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A CRITICAL DISCOURSE ANALYSIS OF LEARNING FOR SUSTAINABILTY

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SUMMARY

Sustainability is a major challenge for society. A capitalist mode of production is neither compatible with ecological preservation nor the meeting of human needs. We are currently experiencing crises which threaten the survival of humanity, not only as stable societies, but as a species. Education is a key mechanism for enacting social and ecological reorganisation. However, the roles schools have to play - as sites for the reproduction of our values, and our capacity to take part in production - are sites for disagreement. This paper examines how these disagreements materialise in the discourse around the Scottish sustainability education agenda, Learning for Sustainability (LfS), from a critical, Marxist perspective.

When considering policy, language mediates between ideas and social practices. Following Foucault, systems of these mediations present themselves as discourses. Discourses are products of specific social and economic organisation, and both shape and are shaped by social practices. Sustainability discourses are multiple and varied, interacting with educational discourses as well as others - disagreements concerning the roles of social institutions manifest themselves as disagreements between discourses.

Critical Discourse Analysis (CDA) is an approach to research that aims to "describe, interpret and explain" (Roger et al, 2005:366) the production and reproduction of the social world through language. The approach used in this study is Fairclough's (2001) three stage model: description, interpretation and explanation. The first stage is concerned with a linguistic analysis of the text, the second stage with mediating the production, distribution and consumption of the text and the final stage with examination of the interaction between the text and larger social structures and practices.

The analysis centres on three policy documents in 'conversation' with each other, the One Planet Schools Working Group Learning for Sustainability report (2012), the Scottish Government response to the report (2013) and the Vision 2030+ report by the Learning for Sustainability National Implementation Group (2016). It aims to explore the conceptualisation of LfS, how social organisation is envisaged in the texts and how compatible these conceptualisations are with a sustainable future. It makes no policy proposals, instead outlining the fundamental contradictions inherent in the policy framework and the assumptions of its framers. It proposes that the realisation of the radical implications of learning for sustainability require the expropriation of an education system that is currently, fundamentally, for capitalism.

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INTRODUCTION

The challenge of our time

"Sustainability is the challenge of our time."
(Wilson and Wu, 2017: 44)

Earth is facing ecological catastrophe (Buckles, 2018; Griffiths and Murray, 2017; Wang, 2017; Winther, 2017). Humanity is beset by inequalities and injustices (Daniels, 2018; Griffiths and Murray, 2017). Capitalism in its latest incarnation is increasing these inequalities, reducing social welfare and continuing to devastate the environment (Allman, 2001; Buckles, 2018; Faber, 2018; Fairclough, 2003). These challenges can be seen as challenges of sustainability, with Tibbs (2011) arguing that humans "are living unsustainably, and that humankind needs to change to live sustainably" (cited in Buckles, 2018: 124). Education is frequently seen by policy makers as a mechanism for such change, with the Scottish Government being no exception (Daniels, 2018; Scottish Government, 2017). However, there is not a consensus on conceptualisations of sustainability, nor on practices that are 'sustainable'. In facing the challenges of sustainability, Schmitz and Scoones (2015) posit that analyses must start with "looking at the historical emergence of states and markets, and the operation of capital, set within a historical political economy frame" in order to identify the "economic incentives and power dynamics" (13) that shape current reforms and practices. This study is therefore concerned with sustainability discourses, how they interact with the organisation and practices of educational structures and to what extent they are able to meet the challenges of ecological collapse and social inequality.

The role of formal education in relation to the state, the economy, the development of the individual, liberation and social justice is a hotly contested one (Apple, 2010; Au, 2008; Buckles, 2018; Griffiths and Murray, 2017). Buckles (2018) identifies schools as a key site for the education of 'citizens' in their 'citizenship': education becomes a 'value-driven' public undertaking, that

reflects both 'universal' and national values, and is organised and predominantly run by the state. These underpinning values are seen by some as concerned with the creation of a better world through increasing solidarity and social justice (Laurie et al, 2016). However, education reflects, generates and reproduces the values, requirements and subsequent organisation of the existing mode of production (Apple, 1979). The role of education, within capitalism, is to make ready the population for their roles in this mode of production: those of workers and consumers (Cachelin et al, 2015). Influenced by an increasingly competitive, globalized economy, these values and the resulting organisation of education reflect national priorities centred around capitalist economic growth and increasingly market-based approaches to education (Apple, 2010; Buckles, 2018; Fairclough, 2002: 164; McKenzie et al, 2015). Thus 'citizenship', whether national or global, is transformed by capitalism to mean producer, consumer and atomized voter (Foley et al, 2015) limiting the capacity of 'citizenship' to address collective sustainability concerns.

McKenzie (2012) identifies 'neoliberal' logics and their impact on educational practices as sites for critique. For example, Tröhler (2006) details the shift in the vocabulary used in education to reflect a more economic paradigm. Language "embodies specific views - or 'theories' - of reality" (Fowler *et al*, 1979: 1). Texts therefore contribute to the conceptualisation of abstractions - including sustainability - as well as the discourses that shape social relations (Cachelin *et al*, 2015). Specifically, policy texts, situated within "social, ideological and economic conditions" produce, shape and limit educational priorities on national and global scales (Apple, 2010: 7; McKenzie *et al*, 2015).

Critiques of unsustainable social practices rarely include critiques of capitalism itself (Allman, 2001). Similarly, most of the critique around education for sustainability centres around reductions in scope and subsequent impact on pedagogy, rather than on the role industrialised education plays in capitalist production (McKenzie, 2012). Changes must happen at individual and systemic levels for transformation to occur (Cachelin *et al*, 2015; Jones, 2011). This is

dependent on "people developing a critical consciousness of domination and its modalities, rather than just experiencing them" (Fairclough, 2001: 3). The tools of education could be used to realise increased resistance and change, but when used uncritically within capitalism, produce and reproduce existing social structures (Allman, 2001; Cachelin *et al*, 2015; Fairclough, 2001; Griffiths and Murray, 2017). Therefore, "educators dedicated to a better future for all human beings" (Allman, 2001: 3) must engage critically with policies, practices and the organisation and purpose of education itself.

Educational research that attempts to engage with the purpose of education is what Hammer (1988) identifies as "philosophical or teleological pedagogy" (cited in Bridges, 2017: 17). However, "[e]ducational philosophy risks being irrelevant unless its conclusions are grounded in example" (Griffiths and Murray, 2017: 46). McKenzie et al (2015) assert the importance of locality in analysis, the examining of specific sites for specific ideological processes and manifestations. Therefore, despite the global natures of capitalism and sustainability, Scotland's *Learning for Sustainability* (LfS) agenda is taken as an illustrative site for analysis. The vehicular quality of sustainability as discourse gives it a hermeneutic flexibility and requires a reciprocal approach to analysis (McKenzie et al, 2015). This study critically examines the sustainability education discourse in Scotland and aims to discover whether the LfS agenda facilitates practices that are compatible with a sustainable future.

Chapter overview

This study is comprised of six chapters including this first, introductory chapter. The second chapter outlines the theoretical approach to the study, detailing Critical Social Theory, the importance of language, discourse and power and critical Pedagogy. Chapter three provides an overview of the literature of both sustainability discourses and those concerned with education for sustainability. Additionally, the literature review situates the Scottish approach to sustainability education within these discourses. Chapter four presents the methodology and methods used for this study. Chapter five presents the

findings and a discussion of the analysis undertaken. The sixth and final chapter draws together conclusions from the previous chapters, reflects on the contributions of the research and makes some suggestions for the future.

Terminology matters - a note on 'neoliberalism'

This study recognises language as a significant cultural tool "in the production, maintenance, and change of social relations of power" (Fairclough, 2001: 1; Rogers et al, 2005). Consequently, terminology matters. Despite this, providing definitions ontologically jars with the idea of language as dialectic (Bacchi, 2000). Definitions "require scrutiny, not replication" (Bacchi, 2000:46). Throughout this study, terms and discourses are examined in as much detail as the scope of the paper allows. McKenzie et al (2015) articulate the challenges of using terms such as 'neoliberalism' as they may be deployed in a limiting and blunt fashion. There is no one way that either capitalism or neoliberalism operate: "capitalism is not a thing" (Allman, 2001: 8); "there is no one form of neoliberalism" (McKenzie et al, 2015: 325). Ideally, this paper would not employ the term 'neoliberal' or its derivatives but rewording the term from various other sources risked altering the authors' original intentions. Therefore, broadly, neoliberalism is used throughout this essay to mean the "complex set of ideas and practices" (Coffey and Marston, 2013: 180) that perpetuate an ideology to sustain capitalist relations by promoting marketisation, commodification and competition (Cachelin et al, 2015).

THEORETICAL CHAPTER

"Power takes on many forms: ideological, physical, linguistic, material, psychological, cultural..."

(Rogers *et al*, 2005: 368)

Critical Social Theory (CST) is a transdisciplinary framework, strongly influenced by Marxist theory, centred on the critique of existing social practices and the generation of practices of freedom (Hansen et al, 2009; Leonardo, 2004; Rogers, 2011; Rose and Cachelin, 2018). Critical researchers should extend their thinking to consider the axiological drivers - assumptions of value - of research, as well as the procedural approaches (Kress et al, 2013). CST is designed to "expose the operation of power" within social practices with the aim of not only revealing, but improving, social conditions (Cohen et al, 2011: 32). Critical social theories reject naturalism, rationality, neutrality and individualism as approaches to research, concerned instead with revealing the social reproductive elements of oppression and identifying sites and practices for liberation (Rogers, 2011). CST can represent a range of theoretical positions, including feminist critique, critical race theory, postmodernism and deconstructivism, but its origins, and the approach found here, are from a Marxist tradition (Gottesman, 2012; Hansen et al, 2009; Rogers et al, 2005). Additionally, CST research seeks transformation through critical praxis (Allman, 2001; Cohen et al, 2011; Torres et al, 2011).

Critical educational research examines educational sites, structures and practices both as sites of critique and as potential transformative spaces (Kress et al, 2013; Rogers, 2011). There is a wealth of scholarship on education as a site for the reproduction and perpetuation of capitalistic social relations (for some examples see the work of Bowles and Gintis, Giroux, Willis). Given the lack of a specific theory of education in Marx's work, this scholarship has grown from applying Marx's dialectical approach and "conceptual 'tools'" to the organisation of educational structures and has drawn heavily on Antonio Gramsci's writing on power as hegemony (Allman, 2001: 39; Apple, 1979; Gottesman, 2015; Stoddart, 2007). Kettley (2012) argues that approaches that

apply "grand theory" to interpret social phenomena must use concepts that are "logically derived one from another" (23). Gottesman (2015) agrees: theoretical rigor requires a historical understanding of the development of conceptual tools and theoretical influences on our own uses of theory. The following paragraph will outline the specific theoretical frameworks that inform this work.

