschaft, die ein bisschen langsamer ist, weil, das alles miteinander verknüpft ist für mich. Wenn man anfängt so zu leben, dann braucht man nicht so viele materielle Sachen und sieht irgendwie den Reichtum in allem. Und kommt aus diesem Hetzen heraus.“, Interview 3, Ref. 3

[G36] Original: „Eine humorvolle Haltung erleichtert es den Besucher*innen, ihren eigenen Nahrungsmittelkonsum kritisch zu hinterfragen und vermeidet eine moralisierende Neigung“, Educational Concept Paper, Short, Ref. 1

[G37] Original: „Das darf man auch anerkennen, dass die Wandel, die gerade stattfinden, nicht einfach ist. Dafür könnte ich dann auch Raum halten.“, Interview 3, Ref. 11

[G38] Original: „Und sagen so, ja, das ist nicht leicht und man will auch am liebsten wegschauen. Und es ist völlig normal. Und ihr dürft das auch.“, Interview 3, Ref. 1

[G39] Original: „Fokussierung auf Emotionen hervorrufen→“wie fühlt sich das an“ in Bezug zu konventionellen Haltungsbedingungen“, Observation Protocol, Ref 5.; Interview 2, Ref. 6

[G40] Original: „Ich gebe dem Raum und dann versuche ich, das Weg von der sachlichen Ebene zu führen, auf die emotionale Ebene hinzuspinnen und auch durchaus ein bisschen mit dem erhobenen Zeigefinger oder mit dem moralischen Imperativ von findest du das gut oder wie würdest du es dir wünschen und.“, Interview 2 Ref. 6

[G41] Original: „Mit Frustration arbeiten→hervorrufen von Emotionen als starken Impuls für Lernerfolge →kann aber auch nach ‚hinten‘ gehen→wichtig Emotionen aufzugreifen, und nichtwertend zu adressieren“, Observation Protocol 09_04, Ref. 6

[G42] Original: „etwas emotionales aufbauen bleibt immer länger hängen“, Observation Protocol, 09_04, Ref. 10

[G43] Original: „Das heißt jetzt nicht, dass es diese Katastrophenpädagogik [braucht], mit der [ich] groß geworden [bin]“, Interview 1, Ref. 7

[G44] Original: „Und wenn es jetzt darum geht, wo wie ich mich sehe, dann ist es eher dieses dieses Flämmchen entfachen. Ich finde das ne schöne Metapher.“, Interview 2, Ref. 3

[G45] Original: „Und vielleicht auch auf dieses diese Flämmchen Metapher. Ich hab nämlich das Gefühl, dass die emotionale Komponente dieses Flämmchen besser also dieses mehr Luft quasi für das Flämmchen als das sachliche, das sachliche prallt meistens mit der Zeit irgendwann ab, vor allem bei 2 Stunden, wenn die so voll sind, dann kannst du halt noch die 10. Coole Sache erzählen, irgendwann ist es halt nicht mehr spannend, aber auch solche Sachen, wir dringen Mehr zu Ihnen durch.“, Interview 2, Ref. 8

[G46] Original: „[...] den Vorhang fallen zu lassen“, Interview 2, Ref. 15

[G47] Original: „[...] wie würdest du es dir wünschen“, Interview 2, Ref. 6

[G48] Original: „[...] dass Utopien um einiges wirksamer sind als Dystopien“, Interview 2, Ref. 19

[G49] Original: „Aber es ist einfach nur ein Fallbeispiel, wo man merkt, OK, mit negativer Emotion kann man was erreichen, aber ich glaub utopische Ansätze sind kräftiger, weil sie halt eben dieses wollen erzeugen, also nicht die Aversion, nicht dieses Nein, das will ich nicht, sondern irgendwie die Sehnsucht wecken können. Klingt ein bisschen kitschig, aber ich glaub, das ist tatsächlich so, deswegen halte ich das für total wichtig, ich glaub nicht, dass ich das immer gemacht hab, fällt mir jetzt ein, aber ich halte es Für total wichtig schon. Zu ermutigen, ne eigene Utopie zu zeichnen, weil Weil das motiviert halt langfristig, weil wenn ich halt kurz disruptiv bin und sag scheisse, dann ist man vielleicht kurz schockiert. Aber ich glaub das lähmt viel mehr, als dass es, als dass es bewegt. Dort sind Utopien wahrscheinlich. Nützlicher, glaube ich.“, Interview 2, Ref. 20