The theoretical underpinning for this study is Marxism not as an 'ideology', but as "a mode of critique based on dialectical conceptualization or analysis" (Allman, 2001: 47). It assumes a critical, relational ontology and a dialectical epistemology (Allman, 2001). It is additionally informed by Apple's (1979) Ideology and Curriculum, detailing the "ideological and cultural mediations which exist between the material conditions of an unequal society and the formation of consciousness of the individuals in that society" (2) and Allman's (2001) Marxist critical pedagogy as detailed in Critical Education Against Global Capitalism. Apple (1979) outlines ways in which education, as a facet of cultural life, contributes to a capitalist hegemony. Marx and Engels (1970) state "definite individuals who are productively active in a definite way enter into these definite social and political relations" (46). However, following Williams' (1973; 1977) work on hegemony, Apple (1979) makes clear that the relationship between economics and culture is not deterministic. Rather, this relation is conceptualised as the "setting [of] limits, exerting [of] pressures" (4) by "deeply saturating the consciousness of a society" (Williams, 1973: 8). The reproduction of capitalist relations happens through the dialectical relationship between culture and the economic mode of production (Apple, 1979). Even social relations that operate outside the immediate sites of production, and may predate capitalism, are reshaped by the specific, historical form of contemporary capitalism, including the social relations that make up educational organisations (Allman, 2001; Fairclough, 2003). One of the ways that educational structures mediate and regulate these relationships is through the maintenance of dominant ideologies (Apple, 1979).

Ideologies are conceptualisations of social relations, power relations and social behaviours that reflect the interest of a dominant group or class (Fairclough, 2001; Rogers, 2011; Stoddart, 2007). According to Fairclough (2001) the perpetuation of dominant ideologies is, "the prime means of manufacturing consent" (3) to systemic inequality (Stoddart, 2007). However, it is worth remembering that this exerting of pressure is not consciously imposed upon schools by 'powerful elites' (Apple, 1979), but is rather constantly reproduced through uncritical engagement with social relations within capitalism (Allman, 2001).

One way such ideologies are maintained in schools is through the production and distribution of knowledge and culture (Apple, 1979; Stoddart, 2007). Language is a primary mechanism for this process (Hodge *et al*, 1979) as "[i]deas do not exist separately from language" (Marx, 1973: 163). Language is a dialectical social process that both constructs society and is constructed by it (Fairclough, 2001, 2003; Rogers, 2011; Rogers *et al*, 2005; Stoddart, 2007; Wodak, 2001). "The production of ideas, of conceptions, of consciousness, is at first directly interwoven with the material activity and the material intercourse of men, the language of real life" (Marx and Engels, 1970: 47). Heavily influenced by Foucault's work, "systems of thought" comprised of ideas and social practices and mediated by language can be referred to as discourses (Rogers, 2011; Stoddart, 2007: 203).

Language both exercises power from discourses and feeds power back into discourses by contributing to them. Thus, discourses "both construct and represent the social world" (Rogers, 2011: 6; Van Dijk, 1993). Discourse types are products of specific economic and social organisation (Fowler *et al*, 1979) and can be subtle in controlling how ideas and problems are formed at political and societal levels through the creation of limits in what is represented as feasible within the debate (Bacchi, 2000; McKenzie *et al*, 2015; Van Dijk, 1993). Ideological working is most effective when it is unseen, presented as 'common sense', through background assumptions and the positioning of knowledge in such a way that the ideological underpinnings are reproduced unconsciously by

actors within the discourse (Fairclough, 2001, 2002; McKenzie, 2012). This contributes to Williams' (1973) saturation of societal consciousness, to "change the mind of others in one's own interests" (Van Dijk, 1993: 254). Fairclough (2001) calls this process naturalization - the process of making a discourse type so dominant that alternatives are unimaginable: "neoliberalism has come to be seen as a necessary, and even 'natural', way of operating" (Harvey, 2005, cited in McKenzie, 2012: 166).

Van Dijk (1993) argues that power can be measured (in one form) by examining the access to discourses it has. The ideological assumptions embedded in dominant conventions of discourses are a way of "legitimizing existing social relations" (Fairclough, 2001: 2). The more that certain discourses permeate and control others, the greater the power for that discourse becomes and the more they influence and 'travel' across additional discourses (McKenzie *et al*, 2015; Van Dijk, 1993). For example, Cachelin *et al* (2015) detail how neoliberal discourses shape our identities, reimagining us from citizens to consumers, from "community members" to "economic actors" (1128), and how, this in turn, shapes how we conceptualise and construct our identities in educational settings. This dominant discourse is then in turn "ideologically sustained" through governing structures, such as education (Van Dijk, 1993: 255). Neoliberal discourses influence and reshape educational discourses.

When challenging a dominant discourse, it is important to remember that "it is dominant, it is not absolute" (Buckles, 2018: 30). Reframing discourses to reflect languages of hope and freedom is an important site for struggle (Leonardo, 2004). In Foucault's conceptualisation, power is relational, with every site of its operation simultaneously a site for potential resistance (Stoddart, 2007). Similarly, education both perpetuates existing social structures and provides the tools with the potential to question and destabilize them (Buckles, 2018).

Within the field of education, CST is often synonymous with 'critical pedagogy' (Alexander, 2018; Freire, 1985). Although now used to encompass a wide range

of critical approaches, critical pedagogy, developed from CST, has its origins in Marxist analysis (Alexander, 2018; Agostinone-Wilson, 2013; Fairclough, 2001; Freire, 1985). However, Foley *et al* (2015) detail various ways that critical pedagogy and associated concepts, including social justice, problem-posing education and critical thinking, have been adopted and diluted by noncritical educational and corporate thinking - or discourses - causing them to advocate for a return to Marxist approaches. Similarly concerned, Allman (2001) argues that it is a lack of clarity surrounding critical education (her term) that has left it open to co-option. To counter the possibility of this, she defines *revolutionary critical education* as education:

... that is capable of preparing people to take part in the creation of what I call authentic socialism: a society engaged in revolutionary social transformation and the development of the type of communist social formation advocated by Karl Marx.

(Allman, 2001: 162)

Praxis - reflection and action - is identified by Freire (1985) as the mechanism for critical pedagogy. CST faces criticism at times for being too focused on critique (reflection) rather than action (Rogers *et al*, 2005). However, Leonardo (2004) and Allman (2001) both reject the dualism of theory and practice implied by this distinction. Praxis, according to Allman (2001), is the dialectical unity of thought and action and can either be uncritical, reproducing social relations as we find them, or critical, seeking to transform these relations. As such, critique is a constructive process, contributing to Habermas' "emancipatory" knowledge (Cohen *et al*, 2011: 32). Additionally, Allman argues that "there should be no dichotomy between means and ends" (2001: 168) as it is through process - or struggle - that transformation occurs.

LITERATURE REVIEW

Sustainability - a slippery term

Sustainability is a much-contested term, utilised in alignment with diverse worldviews or ideologies and shifting its meaning as it moves across sites and policies (Cachelin *et al*, 2015; Coffey and Marston, 2013; McKenzie *et al*, 2015; Wang, 2017; Weaver, 2015; Winther, 2017). This in part is due to its transdisciplinary nature, encompassing economic, social, political, scientific, technological, ecological and cultural elements (Cachelin *et al*, 2015; Kagawa, 2007; Wilson and Wu, 2017). Furthermore, sustainability can be said to be a "regulative ideal" - what Greenberg refers to as a "utopian project" (2014: 55) - an abstract idea that cannot be realised, but rather guides human behaviour in the same way that 'social justice' might (Stables, 2013: 177). Regulative ideals can be conceptualised in a multitude of ways - there is no singular definition of sustainability, but rather what Weaver refers to as "multiple sustainabilities" (2015: 223-224) - depending on the normative values of the actors, spaces and social movements that frame them.

Stables (2013) argues that sustainability is hard to contest, given its inherent implications for the preservation of human life. However, sustainability discourses represent competing values and ideologies that prioritise different interests (Greenberg, 2014). Palmer (2003) identifies eight different sustainability discourses that reflect different personal and political understandings of sustainability and what should be done to realise it. Faber (2018) outlines how increasingly reactionary political powers are prioritising the preservation of the economic interests of specific demographic groups over both the environment and the rights of oppressed groups. As Winther (2017) puts it, "sustainability can be used for good or bad 'things'" (338). Sustainability discourses shape education for sustainability discourses and the values that may be represented in them (McKenzie et al, 2015). To provide this context, several prominent sustainability discourses are outlined here,

recognising that these are not exhaustive and will encompass additional discourses within them.

As McKenzie *et al* (2015) point out, in an increasingly globalised world, ideas move across disciplines, physical spaces and social constructs, with global discourses influencing national and local policies. This can be seen in the reproduction of discourses across the wide range of disciplines and nationalities represented in the literature used here. This literature, despite its diversity, consistently cites the World Commission on Environment and Development (WCED) definition as the genesis of the mainstream discourse surrounding sustainability (for examples see Coffey and Marston, 2013; Greenberg, 2015; Wang, 2017; Weaver, 2015; Wilson and Wu, 2017; Winther, 2017):

Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts:

- the concept of 'needs', in particular the essential needs of the world's poor, to which overriding priority should be given;
- and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and future needs.

(WCED, 1987: 41)

This definition has framed many sustainability discourses including those concerned with social justice (drawing on the first key concept), the environment (drawing on the second key concept) and the economy (drawing on the concept of 'development'). Multiple conceptualisations of sustainability now reflect this three-component structure - society, environment and economy or "people, planet and profit" - which has come to be known as the *three pillars* definition (Cachelin *et al*, 2015: 1128; McKenzie *et al*, 2015; Wilson and Wu, 2017).

The three pillars conceptualisation has been adopted by one of the major contributors to global sustainability discourse following the WCED report: the United Nations (UN). In 1992, the UN held a global summit in Rio - *The United Nations Conference on Environment and Development (UNCED)* - culminating in

The Rio Declaration, a set of twenty-seven principles for sustainability (UN, 1992). The three pillars definition can be seen in reports of the UNCED, "environment and economic and social development" (UNESCO, 1992: 6), which Diprose et al (2018) identify as one of only three policy events to have had a major impact on sustainability discourses within the British media. The more contemporary UN sustainability agenda, the Sustainable Development Goals (SDG) continues to echo the three pillars models, "end poverty, protect the planet and ensure prosperity for all" (UN, online), which can be seen influencing the National Performance Framework in Scotland (Scottish Government (SG), online).

Since the conception and mainstream adoption of sustainability as a tripartite system, debates over sustainability models have predominantly centred around the content, organisation and interaction of these components (Neumayer, 2013; Wilson and Wu, 2017; Wu, 2013).

Sustainability discourses - the market influence

"If a market-oriented sustainability becomes hegemonic, displacing non-market alternatives, sustainability policies will be increasingly shaped and constrained by capitalist logics..."

(Greenberg, 2015: 125)

What Rauch (2002) calls an "economic market philosophy" (47) underpins much of the discourse of sustainability. As well as the three pillars approach, the WCED definition also conceived the term 'sustainable development'. This term has been heavily influenced by economic paradigms which align 'development' with 'economic growth' (Diprose *et al*, 2018; Neumayer; 2013; Wang, 2017). Stables (2013) argues sustainable development is additionally favoured as a term by politicians, policy makers and businesses as it is deliberately ambivalent, hard to operationalise or measure and can be used to appeal to diverse interests. Utilised across both market and political spaces, economic models for sustainable development have thus contributed to wider conceptualisations of sustainability.

In order to fit within economic models, the 'three pillars' of sustainability are reimagined, by analogy, as types of 'capital': "social, environmental, and economic" (Wilson and Wu, 2017: 44). Three pillar models are concerned with maintaining a 'balance' between the pillars (Murphy, 2012) with substitutability being a key site for disagreement (Wilson and Wu, 2017). The predominant debate within this paradigm is weak versus strong models of sustainability (Wilson and Wu, 2017). Weak sustainability models propose that environmental capital can be indefinitely substituted for economic or social capital whereas strong sustainability recognises that man-made capital is dependent on environmental capital which must be maintained over time (Neumayer, 2013; Pelenc et al, 2015; Wu, 2013). Although weak sustainability has been recognized to be limited in terms of longevity, this approach to the practicalities of sustainability can be seen influencing the wider discourses. For example. The Rio Declaration issues guidance on "managing the environment as part of the economy", framing environmental costs, such as pollution, as financial rather than ecological (UNESCO, 1992; Winther, 2017: 339).

The division of sustainability into discrete areas facilitates prioritising certain aspects and limits the focus on interconnections (McKenzie *et al*, 2015). Drawing on the WCED-informed market-oriented discourse, frequently the debate is reduced down to the interplay between approaches (Greenberg, 2015: 105; Griffiths & Murray, 2017; Li, 2018; Liu, 2009; McKenzie et al, 2015; Weaver, 2015), those prioritising the economy at one end, and the environment at the other (Lockie, 2016).

Market conceptualisations of sustainability shape discourses, legitimising responses that fit with existing social practices (Fairclough, 2003). Adjusting production and consumption patterns within a competitive market framework in an attempt to recognise environmental concerns is advocated on both national and international scales (OECD, 2008; SG, 2015). For example, Palmer (2003) refers to "green individualist discourse" (12), based on consumption choices, which was the most popular conceptualisation of sustainability within

his research. Similarly, Diprose *et al* (2018) noted the rising trend in responsibility for environmental protection being passed from corporations to consumers. An additional market-oriented sustainability discourse is *ecological modernization*: a discourse that attempts to frame technological development, facilitated through corporate 'innovation', as the solution to the discrepancies between economic growth and environmental protection (Coffey and Marston, 2013; Jänicke, 2008; Murphy, 2012; Li, 2018).

Frequently, governments adopt these discourse-types as they complement capitalistic production and consumption patterns and are driven by competitive markets, therefore requiring little real change to social organisation (Coffey and Marston, 2013; Jänicke, 2008). Those who support such approaches see the marriage of capitalist competitiveness and innovation as a "win-win" solution to the challenges of sustainability (Jänicke, 2008: 563). However, critics of these dualist approaches to sustainability warn against attempts to "greenwash economic interests" (McKenzie *et al*, 2015: 320) or to adopt "green consumption" uncritically within existing economic practices (Murphy, 2012: 23), arguing that they distort the perceived level of response required and place responsibilities for systemic challenges onto individuals (Coffey and Marston, 2013; Rose and Cachelin, 2018). Additionally, Martinez-Alier (1988) and Li (2018) have both argued (three decades apart) that a neoclassical economic approach is incompatible with environmental preservation as the 'costs' of production to the environment cannot be known.

The warning given by the WCED (1987) about the narrowing of the meaning of 'development' to prioritise economic growth rather than human development more holistically, can be seen in the discourses which dominate public sustainability discussions in the UK and the US (Diprose *et al*, 2018). These approaches are individualistic, prioritise human "stewardship" over the planet and maintain the view of the environment as a type of 'capital' (Hammer and Pivo, 2017: 25). Despite this anthropocentric approach, consideration of the third 'pillar' - variously referred to as equity, people or society - is not dominant in their design (Diprose *et al*, 2018). In the period between the WCED report

and the UN 2030 agenda, social justice dimensions of sustainability received the least scrutiny, representing only the social and economic interests of the most powerful groups (Lockie 2016; Murphy, 2012).

The reduction of the complexities of sustainability through analogies with 'capital' has both allowed market narratives centred on growth to dominate and marginalised the social considerations of sustainability (Greenberg, 2015). Murphy (2012) identifies various concepts incorporated under the 'social' pillar including: poverty, equity, health, education, housing, governance, demographics and inclusion which can also be seen in the contemporary UN sustainability agenda - Transforming our world: the 2030 Agenda for Sustainable Development (UN, 2015). Despite this clear recentralising of 'the what' in terms of socially transformative objectives with the SDGs (Lockie, 2016), the Agenda 2030 remains committed to remaining within the paradigm of economic growth and regulation as 'the how' (UN, 2015). In turn, the "globally endorsed presumptions" that can be seen in the SDGs filters down to local and national policies (McKenzie et al, 2015: 326), illustrating how discourse and power intersect materially.

Critical Sustainabilities - reimagining sustainability through an anti-capitalist lens

"Most traditional notions of sustainability seek to change, alter, or tweak existing systems; critical sustainabilities are based in action research that effectively undermines, subverts, and offers alternatives to existing systems..."

(Rose and Cachelin, 2018: 2)

Winther (2017) critiques three pillars models for being simplistic, unable to capture the complexities at different development levels that are contained within the 'ideal'. 'Strong' sustainability critically recognises that the environment encompasses society and society creates the economy. However, the way in which the economy is organised shapes both society and society's interaction with the environment: the relationship is dialectical (Allman, 2001).

Approaches that critically engage with the interconnectedness of ecological, social and economic structures and the complexities of how these structures influence each other are required (Rose and Cachelin, 2018).

Critical sustainabilities is a term used to try to capture the dialectical, deconstructivist and problematizing approach to sustainability discourses that will be used here in an attempt to examine these interconnections (Buckles, 2018; Cachelin et al, 2015; Greenberg, 2014; Rose and Cachelin, 2018; Weaver, 2015). It poses that capitalism creates ecological and social conditions that are unsustainable for either the preservation of the planet or the wellbeing of humanity (Allman, 2001; Jones, 2011; Li, 2018; Rose and Cachelin, 2018). For example, Faber (2018) outlines how the logic of capitalism works to "to increase the rate of exploitation of labor [sic] and nature" rather than reduce it. Additionally, groups marginalised and rendered less powerful through capitalism tend to suffer the worst material effects of ecological degradation (Faber, 2018; Griffiths and Murray, 2017; Li, 2018; Murphy, 2012). Many of the social components of sustainability identified by Murphy (2012), such as health, poverty and housing have overt economic considerations; meeting human needs requires material goods (Wu, 2013). However, critical approaches recognise that capitalistic logics permeate all elements of social existence including social coherence, preservation of local characteristics and engaged governance (Allman, 2001; Murphy, 2012). Therefore, the mechanisms for production, distribution and consumption and the ways that these mechanisms interact with social relations should be a key site for examining sustainability practices.

The "social and ecological costs of capitalist accumulation" are extensive (Buckles, 2018; Faber, 2018: 11). Jones (2011) details how production based on the continuous need for growth and increasing consumption patterns are inherent challenges of capitalism in realising sustainability. Similarly, Rose and Cachelin (2018) implicate "capitalist production and consumption as major players in the transformation of the materiality and discursive production of nature-society relations" (5). The SDGs identify production and consumption as sites for change: "We commit to making fundamental changes in the way that

our societies produce and consume goods and services" (UN, 2015: 8), however, market-oriented discourses of sustainability are full of contradictions (Griffiths and Murray, 2017) and the UN simultaneously make this commitment and commit to economic growth. Analysts must examine where and which "causal mechanisms" (Weaver, 2015: 227) may create discrepancies between sustainability claims and their contexts.

Despite the commitment to changing production and consumption, economic growth remains a mechanism for sustainability in the UN discourse (UN, 2015). Tensions in the interaction between the economy, the environment and society can be problematized by examining the inherent contradiction in the term "sustainable economic growth" used unproblematically by both the United Nations and subsequently the Scottish Government (Coffey and Marston, 2013; SG, 2015: 4; UN, online). Over the last fifty years, the generation of wealth through economic growth has, in some instances, reduced poverty and 'increased well-being' across the world, making it a popular neoliberal discourse for sustainability (Rose and Cachelin, 2018; Schmitz and Scoones, 2015). Despite these historical 'successes', resource depletion coupled with rising demand suggests that such approaches are not indefinitely sustainable within contemporary capitalism (Schmitz and Scoones, 2015). Jones (2011) identifies this as the "growth problem" (56) - a system based on continuous accumulation within a closed ecological system.

Growth (the quantitative and continuous accumulation of capital) is a necessary feature of capitalism (Jones, 2011; McKenzie, 2012). Responding to planetary crises, advocates of "sustainable capitalism" adopt ecological modernization as the solution to the growth problem (Foster *et al*, 2010: 54). However, Li (2018) explores various potential technological and economic 'solutions' to overcome the growth problem in detail but concludes that "there are absolute limits to growth" (149). Winther argues that the economic imperative of sustainability centres not on growth, but on managing an "unfairly distributed economy" to meet human needs (2017: 339). This view chimes with the UN discourse where production is organised around continuous growth but "wealth is shared and

income inequality is addressed" (UN, 2015: 8). However, capitalism is characterised by the profit motive: the accumulation of capital which prevents the redistribution of wealth (Allman, 2001; Jones, 2011).

Capitalist production reconstitutes and reterritorialises the planet as an "object of consumption" (Marx, 1973: 343). The commons of planetary wealth become privatised, commodified and put on the market (Caffentzis and Federici, 2014). Additionally, knowledge, ideas, language, discourses and human capabilities become commodified under capitalism (Allman, 2001; Fairclough, 2002; Jones, 2011). This commodification prevents the use-values of social production being released independently from their exchange-values (Allman, 2001). Furthermore, to facilitate the exchange of these commodities on the market for a profitable price, capitalist relations constantly expand human wants, fostering a culture of overconsumption (Jones, 2011: 59). Where profits cannot be realised, under capitalism "[u]se-values are even destroyed or wasted rather than used to meet human needs when people cannot afford their exchange value" (Allman, 2001). Consumerism is an inevitable consequence of capitalism due to the profit-driven character of the social relationships that sustain it and is incompatible with a sustainable future (Jones, 2011; Li, 2018).