[G50] Original: „Also, meine allgemeine Lebenserfahrung ist: Wenn man Emotionen zulässt – die positiven genauso wie die schwierigen –, dann lassen sie sich leichter verarbeiten. Und ja, das Leben wird dadurch viel reicher und schöner“, Interview 3, Ref. 3

[G51] Original: „In den Bildungsformaten wird das Lernen und Lehren nach dem Muster eines Dialogs organisiert. Dies spiegelt sich sowohl in den erstellten Materialien als auch in der dialogischen Haltung der Vermittlungsperson wider. Besucher*innen haben somit die Möglichkeit durch ihren Input einen aktiven Beitrag zur Gestaltung des Felds und der Bildungsformate zu leisten.“, Educational Concept Paper, Short, Ref. 5

[G52] Original: „wieso denkst du das?“, Interview 3, Ref. 3

[G53] Original: “ruft euch das letzte Gericht vor Augen, das ihr gegessen habt“, Workshop for Adults

[G54] Original: „Es gilt sie dort abzuholen, wo sie stehen“, Educational Concept Paper, Long, Ref. 3

[G55] Original: „Was ist die Sprache der lerngruppe? Es ist kein Monolog, rückfragen, wirkliche Unterhaltung“, Observation Protocol 29_03, Ref. 8

[G56] Original: „welche Probleme wichtig/relevant für lernende→partizipatorisch, kollektives entscheiden der problemzustände“, Observation Protocol 09_04, Ref. 5

[G57] Original: „im Austausch: fragen stellen→interaktiv→welche Themen interessanter sind, was der Wissensstand ist“, Observation Protocol 09_04, Ref. 3

[G58] Original: „Besucher*innen haben somit die Möglichkeit durch ihren Input einen aktiven Beitrag zur Gestaltung des Felds und der Bildungsformate zu leisten.“, Educational Concept Paper, Short, Ref. 5

[G59] Original: „Dieses Spiel ist sehr interaktiv und mithilfe von Fragen an die Klasse sollen die Schüler:innen durch das Erlebte selbst zu Erkenntnissen kommen“, Workshop Fair & Climate Friendly, Ref. 1

[G60] Original: „Ich finde irgend ich weiß gar nicht mehr, wo ich das gehört hab man spricht oder ich spreche nicht mehr von Teilnehmer:innen, sondern von Teilgeber:innen.“, Interview 1, Ref. 7

[G61] Original: „[...] eigenen Bedürfnissen, mit einem eigenen Wollen, mit eigenen Hinsichten auf die Welt“, Interview 3, Ref. 2

[G62] Original: „Es veranschaulicht, dass Lehrende, Lernende und Inhalte in einer Beziehung miteinander stehen und von gegenseitigen Abhängigkeiten geprägt sind.“, Educational Concept Paper, Short, Ref. 6

[G63] Original: „Damit führen Lernende und Lehrende eine dialogische Beziehung.“, Educational Concept Paper, Long, Ref. 12

[G64] Original: „Um Jugendliche für einen Besuch des Feldes zu motivieren, ist es wichtig, glaubwürdig, authentisch und auf Augenhöhe aufzutreten.“, Educational Concept Paper, Long, Ref. 16

[G65] Original: „Ich sehe mich eher als eine Begleitung am Feld, eine Begleitung, die manchmal viel quatscht und manchmal auch nicht also.“, Interview 1, Ref. 10

[G66] Original: „Ja, ein Instrument, ja ein Ermöglicher. Ja, genau das ist eigentlich nicht, also es geht nicht um mich und was ich will.“, Interview 3, Ref. 8

[G67] Original: „Und wenn es jetzt darum geht, wo wie ich mich sehe, dann ist es eher dieses Flämmchen entfachen. Ich finde das eine schöne Metapher.“, Interview 2, Ref. 3

[G68] Original: „Viel mehr Lust haben zu lernen. Und vielleicht viel mehr Lust und Vertrauen haben, eine Grenze aufzusuchen, wo sie vielleicht nicht hingegangen wären, wenn dieses Vertrauen nicht da ist“, Interview 2, Ref. 11

[G69] Original: „Diese Hierarchie möglichst flach zu halten“, Interview 2, Ref. 2

[G70] Original: „Ich mag das nicht. So von oben herab zu behandeln und jemanden als Objekt Meiner Information oder meiner Lehre da jetzt hinzustellen, also ich will, über niemanden man was überstülpen, sondern etwas anbieten.“, Interview 2, Ref. 2

[G71] Original: „Also irgendwie muss es diese Hierarchie schon geben, mit einer klaren Rollenverteilung – dass ich da als Workshop-Leiter bin und nicht als Freund oder Unterhalter“, Interview 3, Ref. 9

[G72] Original: „Aber das ist wirklich. Eine spannende Gratwanderung“, Interview 3, Ref. 12

[G73] Original: „Also irgendwie schon klare Grenzen setzen. Aber da innerhalb von diesen Grenzen viel, viel Spielraum, ja.“, Interview 3, Ref. 12

[G74] Original: „Und dieses kritische Denken zu fördern, ja, gut, weil ich fest daran glaube, dass, wenn man das unterstützt, Menschen von sich aus auf gute Lösungen kommen, die auch für die ganze Gesellschaft gut sind. Vielleicht nicht alle Menschen – es gibt sicher ein paar, bei denen das nicht so ist. Aber ich glaube schon, dass Menschen im Grunde gut sind. Und die Gesellschaft kann das auffangen: Wenn eine Person in der Gemeinschaft krank ist, machen die anderen eben ein bisschen mehr, und beim nächsten Mal macht die Person wieder mit, und dann ist vielleicht jemand anderes krank – und das funktioniert. Deshalb glaube ich, dass, wenn man die Menschen einfach lässt, sie von selbst helfen und Probleme lösen wollen.“, Interview 3

[G75] Original: „Das WeltTellerFeld kann hier in der Vermittlungsarbeit durch das Setting, den außerschulisch begehbaren Lernort und durch die definierten Grundhaltungen, die sich unter anderem auch in der Methodenvielfalt in der Vermittlungsarbeit widerspiegeln, punkten und einen wesentlichen Beitrag in ebendieser breit gefächerten Klimakommunikation liefern“, Educational Concept Paper, Long, Ref. 2

[G76] Original: „Aber gleichzeitig ist es natürlich schon noch ein ein Schulsetting hier, wo auch die Lehrperson dabei ist. Und die hat auch wieder bestimmte Erwartungen. Manchmal, manchmal auch nicht.“, Interview 3, Ref. 1

[G77] Original: „Ja, man merkt schon manchmal also anhand der Manieren und der Lehrperson, die entweder mit eiserner Faust regiert oder nicht, merkt man dann schon OK Schule hat einen Einfluss“, Interview 1, Ref. 7

[G78] Original: Situation Lehrpersonal schwierig: - Lehrpersonal antwortet für Kinder→“lass mal lieber die Kinder antworten“ - 15% machen das - Wollen das die Klasse gut rüberkommt - Vorher telefonieren mit Lehrpersonal →rollen definieren - Autorität der Lehrperson in Frage stellen? Doch, einsetzen: es ist nicht schule“, Observation Protocol 29_03, Ref. 4

[G79] Original: „Aber die machen das und umgekehrt gibt es dann auch manchmal Lehrpersonen, die sich dafür schämen, dass die Kinder was nicht wissen. Und dann sag ich wurscht, deswegen sind wir ja da, also das, was die Kinder da nicht wissen, wissen manche Erwachsene auch nicht.“,

[G80] Original: „→es ist nicht schule, Lehrer nicht einmischen, vorurteilslos, Bias nichtnehmen →Erlebnis außerhalb der schule“, Observation Protocol 29_03, Ref. 1

[G81] Original: „Ich glaube, es gibt keinen Workshop, wo mir das nicht begegnet. Das Konkurrenzdenken und das die eigene Leistung durch Leistung anderer zu definieren, also diese Differenz als Maßstab heranzunehmen, das ist ubiquitär. Ja, das ist in jedem Schulsetting immer beobachtbar.“, Interview 2, Ref. 5

[G82] Original: „Weil ich glaub das halt lernhinderlich ist. Es geht dann nicht mehr um das Thema, sondern es geht darum das Thema vermeintlich besser zu behandeln als die anderen. Das heißt die ganze Aufmerksamkeit ist auf dem, was die anderen tun; Sie ist nicht am Feld; also Ich empfinde das als sehr hinderlich“, Interview 2, Ref. 6

[G83] Original: „ich sag dann schon, hey Leute, es geht nicht um Leistung, es geht darum, dass ich was lernt, also ich versuch das dann ein bisschen, hauptsächlich verbal zu unterbinden.“, Interview 2, Ref. 5

[G84] Original: „Ich weiß auch nicht, ob ich die macht hab, in zweieinhalb Stunden das aus den Köpfen zu kriegen, ich würde es mir wünschen, dass es anders wäre, aber ist nicht möglich.“, Interview 2, Ref. 6