Rose and Cachelin (2018) assert, "justice and equity are foundational to a world that is sustainable" (3). Future sustainability practices must look at prevention rather than reaction and "deal with the root causes of poverty and exclusion" (Boone, 2010; Lockie, 2016: 116). The social aspects of sustainability, as well as alleviating oppressive social conditions, are concerned with social cohesion, strong participation and interaction in social relationships characterised by solidarity (Murphy, 2012). The positioning of individuals as competitive consumers assumes an individualism that is incompatible with community or ecological approaches (Apple, 1979; Jones, 2011; Rose and Cachelin, 2018). There is a need for a shift in the human "socio-psychology" from meeting the economy's needs to meeting human needs, from competitive models to cooperative models, from self-interest to community interest, and from the celebration of "lifeless goods" to the celebration of life (Griffiths and Murray,

2017; Jones, 2011; Li, 2018: 151). To facilitate this shift and reconcile the conflicts of capitalism, alternative systems of production, distribution and consumption based on meeting human needs would need to replace capitalistic ones (Jones, 2011; Li, 2018).

Education for Sustainable Development - competing discourses

"Indeed, education and sustainability are inextricably linked, but the distinction between education as we know it and education for sustainability is enigmatic for many..."

(UNESCO, 2005: 27)

It is in education, as well as many other areas of social existence, that we see discourses of sustainability realised in material ways (Stables, 2013). Working towards global justice, environmental protection and economic reform are recognised as vital questions for educational policies and practices (Griffiths and Murray, 2017). However, Education for Sustainable Development (ESD) is not an implementable 'thing', and so must be translated by education departments, schools and teachers (Summers and Kruger, 2003). The discourses and conceptualisations adopted in policies effect this translation, leading to a wide range of interpretations and pedagogical approaches (O'Flaherty and Liddy, 2017; Summers and Kruger, 2003). Although sustainability and sustainable development have only been constructed as mainstream discourses since 1987, education has concerned itself with concepts that have shaped the ESD discourse for longer than that.

A decade before the WCED report, the 1977 Tbilisi Declaration outlined the "role, objectives, and guiding principles" of Environmental Education (EE), many facets of which can be seen mirrored in education for sustainability literature today (Scoullos, 2010; UNESCO, 1978: 25). Scoullos (2010) outlines how EE adapted after the Earth Summit in Rio to initially reflect the three pillar model of sustainability and then again, after the International Conference of Thessaloniki (UNESCO, 1997), to recognise the interdependence of the three pillars. The most recent influence on ESD, and the genesis of it as a widely used term, has come from the United Nations Decade of Education for Sustainable

Development (UN DESD), from 2005-2014 (UNESCO, 2005). Following the DESD, ESD is now more frequently recognised as incorporating or overlapping with aspects of Development Education and Global Citizenship Education as well as EE and Outdoor Education (Higgins and Kirk, 2006; O'Flaherty and Liddy, 2017). Tracing this history of ESD, the role of the UN and of UNESCO in particular in shaping the discourse around sustainability education becomes clear (McKenzie, 2012). This definition and terminology then becomes replicated in educational policies across the world (McKenzie *et al*, 2015).

The primary strategy that can be seen in UNESCO's approach to ESD over the last forty years is one of adjustment and reorientation of existing educational practices: "reoriented and based on an ethos of the environment" (UNESCO, 1978: 6); "adjust their curricula" (UNESCO, 1997: 3); "reorienting existing education programmes" (UNESCO, 2005: 7). This can then be seen replicated in academic discourse in Scotland - "re-orienting teacher education to address sustainability" (Higgins and Kirk, 2002: 10) - and the LfS documentation, "[r]eorienting learning to create a more sustainable future" (Learning for Sustainability National Implementation Group (LfSNIG), 2016: 21). Apple (1979) refers to this as a "technocratic ideology" (111), where marginal changes are realised through "system adjustment" (italics in original) (112) rather than transformation.

Jenson (2013) comments that ESD should not be education about sustainability, but rather a pedagogical approach that fosters sustainability. There is agreement in the literature that ESD should provide learners with experiences that develop sustainable behaviours and practices (Scoullos, 2010; Daniels, 2018; UNESCO, 2013). Post the DESD, Laurie *et al* (2016) argue that ESD has been through its "experimentation" phase and is now in a global "implementation of good practice" (227) phase. Here sustainability education, rather than being an evolving and changeable process (Kagawa, 2007), is positioned as a finalised approach that can be applied to existing educational practices and is adoptable within current educational structures. However, sustainable behaviours and practices are as diverse as the related discourses

(O'Flaherty & Liddy, 2017). With this complexity of approach in mind, Bourn (2008) outlines two broad typologies for ESD: a) an approach to learning with a focus on building critical thinking skills and capacities and b) a way to facilitate change in society and across the world.

This first approach can be seen reflected across much of the literature. In global and national policy, research and guidance, ESD is characterised by a transdisciplinary approach that incorporates knowledge, skills and values (Daniels, 2018; Jenson, 2013; Kagawa, 2007; Scoullos, 2010; SESR, 2006; UNECE; 2016). Specific knowledge that might be required is not detailed in the literature, but it is acknowledged that it will likely be complex, specific to purpose and changeable over time (Jenson, 2013). Skills required include analysis, critical thinking, systems thinking, problem-solving and creativity with values including respect, empathy, inclusion, equality and cooperation (Bourn, 2008; Brown, 2015; Jenson, 2013; Murray et al, 2014; O'Flaherty and Liddy, 2017). Skills based approaches to ESD reflect priorities that are promoted within contemporary curriculum designs across the world (for example see California State Board of Education, 2014) and therefore complement UNESCO's adjustment strategy. O'Flaherty and Liddy, (2017) outline existing concerns that the global and social elements of ESD are recontextualised within individualist frameworks, reducing them down to soft, skills building activities. Fairclough (2002) points out that, within the knowledge economy, discourses become commodities, developed and distributed through "skills training" (164). Through this lens, sustainability education can be seen as a mechanism for raising attainment, developing engagement or improving schools (Wang, 2017).

Sustainability as a vehicle for raising attainment has links with the SDGs: education is seen as a sustainability as well as a mechanism for the realisation of it (Buckles, 2018; Griffiths and Murray, 2017; Murphy, 2012). However, focuses on 'quality' education as the only connection between education and sustainability can be limiting. Laurie *et al* (2016) explain the motivation for their research as the need to produce evidence to justify how ESD contributes to the current educational paradigm - such as "ESD improves test scores" (233)

- which suggests it is not an educational or societal priority in its own right. Sustainability as an apparatus for skills development may contribute to SDG 4 - quality education (UNDP, online) - but does not guarantee the realisation of more sustainable societal practices.

This is not a call to abandon notions of education being of quality, nor to deny that these practices have "positive impact" on learners, nor to minimise the complex skills that will be required to alter discourses and practices in search of sustainability (Jenson, 2013; Kagawa, 2006; O'Flaherty and Liddy, 2017: 8). Rather, it is to highlight the ease with which structures within schools prevent transformation as new ideas, practices and the good intentions of practitioners get altered to fit within the existing mode of social organisation (Gould, 2013). As captured in the UNESCO quote at the beginning of this section, there does not appear to be any clear distinction between skills based conceptualisations of ESD and education as it exists already in many educational systems struggling to meet the demands of the 'knowledge economy' (Gilead, 2017).

Shifting values is an alternative educational approach to sustainability. Wang (2017) identifies the main challenge to sustainable practices as people exhibiting the "wrong attitude" towards nature (551) with the shifting of this attitude as the priority for educators. Similarly, Murray et al (2014) advocate for pedagogies that are based on shifting values - a change in values changes beliefs, which influences behaviour and creates sustainable habits. However, although their research found increased awareness of sustainability values, significant shifts in personal values were not evidenced. An approach to ESD that solely focuses on values chimes with Palmer's (2003) green individualist discourse, where individuals are encouraged to make sustainable choices within current social structures and carries with it Coffey and Marston's (2013) concerns over individualism. Furthermore, Daniels (2018) highlights the potential conflict of values that could emerge from unpacking the concepts "global, citizenship and education" (5). Similarly, the conflict of values in perpetuating a system based on economic growth, preserving the planet and the realisation of social justice and equity have been outlined above. Without critical consideration, Murray *et al's* (2014) individual values approach is similarly likely to give rise to conflicts.

One such conflict is between sustainability and the structures and purposes of education itself. Education plays a key role in the "forming, legitimating and perpetuating" of dominant ideologies - what Buckles call the "social imaginary" (2018: 13). Laurie et al (2016) argue that educational objectives have moved from "international economic competitiveness" towards "global citizenship, social justice and sustainability" (230). However, shaped by the enlightenment and the industrial revolution, Cachelin et al (2015) identify the root metaphors of learning in western education as "mechanism, modernization, and individualism" (1129). This has framed educational discourse within a mechanistic, technocratic and atomized paradigm (Buckles, 2018) that fosters mindsets and practices within schools that are centred on standardization and efficiency and limit the changes needed to meet the needs of the future (Gould, 2013). For example, O'Flaherty and Liddy (2017) identify the "tension between the philosophical conceptualisation" of ESD and "the measurement of learning" (13). Education systems organised around high stakes testing, facilitate the comparison and classification of students as individual actors within the labour market but limit flexible or creative approaches to the sustainability problem (Au, 2008; Jenson, 2007). In this way, capitalist influence on educational organisation "philosophically undermines education for sustainability" (Cachelin et al, 2015: 1127).

Jenson (2013: 26) recognises that within sustainability education, the "how" (the structure and organisation of education) is as important as the "what" (the curriculum). For sustainability education that mirrors Bourn's (2008) second typology, sustainability education must facilitate the transformation of educational and societal structures (Jenson, 2013; Rauch, 2002).

A new paradigm

Education should be concerned with the development of skills and values that promote solidarity. Empathy is the base for social justice and this, along with developing the skills needed to critically consider the challenges and injustices of society, requires education (Griffiths and Murray, 2017). However, there is a need for alternative thinking to the "currently dominant, instrumental, technical discourse" that can be seen in ecological modernisation approaches to ESD and across education in general (Griffiths and Murray, 2017: 47). Approaches to sustainability education must be critical of existing approaches to both sustainability and social organisation (Rose and Cachelin, 2018). The uncritical presentation of the competitive market as a model for social relations poses "a significant threat to education for sustainability" (Cachelin *et al*, 2015: 1127). Rauch (2002) details how transformative sustainability education could conceptualize educational outcomes: "to understand the environment and equity issue as a corollary of an economic system that is based on competition and exploitation" (48). For example, educational approaches that engage with concepts like climate change as problematic, but do not challenge discourses of economic growth, or engage with discourses on how marginalised communities are disproportionately affected by climate change can be seen as taking the "Ignore Stance" (Buckles, 2018: 114; Faber, 2018). This additionally requires schools to face the challenging task of examining their own relationship with economic structures (McKenzie, 2012). The organisation and assessment of education requires transformation in order to meet the exacting demands of sustainability (Jenson, 2013).

Critical approaches to sustainability argue for a move away from anthropocentrism towards recognising a more systemic and interconnected worldview (Jones, 2011; Wang, 2017). This requires the development of a more ecological and biopolitical organisation of social life and education (Buckles, 2018; Jenson, 2013; Rose and Cachelin, 2018). Biological systems of organisation rather than mechanistic systems should be explored as potential alternatives for the organisation of schools (Apple, 1979). This philosophically conflicts with individualism as an approach to education, which Rauch (2002) identifies as one of the defining social features of the current educational

landscape. Approaches to education that focus solely on the individual, reflect the values of productivity and human capital (Gilead, 2017), are "economistic" (Arnott and Ozga, 2010: 335) and embody what McKenzie (2012) sees as one of the defining features of what they identify as 'neoliberalism'. Illustratively, although Murray et al (2014) argue that they advocate for transformative rather than transmissive approaches, they are contextualised within an individualist and anthropocentric paradigm centred on individual choice rather than ecological understanding. Capitalism views nature and the activities of social production as commodities, necessarily placing humans as agents for capitalist production, rather than as components of an ecology (Foster et al, 2010).

A primary UN objective set for ESD within Europe is to ensure that, "policy, regulatory and operational frameworks support ESD" (UNECE, 2016: 1). The proposal to use pedagogy as a tool to facilitate a shift in paradigmatic thinking and operational structure is more radical than it may first appear (Griffiths & Murray, 2017). Kagawa (2007) identifies various keywords in the literature that are used to "characterize education for sustainability, such as democracy, diversity, participation, inclusion" (333), but what Buckles terms the "Transform Stance" requires "wholesale change to how humankind interacts with the Earth's systems" (2018: 117). This will require a radical departure from capitalism, consumerism and individualism as the influences of our most "fundamental social relations" (Allman, 2001). Calls for education to instil the message of "be a citizen, a neighbour, a parent, a friend, a guardian, a steward before being a consumer" (Princen, 2010: 116, cited in Buckles, 2018: 129) can only be realised if education aims to transform or abolish the material conditions and social relations of capitalism, which require you to prioritise being a worker and consumer in order to survive (Allman, 2001). Buckles (2018) asserts that to "enable this a new 'consciousness' is needed" (124). Likewise, Griffiths and Murray (2017) argue that such an approach would require learners to "re-think their outlook on the world" (45). Gould (2013) suggests that school systems should redesign their structures, frameworks and curricula in order to accommodate these shifts.

Sustainability, like freedom or social justice, is not an "end state" (Bourn, 2008: 199). It is a constant struggle for justice and equity within a finite ecological framework (Allman, 2001; Griffiths and Murray, 2017; Rose and Cachelin, 2018). Hence, there is no one approach or framework to sustainability that can be applied to education, however, some ideas can be drawn on in the search for transformation (Winther, 2017). These could include, but are not limited to, a shift from anthropocentrism to ecocentrism (Buckles, 2018; Griffiths and Murray, 2017), the adaptation or abandonment of traditional learning sites (O'Flaherty and Liddy, 2017), the breaking down of disciplinary boundaries (Higgins and Kirk, 2002), a move away from organisation around individualistic and competitive high-stakes testing (Au, 2008) and the communal engagement with values "intellectually, emotionally, spiritually and aesthetically" as well as the preservation of the Earth (Griffiths and Murray, 2017: 44). The dominant feature of any critical sustainability approach would be the revealing and challenging of the systems of oppression and planetary domination caused by global capitalism (Allman, 2001; Rose and Cachelin, 2018). What is required, is a "revolution" (Jenson, 2013: 27).

Situating Learning for Sustainability

Buckles (2018) argues that whilst the form of education is increasingly globalised, the curricular design remains national. Replacing ESD, Scotland has developed *Learning for Sustainability* (see Appendix 1) which operates as a complementary policy to the Scottish Curriculum, the *Curriculum for Excellence* (CfE) (OPSWG, 2012). Griffiths and Murray (2017) suggest that the shift from ESD to LfS "avoids - rather than resolves - some of the tensions inherent in the Rio Declaration" (40) with UNESCO (2013) identifying the CfE as pedagogically complementary with ESD.

Curriculum organisation and guidance "reflect the nation, and the identity that the authorities wished to promulgate" (Buckles, 2018: 68). The General Teaching Council of Scotland (GTCS) identify LfS as "a priority for the Scottish Government" (online). However, McKenzie *et al* (2015) state that individuals

who are constructing policies are likely to borrow the abstraction or "political symbolism" of a discourse, with little investigation of the details of it. Additionally, policies tend "to take the authority of the nation-state as given" (Rizvi and Lingard, 2010: 13, cited in McKenzie, 2012: 170), meaning that educational policies reflect governmental priorities. Arnott and Ozga (2010) describe the discourse of the current Scottish Government's policy approach, including education, as "modernised nationalism" (337), with the goal of creating a "wealthier and fairer, healthier, safer and stronger, smarter and greener Scotland" (338) through economic growth (SG, 2016). This discourse connects wealth and fairness: "economic growth is defined as a public good" (Arnott and Ozga, 2010: 338) and views sustainability as an economic consideration: "a more competitive, more sustainable and fairer economy" (SG, 2015: 4).

No previous research has examined how sustainability discourses manifest within Scotland's LfS agenda, how these interact with existing national discourses and how LfS subsequently impacts on organising educational structures. Additionally, there is a distinct lack of research into LfS from a CST perspective. Therefore, this study attempts to address this gap by critically analysing key reports in the creation and conceptualisation of LfS.

METHODOLOGY

Critical researchers recognise that research itself is a site of struggle (Kress *et al*, 2013). Fairclough (2002) notes that under capitalism, research knowledge takes on the form of a commodity, leading to a concern that philosophical approaches to educational questions are being sidelined in favour of more empirical approaches, which Bridges (2017) refers to as "scientism" (35). Tröhler (2006) argues for the importance of educational research to focus on the academic; to analyse structures and motivations historically and philosophically rather than solely preoccupy itself with finding "what works" (66) in any given moment. This chapter outlines why a Critical Discourse Analysis (CDA) was selected to examine the representation of sustainability, and the subsequent education for it, within Scotland.

Research Objectives

"In general CDA asks different research questions" (Meyer, 2001: 3) from those approaches that claim a more positivist epistemology. Qualitative, critical, social research is built around exploration, starting with open ended research questions, rather than predictions or hypotheses (Carter and Little, 2007; Smeyers and Smith, 2014). Following the literature review, the following questions shape the analysis:

- 1. How is 'Learning for Sustainability' conceptualised in the One Planet Schools and the Vision 2030+ reports?
- 2. What discourses and conceptualisations of social organisation are envisaged in the One Planet Schools Report, Scottish Government Response and Vision 2030+?
- 3. To what extent are these discourses and conceptualisations compatible with a sustainable future?

CDA

CDA is a "socially committed scientific paradigm that addresses social problems", frequently used by researchers to examine political, institutional and educational discourses where they perceive social changes need to be made (Bacchi, 2000; Rogers *et al*, 2005: 370). It is an approach to "describe, interpret and explain" the construction and maintenance of the social world through language, with a focus on identifying potential solutions to social 'problems' (Fairclough and Fairclough, 2018; Rogers, 2011; Rogers *et al*, 2005: 366). It combines critical social theories and linguistic analysis to highlight how language reinforces power inequalities (Fairclough, 2001; Rogers, 2011; van Dijk, 1993). Similarly, to CST, CDA can draw on a wide range of theories (Meyer, 2001). The connection to theory is crucial for the analysis to have any meaning (Fairclough, 2003). Rogers (2011) stresses the need for coherence between the social theory, the area of research and the theory of language used.

Following CST and critical pedagogy, CDA is grounded in a Marxist tradition with Fairclough and Graham (2002) referring to Marx as a "significant partner-indialogue" (6) during their development of CDA. Epistemologically, Marx's dialectical materialism complements both a relational ontology and CDA as method. Human knowledge, or consciousness, is dialectically generated through engagement with the specific, historic and socially constituted material world, including "the objects or processes we produce" (Allman, 2001: 165). CDA eschews strict economic determinism to examine additional systems of manufacturing internalized hegemony through language (Fairclough and Graham, 2002; Rogers et al, 2005; van Dijk, 1993). Consequently, it views texts as moments in the "material production and reproduction of social life" (Fairclough and Graham, 2002: 5). Furthermore, CDA opposes language as abstraction, instead examining how it is used, how it interacts and how it makes meaning (Rogers, 2011). Allman (2001) asserts that using Marx's revolutionary theory of consciousness through dialectical conceptualization can overcome the hegemonic limitations language can place on our thinking. Fairclough and Graham (2002) build on this idea, identifying Marx's work as revolutionary praxis that mirrors CDA, concluding that "[t]he dialectic is Marx's method of analysis" (19).

Rogers (2011) outlines key reasons that CDA is an appropriate approach for education research: education is made from "communicative events" and therefore can be considered discourse; discourse studies can provide reflections on non-neutral social practices linked with power and values and CDA and educational research are both "socially committed paradigms" (1) that suit theoretical arguments about these power relations. Additionally, CDA deals with complex ideas (van Dijk, 1993). "Discourses are plural and contradictory" (Bacchi, 2000: 50), with texts, as Wodak (2001) points out, situated in discursive 'spaces' that incorporate various discourses, power relations and ideologies. Texts draw on, and in doing so interpret, previous iterations of similar texts in both style and content (van Dijk, 1993). "CDA provides the tools for addressing the complexity of movement across educational sites, practices, and systems in a world where inequalities are global in scope" (Rogers, 2011: 1).

Fairclough (2001) argues that language is increasingly the mechanism for the "exercise of power" and the reinforcement of existing social practices and relations as 'normal'. The Foucauldian concept of discourse as social production, rather than a linguistic category, has heavily influenced CDA (Fairclough, 2001; Rogers, 2011). However, born from a critical school of linguistics, Fairclough (2003) identifies the textual analysis as "an essential part of discourse analysis" (3). Wodak (2001) stresses the need for an understanding of Hallidayan grammar in order to develop a "proper" (9) understanding of CDA. Fairclough draws heavily upon Systemic Functional Linguistics (SFL) - a Hallidayan approach (Meyer, 2001). SFL is a functionalist, social semiotic theory of language in which language users are dialogic "meaning makers" (Fairclough, 2001, 2003; Rogers, 2011: 6). Language is a "meaning-making process" (Rogers et al, 2005: 365), where discourse is both the object and the method of study (Rogers, 2011). This meaning making situates the research as interpretivist. This theory of language complements both the social theory and the area for research.