[G85] Original: „Dann versuche ich wirklich so, so weit wie möglich wegzukommen von dem Leistungsdenken. Und weiß ich auch, dass ich sehr davon geprägt bin, auf jeden Fall sehr kompetitiv eingestellt auch. Und es hat. Glaube ich auch sein Platz.“, Interview 3, Ref. 4

[G86] Original: „Das es mal nicht um Leistung geht und einfach ums Entdecken und spielerisch Lernen und Neugierde entwickeln und nachgehen“, Interview 3, Ref. 4

[G87] Original: „Dann schon das Gefühl habe. Dass es vor allem Fakten sind, die die gelernt haben, so. Irgendwie. Beides dann halt so bestimmte Sätze sind oder so. Ja, man soll weniger Fleisch essen, weil es. Weil es zu viel. CO₂ in der Atmosphäre gibt. So gelernte Sätze“, Interview 3, Ref. 3

[G88] Original: „Und da kommt, glaube ich, wieder dieses Tun und diese Erfahrung in den Vordergrund, obwohl es bei dem Thema natürlich sehr schwierig ist, direkte Erfahrungen zu machen. Ich meine, wie kann man eine direkte Erfahrung von zu viel CO₂ machen? Da müsstest du ja eine Kammer bauen“, Interview 3, Ref. 3

[G89] Original: „Ich hab so ein bisschen das Gefühl, dass viele Kompetenzen einfach verloren gehen und nicht verloren gehen, gar nicht ausgelebt werden können, weil die Möglichkeiten so beschränkt sind oder beschränkt werden also gerade in der Stadt. Und das ist dann vielleicht der regionale Bezug. Gerade in der Stadt erlebe ich das wirklich und ich bin manchmal echt schockiert, wie wenig die Kinder wissen oder kennen.“, Interview 1, Ref. 2-4

[G90] Original: „Ich musste einmal erklären, was ein Reh ist und jetzt beschreib mal ein Reh für eine Person, die keine Ahnung hat, was ein Reh ist. Also da war ich kurz sehr gefordert, aber es passiert.“, Interview 1, Ref. 5

[G91] Original: „Und davon braucht es generell mehr, also nicht nur in der Schule überhaupt mehr spüren dürfen und mehr Erfahrungen machen“, Interview 1, Ref. 1

[G92] Original: „Ich find Schule extrem wichtig. Schule darf aber auch neu gedacht werden, also bei diesem ganzen Zeug, über das wir da gerade sprechen von Degrowth über Bildung, wenn sich auf struktureller Ebene nichts tut, dann kann man sie vergessen ja, und genauso ist es da auch“, Interview 1, Ref. 10

[G93] Original: „Die meisten, die haben Vormittag kommen, sind happy, dass es keinen Unterricht gibt.“, Interview 1, Ref. 6

[G94] Original: „Ich war einmal als Helfer bei einer Ausbildung dabei, und da war auch ein Lehrer anwesend. Der meinte, dass das Schulsystem in seiner jetzigen Form quasi am Ende sei oder auslaufe. Und ich glaube, die Schülerinnen spüren das auch. Schon als ich selbst Kind war, haben wir alle die Schule gehasst. Aber das muss ja nicht so sein. Man könnte auch mit sehr viel Freude zur Schule gehen – und ich glaube, genau da könnte man ansetzen. Vielleicht auch in Form eines Vergleichs mit dem aktuellen Schulsystem, denn viele merken wahrscheinlich

schon: „Eigentlich gehe ich nicht gerne zur Schule. Ich gehe hin, weil ich meine Freundinnen sehe, aber nicht wegen des Lernens.“ Denn man wird gezwungen, etwas zu tun, etwas zu leisten, was man eigentlich nicht machen will. Und das ist natürlich auch ein roter Faden in unserer Gesellschaft: dass man gezwungen wird, etwas zu leisten, das einem eigentlich nicht entspricht“, Interview 3, Ref. 7

[G95] Original: „[...] sind wir als westliche Gesellschaft sehr arm“, Interview 3, Ref. 9

[G96] Original: “Die Jugendlichen verfügen nach einem Besuch bei WeltTellerFeld über Wissen zum Thema klimagerechte Ernährung und Klimawandel und haben außerdem Handlungskompetenzen entwickelt, die sie dazu ermächtigen, in ihrem eigenen Alltag entsprechende Akzente zu setzen.“, Educational Concept Paper, Long, Ref. 23

[G97] Original: „WeltTellerFeld zeigt auf, welchen Einfluss und folglich welche Handlungsmöglichkeiten wir mit unserer Ernährung und unserem gesellschaftlichen Engagement auf die globalen Ressourcen haben.“, Educational Concept Paper, Long, Ref. 8

[G98] Original: „Schülerinnen treffen Konsumententscheidungen nicht immer selbstständig und eigenmächtig – sie essen halt das, was es zu Hause gibt, das, was es in der Schule gibt, oder einfach das, was sie irgendwie in die Finger kriegen.“, Interview 2, Ref. 6

[G99] Original: “Dies führt zu einer nachhaltigen Änderung in Gewohnheiten und Haltungen, was wiederum zu Nachahmungseffekten im eigenen sozialen Umfeld führt. Dieses Phänomen ist auch als der Bystander-Effekt bekannt.“, Educational Concept Paper, Long, Ref. 10

[G100] Original: „So sind die Jugendlichen von heute die Entscheidungsträger*innen von morgen, die durch ihren Lebensstil und ihr Konsumverhalten zur Etablierung neuer Maßstäbe eines „guten Lebens“ abseits der Ideologie der kapitalistischen Marktwirtschaft beitragen können.“, Educational Concept Paper, Long, Ref. 14

[G101] Original: „Was können Leute, die Politik machen, und Firmen tun, um zu helfen, dass alle gesünder essen und die Umwelt schützen? Welche Regeln könnten gemacht werden, damit gesundes Essen und Umweltschutz für jeden möglich sind?“, Workshop Three W's, Document 2, Ref. 4

[G102] Original: „Was sind Dinge, die von der Politik und von Unternehmen wollt, dass sie verändern?“, Workshop Three W's, Document 2, Ref. 2

[G103] Original: „Verbindung von Bottom-up-Druck und Signalen durch individuelles Handeln → Kreierung eines Gefühls von Selbstwirksamkeit → alleine nicht ausreichend → gleichzeitig braucht es die Verbindung zum systemischen Top-down“, Observation Protocol, 09_04, Ref. 2

[G104] Original: „alternative“ Bezugsquellen wie Food Coops, Solawi etc. unterstützt Strukturen eines nachhaltigeren Systems. In lokale (politische) Initiativen wie Ernährungsräten engagieren oder bspw. Forderung für Lieferkettengesetz o. ä. unterstützen, durch (Nicht-)Konsum gerechteres und gesünderes Wirtschaften stärken.“, Workshop, For Adults, Ref. 13

[G105] Original: „Durch Aktivwerden auch (politische) Rahmenbedingungen zu ändern – Einbringen in Organisationen oder Initiativen, die für ein nachhaltigeres Ernährungssystem auf regionaler bzw. urbaner Ebene einsetzen“, Workshop, For Adults, Ref. 18;

[G106] Original: „Dann fange ich eher damit an, was gut für die Gesundheit ist, die eigene Gesundheit. Weil ich gemerkt habe, dass das ein sehr sensibles Thema ist. Vor allem, weil die meisten Schüler wirklich täglich oder fast täglich Fleisch essen – es gibt wirklich nur sehr wenige Vegetarier*innen. Und dann spreche ich eben an, dass unser Fleischkonsum in Österreich ungefähr dreimal so hoch ist wie das, was als gesund gilt. Ich versuche klarzumachen, dass es, wenn sie Fleisch essen wollen, für ihre eigene Gesundheit besser ist, unverarbeitetes Fleisch zu essen. Ich habe das Gefühl, dass sie eher dazu neigen, sich damit zu beschäftigen oder nachzurecherchieren, wenn man bei der eigenen Gesundheit ansetzt. Und dass sie dann vielleicht selbst draufkommen: ‚Ah, Massentierhaltung ist eigentlich wirklich nicht so geil, oder? Und für die Klimakrise ist das ja auch überhaupt nicht gut‘“, Interview 3, Ref. 1