CDA has been defined through its intended outcomes and goals, rather than as a strict method (Meyer, 2001; Roderick, 2018; Rogers et al, 2005). Bridges (2017) argues for the need for systematics in harmonising a community of researches. However, Rogers et al (2005) pose the question of whether a more uniform approach counters "the epistemological and ontological tenets of a critical paradigm" (379), advocating for blending various approaches to CDA as a way to illuminate different aspects of educational questions and avoid methodological homogeneity. Bridges (2017) agrees that rigid, procedural "disciplines" (26) can reduce and confine scales of inquiry. Additionally, Rogers et al (2005) identify three further common critiques of CDA within educational research: a lack of balance between linguistic and social theory; a lack of contextualisation and that "political and social ideologies are read into the data" (372). These concerns will be addressed in the following section, examining Fairclough's (2001) three stages of CDA, description (textual/linguistic analysis), interpretation (contextual analysis) and explanation (social/theoretical analysis).

The three stages, necessarily enacted as interwoven parts of a whole (Fairclough, 2003), are outlined separately here for clarity. The description stage, although interconnected with interpretation, concerns the analysis of the linguistic features of a text (Fairclough, 2001). Frequently in CDA, Wodak (2001) argues, there is not a cohesive or thorough approach to the analysis of language. This is possibly due to researchers coming from non-linguistic backgrounds (Fairclough, 2001; Rogers *et al*, 2005). Recognising the validly of this concern for this research, text level analysis for this study will be systematically undertaken using Fairclough's (2001) framework for analysing vocabulary, grammar and textual structures.

The interpretation stage, is a socially deconstructive approach, meaning it is concerned with mediating the context surrounding the production, distribution and consumption of the text as well as the text itself (Bacchi, 2000; McKenzie *et al*, 2015; Rogers *et al*, 2005). Fairclough, although using the term in 2001, later (2003) challenges the use of the term 'context', arguing that, due to their

dialectical nature, texts are mediating components of social events between social actors, as opposed to isolated objects within a context. Van Dijk (1993) refers to this mediation as social cognition, "the role of social representations in the mind of social actors" (251), and identifies it as the crucial analytic factor for understanding the connection between discourse and power reproduction; social cognition (interpretation) mediates between the micro (text analysis/description) and macro (social relations of power/explanation) levels (Fairclough, 2001; van Dijk, 1993). As the mediating stage, the analysis at this level will focus both on the linguistic interpretative features as well as the situational interpretative features that may be drawn on by the interpreter (Fairclough, 2001). While this research remains interpretivist, it is connected to a wider critical movement to avoid the 'paralyzing' relativism of some post-modernist arguments (Torres and Reyes, 2011).

The explanation stage of the analysis dialectically examines how "social structures" (power relations/social struggles) interact with "social practices" (education/sustainability discourses) and "social events" (texts) (Fairclough, 2003: 23). As Rogers *et al* (2005) point out, social constructs are not fixed. Discourses are part of social struggles and determined by relations of power (Fairclough, 2001). As such, explanation reflects these two dimensions. It is the inclusion of explanation in addition to description and interpretation that distinguishes CDA from other analyses (Rogers *et al*, 2005). If CDA must be concerned with "the concept of power, the concept of history and the concept of ideology" (Wodak, 2001: 3), it is in the explanation stage that these concepts are addressed. This analysis happens at three 'levels': situational, institutional and societal (Fairclough, 2001).

Method

Critical analysis starts where the analyst (researcher) identifies a need for conditions of inequality to be revealed (Rogers *et al*, 2005). Methods are chosen to best facilitate transformative goals (van Dijk, 1993), and will be predicated

on the conceptualization of the existing social relations and discourses of contemporary society the researcher is examining (Fairclough, 2003).

Reflexivity in the researcher is imperative in educational CDA research (Rogers et al, 2005; Wodak, 2001). To use Fairclough's (2001) words, "text interpretation is the interpretation of an interpretation" (67). Researchers need to develop both prospective reflexivity - considering how they as individuals affect the research process - and retrospective reflexivity - how the research process affects them (Attia and Edge, 2017). This connects the analysis with the material experiences of the researcher and the creation of this analysis as a textual moment of the type referred to earlier (Allman, 2001; Bartesaghia and Pantelides, 2018).

Critical researchers cannot "claim neutrality, and ideological or political innocence" (Cohen *et al*, 2011: 32) nor to be arbitrators of 'truth' (Bartesaghia and Pantelides, 2018). Critical discourse analysts must articulate their epistemological standpoint, their socio-political goals and the aims of their research in context (van Dijk, 1993; Wodak, 2001). The epistemological view of the dialectic "is not to discover truth, but rather to 'convict an opponent of inconsistency' and to propose counter assertions" (Hook, 1928: 385, cited in Fairclough and Graham, 2002: 13). As outlined earlier, the socio-political goal of this paper is to facilitate educational practices in search of "real possibilities for a better future" regarding ecological preservation and social justice (Allman, 2001: 151; Freire, 1985). The intention of this research is to both contribute to the discourse around sustainability education from a critical, transformative perspective and to facilitate critical praxis for the researcher through the process of research.

The interpretation and explanation stages of CDA call upon the researcher to use the same interpretative procedures that interpreters do (Fairclough, 2001). The interpretative frameworks that researchers bring to the research will influence the analysis (Rogers *et al*, 2005). Bartesaghia and Pantelides (2018) advocate for researchers to identify "their own involvement in the tensions,

multiple identity positions, and fragmentation of neoliberal discourse" (169). Given this, the researcher in this instance works as a teacher in Scotland, implementing the LfS agenda as an outdoor educator. This may provide useful insight when conducting the analysis as the researcher occupies the role of a social actor that educational texts in Scotland are intended to mediate for (Fairclough, 2003). It may also, however, contribute to researcher bias. During the explanation stage of analysis, the position of the researcher remains easier to distinguish, providing the analysis is sufficiently grounded in theory (Fairclough, 2001). In order to remain overt about the critical analysis, "clear analytic procedures outlining the decision making of the researcher" (Rogers *et al*, 2005: 387) should be given.

Texts are purposefully selected based on the aims of the study (Fairclough, 2003). The three documents selected for analysis cover the major policy 'discussion' that has occurred over the last 6 years in relation to LfS (Fairclough, 2001). Due to the scope of this study, excerpts from the texts have been selected that best address the research questions. The selections from the first two texts detail LfS definitions, the recommendations made by the One Planet Schools Working Group (OPSWG) and the Scottish Government responses, outlining how LfS was defined and enacted. The selections from the third text provide an evaluation of LfS to date from the perspective of the co-chairs of the implementation group and outline what the future vision for LfS is.

The primary texts for analysis will be:

- Learning for Sustainability: The Report of the One Planet Schools Working Group (OPSWG, 2012)
 - Definition of Terms (8-10)
- Learning for Sustainability: The Scottish Government's response to the Report of the One Planet Schools Working Group (SG, 2013)
 - Response to recommendations of Learning for Sustainability (6-13)
- Vision 2030+: Concluding report of the Learning for Sustainability National Implementation Group (V2030+) (LfSNIG, 2016)

- Executive Summary (excluding graphics, quotes, additional resources) (3-6)
- Vision 2030+ (21-22)
- Vision for Scotland in 2030 (23)

Analysis

Following from Cohen *et al's* (2011) point regarding the neutrality of the researcher, "analysis is not - and cannot be - 'neutral'" (van Dijk, 1993: 270). The process of data collection, interpretation and analysis is simultaneous and dialectic (Meyer, 2001). Therefore, the selected texts will be analysed across Fairclough's (2001) three stages simultaneously. The style of analysis must allow "political positions to arise from the data rather than being read into them" (Roger *et al*, 2005: 387). This analysis will consider the convergence of the texts with the various discourses outlined in the literature review, regardless of explicit reference to them. In order to present the procedures undertaken by the researcher for clarity (Rogers *et al*, 2005), the following questions, which emerged from the literature review, informed the analysis process:

- · Is LfS transformative in approach?
- · What changes (if any) to the organisation of schools are suggested?
- What is the social position of learners within the texts?
- What is the role of teachers?
- · What are the roles of governing structures?

Complete knowledge of a text is unattainable, but knowledge of texts is "extendable" (Fairclough, 2003: 14). The selection of linguistic concepts depends on the research questions (Meyer, 2001). Given the broad and openended nature of the research questions, experiential, relational and expressive features will all be included in the analysis, selected for their relevance to the research questions (Fairclough, 2001).

Fairclough (2001) calls the relationship between a text and the "conception of the world it presupposes" coherence (65). Through borrowing and lending, policies move, are adopted and altered across global spaces and networks (McKenzie, 2012). The intertextual reproduction of influential, global texts, such as the Sustainable Development Goals is a key site for examining the relations of power from global to national levels (Fairclough, 2003). Additionally, institutional texts, such as additional Scottish education documents, contribute to the interpretative framework of the assumed readers: Scottish educators. There is some agreement that CDA should be just as concerned with what is missing from a text as with what is present (Rogers, 2011; van Dijk, 1993). Social relations and power structures are normalized and reinforced through and by any discourses that do not challenge them (Fairclough, 2001). Intertextual presupposition is a crucial part of the interpretation of what is not said (Fairclough, 2001). Consequentially, intertextual references will be made in the analysis to both additional texts and additional sections of the selected texts.

Ethics

Agostinone-Wilson (2013) cautions that research being hermeneutic or philosophical doesn't imply it is critical, emancipatory or ethical. However, ethical and moralistic judgements are an aspect of all critical research (Fairclough and Fairclough, 2018; Graham, 2018; Griffiths and Murray, 2017). For example, the approach to CDA as outlined in Fairclough's *Language and Power* (2001) which is drawn on here, conceives an emancipatory ethics concerned with liberation from oppression for marginalised groups (Graham, 2018). Acknowledging the ethical component of critical research however is insufficient given that the ethics of critical research is subjective. Approaches to ethics - our decisions - are shaped by the social practices and associated discourses we exist within (Griffiths and Murray, 2017).

Fairclough and Fairclough (2018) argue that a "commitment to discourse ethics is the most important part of the ethics of doing CDA" (181). In contrast to this, Roderick (2018) suggests that the ethical framework and subsequent reflexivity for CDA is inconsistent within the field and that discourse ethics suffers from ontological inconsistencies. He goes on to identify the need for recognition of the "inseparability of epistemology, politics, and ethics" when undertaking critical analysis (2018: 155). Epistemological clarity matters for the ethics of CDA given the concern with truth (Roderick, 2018). Epistemological and ontological tensions arise from CDA to prevent any claims to an empirical truth (Rogers *et al*, 2005). For example, Bartesaghia and Pantelides (2018) caution against asserting intentionality, hiddenness and static states of oppression or hegemony as 'fact' during CDA. Similarly, Fairclough and Fairclough (2018) argue that CDA should be adopted as a critical, but non-advocacy, approach. No assertions should be made during analysis of either the 'truth' of the texts nor 'what should be done' about it.

The purpose of "de-mystifying" ideologies is emancipatory - to facilitate further critique and action - and therefore political (Roderick, 2018: 157). However, Fairclough and Fairclough (2018) stress that it is crucial that the politics of the analyst do not colour the analysis and that deductions are drawn from immanent, critical, testing of the discourse (2018). The research will be politically situated and motivated, but the analysis should not reflect a particular political viewpoint (Fairclough and Fairclough, 2018; Roderick, 2018). Fairclough and Fairclough (2018) suggest that analysts should critically examine various lines of argument around a particular issue, including those they may politically align with. Where this has been done in the review of the literature, for the actual analysis, the scope of the study limits this possibility.