[G107] Original: „Da habe ich noch gesagt: ‚Wir könnten die Fläche um 75 % reduzieren, wenn sich alle vegan oder pflanzlich ernähren würden. Und dann hätten wir diese Fläche übrig‘. Ich habe gefragt: ‚Was würdet ihr damit machen?‘ – und zuerst haben sie die Frage nicht so richtig verstanden. Aber dann kamen schon Antworten wie: ‚Wir könnten dort einen Wald pflanzen‘ oder ‚eine Wiese anlegen‘ oder ‚wir könnten da auch Häuser bauen.‘ Und ich glaube, da geht es für mich auch ein bisschen um dieses Denken: Es muss nicht unbedingt so sein, dass dort Viehwirtschaft stattfindet. Es könnte auch etwas ganz anderes sein. Denn wir haben einen bestimmten Raum, einen bestimmten Platz, und man könnte damit etwas komplett anderes machen. Und das ist im Grunde einfach eine Entscheidung. Genauso wie beim Thema Gesundheit und Fleischkonsum, da zeige ich dann die möglichen Lösungen auf.“, Interview 3, Ref. 7

[G108] Original: „Also es geht nicht darum, mit deinem Einsatz oder deiner Art und Weise, wie du durch die Welt gehst, die Strukturen zu verändern, sondern darum, die Strukturen und deren Auswirkungen auf andere in deiner individuellen Entscheidung mitzudenken.“, Interview 2, Ref. 11

[G109] Original: „Das individuelle Verhalten, ja, das hat natürlich Auswirkungen aufs große Ganze, auf jeden Fall. Also, deine Konsumententscheidung, das ist wahrscheinlich das didaktische Prinzip, hat einen politischen Charakter, weil sie Auswirkungen auf andere hat. Aber im Mittelpunkt steht eben deine Konsumententscheidung.“, Interview 2, Ref. 10

[G110] Original: „[...] dass man halt als Einzelperson so wenig machen kann“, Interview 3, Ref. 14

[G111] Original: „ja, aber wenn einer was ändert, was bringt es?“, Interview 1, Ref. 4

[G112] Original: „Ich persönlich kann ja eh nichts machen. Es ist eine politische Frage“, Interview 3, Ref. 4

[G113] Original: „Wenn man im Erwachsenenkontext darüber spricht, ist diese Leier von ‚Ich persönlich kann ja eh nichts machen, das ist eine politische Frage‘ viel stärker vertreten als bei Schüler:innen. Das lernt man irgendwann mit der Zeit. Und vielleicht ist das auch eine Horizontfrage, weil Schüler:innen das System noch nicht so genau kennengelernt haben, es noch nicht überblicken. Aber ich habe schon eher das Gefühl, dass die persönliche Frage, ‚Was macht das jetzt mit mir, und was kann ich jetzt tun?‘, bei ihnen greifbarer ist als bei Erwachsenen.“, Interview 2, Ref. 4-5

[G114] Original: „Ich spreche das ganz klar aus. Ich sage einfach: Es gibt so viele Dinge, die wir überhaupt nicht beeinflussen können, und da können wir nur hoffen, dass sich etwas ändert. Aber indem wir es schon einmal wissen, darüber reden und Bewusstsein schaffen, kann man zumindest etwas bewegen. Es gibt schon Petitionen, es gibt Dinge, an denen man ein bisschen mitdrehen kann“, Interview 1, Ref. 5

[G115] Original: „Ich glaub, das Wichtigste ist, zu sensibilisieren und Bewusstsein zu schaffen, und den Zusammenhang zu erkennen: ‚Was kann ich wirklich selbst tun? Und wie gut bin ich informiert?‘

Also, ich spreche das sehr oft an, und ich sage dann auch ganz oft: ‚Wenn wir glauben, dass wir die Welt retten, indem wir im Sommer Biotomaten aus Österreich kaufen, dann leider nein‘“, Interview 1, Ref. 6, 7

[G116] Original: „Und LernTopia ist vom didaktischen Prinzip her ein verhaltensorientierter Ansatz. Es geht wirklich darum aufzuzeigen, was meine tagtäglichen Entscheidungen mit dem Flächenverbrauch oder anderen Aspekten zu tun haben – und wie ich das ändern kann. Das ist schon sehr stark darauf ausgerichtet. Natürlich muss man die Verhältnisse, die politischen Strukturen und die Machtverhältnisse im Ernährungssystem berücksichtigen, um Kontexte herzustellen und Erklärungen zu liefern. Aber das ist eigentlich nicht der Imperativ dahinter. Deswegen glaube ich, dass LernTopia sich das auch nicht explizit als Ziel setzt, weil es eben ein verhaltensorientierter Ansatz ist.“, Interview 2, Ref. 8

[G117] Original: „Aber da finde ich auch wieder: Wenn es um systemische Lösungen geht, hilft der Zugang über den Konsum nur sehr wenig.“, Interview 3, Ref. 8