Graham (2018) concludes that ethics within CDA is primarily an issue of "Scene" - both the "motive site of injustice" and the "critical target of transformation" (199). Van Dijk (1993) identifies the need for critique to be "general, structural and focused on groups" (253). That is, the scene for critique here is the structural relationship between a capitalist mode of production, sustainability

and education as mediated by discourse. Additionally, the authors of the texts are cast here not as individuals, but as social agents of the state, conceptualised here as actors in capitalist social relations rather than as ethically suspect individuals (Graham, 2018).

Additional Limitations

A single analysis will not reveal everything about a text (Fairclough, 2003) and this analysis does not claim to be an exhaustive study of either the identified texts, nor LfS as a discourse. Moreover, van Dijk (1993) identifies the limitations of CDA in addressing the challenges of the social world. Countering dominant social discourses in education can be challenging (Tröhler, 2006) with this study recognising the impact it may have on the discourse as being limited. Analysis is personal in so much as it was conducted by an individual and links specific discourses with wider societal ones as understood by the researcher (Van Dijk, 1993). This report primarily reflects Western conceptualisations of sustainability and education as well as Western thinkers and philosophies (McKenzie, 2012). Additional analyses undertaken by different analysts could extend the knowledge of the texts further.

CDA is also selective, and therefore limiting, in its choice of level of theoretical analysis. This study utilises Fairclough's middle-range approach, concerned with an examination of social structures and practices in relation to specific social phenomena (in this case education) (Meyer, 2001). Without endorsing the strict dichotomy suggested here, the study recognises that the need for critique of the existing power structures from a "top-down" perspective does not negate the need for more "bottom-up" analysis (Van Dijk, 1993: 250). Further analysis of sustainability discourses in classrooms could provide insight into practices that could challenge power relations rather than sustaining them (Rogers *et al*, 2005). Additionally, analysis of written texts can lack the ethnographic contextual framework that interactional texts have (Rogers *et al*, 2005). Theoretical analysis at a more individual level could identify the "everyday

procedures" (Meyers, 2001: 7) that shape and influence sustainability discourses.

FINDINGS AND DISCUSSION

The analysis of the texts found several themes occurring throughout the documents that were pertinent to the research questions. The conceptualisation of LfS is communicated overtly, both in a singular definition and through a discussion on definition, and represented more subtly throughout the documents. How this conceptualisation should be enacted as detailed in the reports is discussed in the section on LfS and the Curriculum for Excellence. The tensions between transformation and continuation of current practices is explored in the following section, with the portrayal of social relations discussed in the final section.

The conceptualisation of LfS

LfS is presented in the OPSWG report as being a multi-faceted approach to education that encompasses a considerable number of areas. LfS is initially conceptualised as the bringing together of "[s]ustainable development education, global citizenship and outdoor learning" (OPSWG, 2012: 8). These facets of LfS are described as 'essential' in contributing to the capacity development of individuals and are presented as being both unique and overlapping. This initial outline draws strongly on three pillar models, specifically a triple bottom line graphic conceptualisation (Wilson and Wu, 2017) which is reinforced by the intertextual reference to a quote by McKeown and Hopkins (OPSWG, 2012: 9). Moreover, the discussion explicitly references the UN discourse, aligning LfS synonymously with the UN definition of sustainability. This nationally familiar (the UN operate Right Respecting Schools programs in Scotland) and accessible discourse may well be where educators go to source resources and guidance. However, McKenzie (2012) expresses concern at the lack of critique around the UN in terms of its simultaneous roles in promoting education, sustainability and competitive, global markets. She identifies it as an organisation that carries individualist, growth-based discourses embedded within it that are then replicated in national and local policies, which can be seen in the transference of the paradoxical 'sustainable economic growth'

discussed in the literature review. Additionally, as Griffiths and Murray (2017) point out, the conceptualisation of LfS, in terms of the coherence between the requisite parts, is not clear and requires further examination.

Beyond this initial depiction, the report goes on to emphasise through repetition and synonymy, the large quantity and diversity of concepts that LfS entails ("encompassed", "encompasses", "breadth", "broad agenda", "wide spectrum" (OPSWG, 2012: 8-9)). This overwording of the broad, encompassing nature of LfS demonstrates a preoccupation with scope (Fairclough, 2001). This scope is illustrated by the inclusion of a word cloud that incorporates 43 issues and approaches to sustainability (OPSWG, 2012: 10). The inclusion of "social justice, learner voice and values-based approaches to learning and teaching" as hyponyms - subordinate terms - of LfS in the *V2030*+ affirms LfS as a suitable vehicle for even more approaches (LfSNIG, 2016: 3). This atomised presentation risks confirming McKenzie *et al*'s (2015) concerns over divisionist models, where interconnections are ignored in favour of individual features. The examples of 'good practice' that are intertextually presented throughout *V2030*+ as a series of tweets reflect this fragmentation of LfS which masks the relations of capitalism at work (Allman, 2001).

Within the *Definition of Terms*, the OPSWG (2012) use pronouns that can be read inclusively or exclusively, "our society", "our objectives", "distract us", "our key objectives" (8). The use of inclusive pronouns aligns the reader with the text producer. This encourages the adoption of the authority claim by the working group that "terminology should not present a distraction" from the "key objectives" (2012: 8) of LfS. However, terminology and language, as previously discussed, are key sites for ideological reproduction (Fowler *et al*, 1979). The call for readers to ignore the distraction of terminology is indicative of the promotion of uncritical engagement with the LfS agenda. Following this, the OPSWG present a definition for LfS contained within a single sentence:

A whole school community approach that enables the school and its wider community to build the values, attitudes, knowledge, skills

and confidence needed to develop practices and take decisions which are compatible with a sustained and equitable society.

(OPSWG, 2012: 8)

Rose and Cachelin (2018) argue that uncritical definitions of sustainability have lost any real meaning as they are translated across discourses. Such a vague definition certainly leaves much to be interpreted by the reader (Liu, 2009). What values, attitudes, knowledge and skills might be needed? What conceptualisation of 'sustainable' and 'equitable' is being brought by the reader? How far can the policy framers assume shared conceptual frameworks? It is the intertextual presuppositions that the reader uses to answer these questions (Fairclough, 2001). These unarticulated assumptions are where hegemony operates (Apple, 1979). The criticality that is required for realising the paradigmatic shifts necessary for a sustainable future must go beyond commodified 'thinking skills' (Apple, 1979; Fairclough, 2002), away from what Arnott & Ozga (2010) describe as an economy-driven, modernised nationalism, based on "skills, smartness and success" (344). Rather it must engage with the questions of "why a particular form of social collectivity exists, how it is maintained and who benefits from it" (Apple, 1979: 7), an engagement that is absent in the conceptualisation of LfS.

LfS and the Curriculum for Excellence

The conceptualisation of LfS is primarily given through outcomes rather than actions. The CfE is a particular focus for both the implementation group and the government within the LfS documents and is presented as the mechanism for implementing LfS in schools. Within the SG (2013) responses, much of the vocabulary is drawn from the CfE discourse, "skills for learning life and work", "four capacities", "learning across the curriculum" (6), positioning the curriculum as a suitable vehicle for LfS. Institutions, such as education structures, will have multiple discourses and ideologies operating simultaneously that will, at some points, contradict each other (Buckles, 2018; Fairclough, 2001). Arnott and Ozga (2016) describe the CfE discourse originally as one of personalised learning, modernisation and the promotion of economic

growth, readying learners for participation in the knowledge economy through the building of skills and capacities, that has recently incorporated additional narratives of fairness and social justice.

The repetition within the declarative, authoritative statements regarding key principles of the CfE to develop "politically literate, responsible, active global citizens" (SG, 2013: 6), and "environmentally aware, active global citizens" (7) as a response to recommendations, synonymises social justice goals of LfS with parts of the existing curriculum. Without explicit examination of the exploitative relations of capitalism (not referenced in Education Scotland's (2010) *Developing global citizens within Curriculum for Excellence*) and the reductions of citizenship discussed in the introduction to this paper, these approaches are rendered rhetorical (Apple, 2010). Emphasising sustainability, social justice and fairness as consonant with educational structures conceived to facilitate economic growth acts as a "conceptual block" (Apple, 2010: 7), setting Williams' (1973) limits to critical approaches within LfS.

The OPSWG (2012) uses metaphors of "weaving" (8) and sewing, "linking thread" (9) to suggest the assemblage of multiple components into a cohesive whole, a suggestion that is emphasised with the synonymy of "coherent", "holistic" and "connectedness" (8-9). LfS recognises no tensions in bringing together the existing approaches within the CfE and the additional themes and issues detailed in the word cloud. Similarly, the CfE is branded as "flexible" and "permissive", it "gives teachers freedom" (LfSNIG, 2016: 4). The overwording here emphasises the 'free' nature of the curriculum, indicating how it can be utilised to harness LfS. However, Allman (2001) details the redundancy of freedoms as abstractions without the material conditions in which to realise them. Defining the CfE as giving teachers freedom, does not give them the freedom to realise sustainability while operating within models of schooling that are individualistic, anthropocentric and technocratic.

Transformation or Adjustment

The LfS documents represent LfS as both a continuation of current practice and, antithetically, as a transformational approach to education. The OPSWG identifies LfS as concerned with bringing about "attitudinal and societal change" through "strategic change", experienced by learners in a "transformative way" (2012: 6-7). V2030+ presents a similarly optimistic vision of LfS as a mechanism for transformation. In the Executive Summary, the successes and developments of LfS are seen to "undoubtedly help to bring about transformational change at system level" (LfSNIG, 2016: 4). This positions transformational change as a goal of LfS, a point that is reiterated in the Vision for Scotland in 2030 section of the report which additionally positions schools as mechanisms for societal transformation. However, the OPSWG state LfS is "not intended to replace what schools are doing" (2012: 9) and V2030+ uses the language of "reorienting" learning" (2016: 21) from the UN. Gould (2013) identifies curricula, frameworks and structures of education as elements to be redesigned to facilitate critical sustainability. As detailed above, the commitment to the CfE in the discourse suggests no radical redesign of curriculum. The rest of this section examines frameworks and structures.