[G118] Original: „Handabdruck versus fußabdruck→systemisches handeln durch aber kleine Schritte oder handlungen die motivation und selbstwirksamkeit auslösen, anstatt demotivierung durch eventuell hohen klimafußabdruck“, Observation Protocol 09_04, Ref. 4

[G119] Original: „Klima handabdruck vs →strukturen verändern in Schule/arbeit/familie →kleine schritte →motivierendes konzept ins tun zu kommen vs sieht schlecht fühlen von fußabdruck“, Observation Protocol 09_04, Ref. 3

[G120] Original: „Ja, das ist auch so ein Spannungsfeld, weil einerseits – glaube ich – ist die Schwelle viel niedriger, wenn man auf persönliche Lösungen setzt. Und es sprengt auch irgendwie den Rahmen, wenn ich hier über systemische Lösungen sprechen würde – mit Schülerinnen, die zweieinhalb Stunden hier sind. Das hängt auch sehr von der Gruppe ab, würde ich sagen. Ja, ja. Aber ich glaube, dass man dann trotzdem eher auf der persönlichen Ebene bleibt – also der Einzelebene – oder vielleicht mal etwas, das die Schule oder die Klasse machen könnte. So weit kommt es aber meistens nicht, weil einfach nicht genug Zeit da ist, um sagen zu können: ‚Ah, vielleicht wollen wir uns als Klasse vegetarisch ernähren‘“, Interview 3, Ref. 9

[G121] Original: „Also, wenn ich das Gefühl habe, die Schülerinnen sind offen, sind fit, haben das Prinzip verstanden und sind nicht überfordert von dem Extralelement, dann mach ich es aber in der Regel [nicht]“, Interview 2, Ref. 11

[G122] Original: „Mhm, also ich spreche es meistens nicht an, weil es zu groß ist. Ja, weil das quasi die unsichtbare Arbeit ist. Denn eigentlich – was wir hier machen – ist auf einer gewissen Ebene systemische Veränderung, einfach weil dieser Ort existiert. Na ja, eben, weil das hier

eigentlich schon eine systemische Veränderung ist. Also nicht von sich aus, aber es wird ja von der Stadt gefördert. Und das könnte man schon als systemische Veränderung bezeichnen, weil die Stadt sagt: Das ist uns wichtig, da muss Geld hinfließen. Und dann kommen Tausende von Schülerinnen jedes Jahr vorbei, die irgendwie zum Nachdenken angeregt werden. Und das ist an sich die systemische Veränderung. Und ich glaube, es ist auch gut, dass das für die Schülerinnen unsichtbar ist – dass sie sich nicht damit auseinandersetzen müssen. Ich meine, es wird – ich weiß nicht, wer das gesagt hat – aber in der Pädagogik heißt es, dass 90 % von dem, was der Mentor oder die Mentorin weiß, unausgesprochen bleibt, und nur etwa 10 % tatsächlich vermittelt wird. Weil es keinen Sinn macht, alles zu teilen – es wäre zu viel oder würde ablenken von dem, wo die lernende Person gerade steht.“, Interview 3, Ref. 12

[G123] Original: „Klar habe ich eine Agenda, oder will ich schauen, dass das Denken irgendwie dann in die Richtung geht. Und es ist halt schwierig, wenn da überhaupt keine Offenheit ist, auch mal darüber nachzudenken – oder wenn die Aussage ist: ‚Ja, ich esse jeden Tag Fleisch, und das mache ich auch gerne so, und das will ich gar nicht ändern.‘ Ohne dass ich gesagt hab, dass sie das ändern sollen. Aber das kommt dann manchmal auch von selber“, Interview 3

Appendix D

Figure 5. Observation Protocol of one Workshop element at the Train-the-Trainer Field Observation.

5. Globales Lernen & Soziale Gerechtigkeit

Date	Time 14Uhr
Duration 1 Hour	Location
Participants 8	
Program <ul style="list-style-type: none"> Methodeninput und Praxisbeispiele Interaktive Spiele & Reflexion 	
Descriptive: description of participants, activities, interactions and events <p>Welche Rechte haben wir zusammen mit Ernährung?</p> <p>↳ Arbeitsrechte, Gesundheit, Recht auf Leben, Wohnraum, keine Unterdrückung</p> <p>↳ Ernährungsbildung in Global Citizenship Edu.</p> <p>↳ eigene Perspektive zu hinterfragen</p> <p><u>Problembewusstsein stärken</u> <u>Selbstbewusstsein</u></p> <p>↳ in ein <u>urbanes</u> Mindset zu kommen</p> <p>↳ Überleitung zum Handeln kommen</p> <p>↳ was ist der nächste Schritt um diesen anderen Standpunkt zu vermitteln</p> <p>↳ was ist kein guter Fair Trade? als Orientierungspunkt für Jugendliche</p> <p>↳ krit. kein Fair Trade ist oft zu interpretieren</p> <p><u>Teile Methode</u> : ↳ wie viel interaktiv</p> <p><u>Supermarkt der Zukunft</u></p> <p>↳ Stärkung des Problembewusstseins</p> <p>↳ Lösungen finden → Selbst-wirtschaftlichkeit erfährt</p> <p>↳ Traum-Markte</p> <p>↳ Utopie vorstellen</p> <p>↳ Gemeinsames Finden nächster Schritte und diese</p> <p>↳ was ist der nächste imaginäre alternative Schritt</p> <p>Vorstellung wahr werden zu lassen</p>	
Reflective: Questions to self, observations of non-verbal behaviour, interpretations <p>Ernährungsbildung als Fokus, Situiert in Global Citizenship Education</p> <p>↳ Um die globalen Zusammenhänge zu verstehen</p> <p>↳ Und die eigene Perspektive zu hinterfragen</p> <p>↳ Verbindung zu 'Mind frames, social imagination'</p> <p>↳ Stärkung des Problembewusstseins</p> <p>↳ Lösungen finden → Selbst-wirtschaftlichkeit erfährt</p> <p>↳ Traum-Markte</p> <p>↳ Utopie vorstellen</p> <p>↳ Gemeinsames Finden nächster Schritte und diese</p> <p>↳ was ist der nächste imaginäre alternative Schritt</p> <p>Vorstellung wahr werden zu lassen</p>	

Globales Lernen & Soziale Gerechtigkeit

Descriptive: description of participants, activities, interactions and events

Kindler vs. Kolon koloniale Spiel
 ↳ um Problem bewusstsein zu kreieren → auch mit Frustration arbeiten
 ↳ abgleichzeitig Verbindung zu Selbstwirksamkeit setzen durch zum Beispiel
Utopie - Vorstellung ↳ Wie können wir uns ein gerechtes Kolonialhandel
 vorstellen
 ↳ Verbindung setzen von Individ. Handl. - Systemisch

Hungry Planet → Essen für eine Woche; Familie vorstellen
 ↳ Was essen sie : D
 a) Was sind die Folgen die bekommen was sie essen → soziales Gefüge, Weltmarkt
 ↳ Stadt → weniger gesundes Essen
 ↳ Kultur → mental, die Geschichten zu erzählen, nicht wertend
 ↳ kein westliches Endes
 ↳ weniger Prozess
 ↳ ist politisch, Einfluss auf
 ↳ them. 70 Hunger zum Kapitalismus
 ↳ muss man aber
 werden anders sein
 Vorstellung

Reflective: Questions to self, observations of non-verbal behaviour, interpretations

'Mit Frustration arbeiten' ⇒ Hervorrufen von Emotionen als strateg. Impuls
 für Lernerfolge
 ↳ kann aber auch noch hinderlich sein.
 ↳ wichtig Emotionen aufzugreifen, und nicht-wertend
 zu adressieren
 Thematisierung von Einfluss
 wie internationaler Politik (Systeme)
 ↳ kapitalismus-basiertes System
 ↳ Schwierig Kindern zu beschreiben

Globales Lernen & Soziale Gerechtigkeit

Descriptive: description of participants, activities, interactions and events

Arbeits → First Nations/Aborigines → Arbeitslos, privat verpflegt, Struktur
 ↳ Überfluss an Angebot, vi. Unterstützung/ort

⇒ Beobachtete Rolle

↳ keine Verantwortl. → Aufgaben wenn Kinder verpflegt

⇒ Wertigkeit von Lebensmitteln → wie empfindet sie sich gesund

⇒ Was sind die Umstände

⇒ Raus aus Verantwortung aus unser Perspektive

↳ Reis in Empathie → in die Reflexion ↳ was wir Realisieren

↳ Vorurteile brechen

⇒

abhängig an Zielgruppe

↳ Teile von Klassen

↳ Politik - kaputt laufend

Reflective: Questions to self, observations of non-verbal behaviour, interpretations

Verurteilungen von Kindern/Lernenden Urteilslos aufgreifen

↳ Einordnung in eventuell 'Westliche Perspektive'

↳ Vorurteile widerspiegelnd

Brechen durch
reflektierte Empathie