Regarding frameworks, the V2030+ identifies the inclusion of LfS across a range of governing documents to be key to transformation, including the General Teaching Council for Scotland (GTCS) Professional Standards (Standards) and How Good Is Our School 4? (HGIOS4). Only one of the three Standards includes LfS as a key area for consideration, rather than as an underlying principle or interdisciplinary context for learning. Within The Standard for Career-Long Professional Learning (GTCS, 2012), only one of the listed professional actions relates to the teaching of sustainability, rather than the development of professional capacities. The identification of these "successes" (LfSNIG, 2016: 4) presupposes that the Standards and HGIOS4 are effective mechanisms for facilitating transformative shifts in education: the text producers are placing LfS squarely within existing frameworks rather than challenging them. Contrastingly, HGIOS4 can be viewed as a neoliberal measure of schools' efficiency, reflecting a marketised design of quality assurance and evaluation based on standardization, performativity, comparison and competition

(Croxford, 2010). The uncritical reproduction of LfS into the specific cultural and historical institutional contexts of Scotland's inspection procedures, represents how LfS is adopted within existing discourses rather than transforming them (Bacchi, 2000; McKenzie, 2012; McKenzie *et al*, 2015).

The lack of transformation at structural level can be illustrated through the case of the Scottish Qualification Authority (SQA) in relation to LfS. Recommendations 5.3 and 5.6 concern changes to the SQA in both the recognition of LfS as a "key organisational priority" (12) and the inclusion of LfS in new qualifications. The first recommendation is accepted, with the SG responding, "Education Scotland and SQA have already taken steps to embed learning for sustainability into their corporate plans" (SG, 2013: 12). However, within the SQA's corporate plan 2017-2020, the only mention of sustainability within the strategic content and drivers is "to develop knowledge societies to support sustainable economic growth" (SQA, 2017: 2). The dominance of employability, technological and skills enhancement classification schemes remains throughout the drivers, with half of them specifically relating to the economy. It becomes 'natural' to view sustainability through the requirements of globalised capitalism, as this is the "dominant system of meanings, values and actions" that are drawn on for both the text production and consumption (Apple, 1979: 5). In this way, the SQA reproduce an economic conceptualisation of sustainability, rather than a social one, which then contributes to the institutional conceptualisation intertextually mediates and readers' interpretations.

The second recommendation, to "further embed learning for sustainability within new qualifications" (SG, 2013: 13) was also accepted. Within the SG's detailed response however, logical connectors are used to dilute the commitment to change. The SG draw on the CfE discourse by referencing "skills", "flexibility" and "personalisation and choice" as an existing emphasis within the new qualifications (SG, 2013: 13). The following sentence, refers back to this approach as providing "opportunities to promote the values, attitudes, knowledge, skills and confidence" as outlined in the LfS definition.

The use of this cohesive feature to logically connect current approaches to assessment with the LfS agenda is a construal operation, ideologically positioning high-stakes testing as complementary to LfS rather than oppositional (Fairclough, 2003; O'Flaherty and Liddy, 2017). Bacchi (2000) outlines a trend in policy production for solution based approaches, where problems are recontextualised within limits where they can be solved without radical changes. This dilution, to continue to serve the needs of social organisation based on stratification by maintaining high stakes testing, represents the SG's lack of commitment to the real transformation that is necessary to facilitate a sustainable future (Apple, 1979; Jenson, 2007).

LfS is situated within a discursive, policy 'space', drawing on dominant discourses and feeding back into them (van Dijk, 1993; Wodak, 2001). Emulation is a key mechanism for the transference of discourses across various policy sites (McKenzie et al, 2015). In V2030+, the language of alternative Scottish educational priorities can be seen shaping the justifications for LfS. The SG's key priorities in recent years, outlined in the Nation Improvement Framework 2018 are raising attainment, improving health and wellbeing, the development of employability skills and 'positive destinations' on leaving school (SG, 2017). LfS adapts to these, and is presented as a vehicle for national priorities such as "raising attainment in literacy and numeracy" and supporting learners in "sciences, technologies, engineering and mathematics (STEM)" (LfSNIG, 2016: 5; SG, 2017). The dominant discourse of the national priorities shapes LfS, but this is not mutual as 'sustainability' does not appear in the National Improvement Framework (SG, 2017). The LfS discourse, rather than being transformational, is saturated and transformed by an educational discourse which is informed by the needs of the national economy where "everyone contributes to the sustainable economic growth of our country" (Education Scotland, 2015: 5), perpetuating the seeming inevitability of capitalist reality (Allman, 2001).

Social Relations within LfS

Language socially positions actors in a range of roles, embodying a range of social identities (Hodge *et al*, 1979). This section of the discussion examines how various roles and relations are delineated throughout the LfS texts. The use of the nearly synonymous "campus, culture and community" of the school (OPSWG, 2012: 8) suggests the presentation of collectivity as a stable assumption of LfS (Fairclough, 2001). However, there is a weighting across the texts on individual capacity building - "values, attitudes, knowledge, skills and confidence" (OPSWG, 2012: 8), "greater confidence; increased readiness and motivation to learn; increased attainment; progression in social, critical thinking and communication skills" (LfSNIG, 2016: 4) - rather than an examination of social materialities and interconnections (Griffiths and Murray, 2017). This 'community' does not represent a turn to collectivist solutions, but rather a collection of atomized individuals (Foley *et al*, 2015) and evidences the reports' "inability to think in other than abstracted individualistic terms" (Apple, 1979: 9).

The *V2030*+ report uses nominalisation (the conversion of a process into a noun) to present "climate change", "injustice" and "inequality" as concepts to be metaphorically positioned as opponents, with learners in "combat" against them (Fairclough, 2001; LfSNIG, 2016: 4). This imbuement of human agency into the noun form of social constructs, combined with a discourse of conflict, distances these concepts from the social relations and practices that cause them (Allman, 2001). It relationally situates the "CfE generation" (LfSNIG, 2016: 22) as the combatants, further dissociating their educational relations and practices from the causes of ecological and societal difficulties and presenting an anthropocentric view, rather than an ecological one (Buckles, 2018). Simultaneously, it distances the current generation of teachers from radical changes, positioning the existing relational structures of education as compatible with a sustainable future.

The *Vision 2030*+ section of the *V2030*+ details the sustainable 'horizon' that is being used as the regulative ideal for LfS (Stables, 2013). The representation of learners is a key site for examination as they "embody the vision of CfE and LfS" (LfSNIG, 2016: 22). LfS appears throughout the texts in a nominalised form initially relating to teacher's practice: "should demonstrate learning for sustainability" (SG, 2013: 7), "demonstrate LfS in their practice" (LfSNIG, 2016: 3), and eventually being relationally situated as something that "every learner receives" and that "every practitioner demonstrates" (LfSNIG, 2016: 23). This nominalisation frames LfS as a thing, conceptualising it as a system or structure separate from our experience, rather than as part of our social relations and practices within education (Allman, 2001). Additionally, LfS is recontextualised as a commodity, a set of employment skills that teachers have and learners are entitled to (Fairclough, 2002). This commodification of LfS is illustrated in a clearly normative description of the idealised learner:

They will be highly sought after by employers, colleges, universities and industries the world over as a result of their confidence, critical thinking, entrepreneurialism, ability to learn and adapt to new and unfamiliar situations and because of their deep understanding of global citizenship and sustainable development education.

(LfSNIG, 2016: 22)

Here, confidence, critical thinking, entrepreneurialism, adaptability, understanding and learning itself are used implicitly as hyponyms of LfS, framing it as a vehicle for the development of these individual qualities. Furthermore, it draws on both the discourse of global competition and the national priorities, with the dominant clause in the sentence focused on positive destinations and employability and the features of LfS subordinate to it (Apple, 2010; SG, 2017). Additionally, employment is seen as synonymous with participation, citizenship and educational success (Peters, 2012). As Allman (2001) articulates, preparing citizens for a globalised and competitive economy involves ensuring they have the "flexible and adaptable skills and attitudes that will enhance their employability" (25). The dominant discourse of knowledge production within contemporary capitalism justifies and

legitimises the sustainability discourse by subsuming it, maintaining capitalistic social relations (Fairclough, 2001; van Dijk, 1993).

CONCLUSION

This paper critically deconstructs the discourse of sustainability education, using Scotland as an example, through a practitioner's critical praxis. Simultaneously contributing to a critical agenda for sustainability at a localised level, and utilising a point of potential resistance in capitalist discourses (Rose and Cachelin, 2018; Stoddart, 2007), this analysis has developed the critical consciousness of the researcher, particularly in identifying some of the common-sense assumptions that underpin her own pedagogy. This has contributed to transformation at an individual, if not systemic, level. However, it has also highlighted the systemic tensions between current 'sustainability' practices in Scottish schools and the realisation of a truly sustainable future.

Key Findings

Without a clear and critical conceptualisation of sustainability, it is likely to remain a "weak regulative ideal", one that is unlikely to affect the sort of human response that will facilitate change (Stables, 2013). Definitions of sustainability that lack explicit criticality of the capitalist mode of production are not 'strong' enough to instil sustainability with any meaning (Rose & Cachelin, 2018). The discourse of modernised nationalism imbues Scottish policy spaces with the assumptions of an economic strategy centred on the commodification of knowledge and skills, competition and growth (SG, 2015) for an 'entrepreneurial state' in a globalised market. This reduces the 'greener' and 'fairer' strategic objectives to how they can be imagined within a 'wealthier', 'smarter' and 'stronger' nation, preventing critical considerations of the sustainability problem within education.

LfS is conceptualised as an uncritical, complementary approach to the existing Scottish curriculum. It does not advocate for the structural and organisational shifts that necessitate critical sustainability. Furthermore, it illustrates the saturation of national priorities and objectives into more localised policy discussions, with attainment, employability and entrepreneurialism becoming increasingly emphasized as outcomes for LfS and organisers for social relations.

The goals of sustainability education have been "reinterpreted" and "diluted" to support the current organisation of education in Scotland, and "do not contradict other elements within the effective dominant culture" (Apple, 1979:6). This dilution of the sustainability agenda within a technocratic and globally competitive economic discourse represents how capitalist discourses are uncritically reproduced.

Whilst education remains a reflection of national and global values that are incompatible with sustainability, it has little chance of success in realising sustainable outcomes. In order to further challenge not only the discourse, but the lived reality of a lack of sustainability, following research would take on a more committed stance in the everyday practices of education, looking for opportunities to develop the capacity of educators to resist. Sustainability education must critically challenge structures that destroy the people and the planet to preserve profit. The realisation of the radical implications of learning for sustainability require the expropriation of an education system that is currently, fundamentally, for capitalism.

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APPENDIX 1

Overview of policy events in Scottish Sustainability Education 2005-2016

Policy Event	Date	Key Actors
United Nations Decade of Education for	2005-	United Nations
Sustainable Development	2014	
Publication:	2006	Scottish Government
Learning For Our Future: Scotland's First		
Action Plan for the UN Decade of		
Education for Sustainable Development		
Publication:	2010	Scottish Government
Learning for Change: Scotland's Action		
Plan for the Second Half of the UN		
Decade of Education for Sustainable		
Development		
Publication:	2012	One Planet Schools
Learning for Sustainability: The Report		Working Group
of the One Planet Schools Working		
Group	2012	
Publication:	2013	Scottish Government
Learning for Sustainability: The Scottish		
Government's response to the Report of		
the One Planet Schools Working Group		
Languing for Cretainability National	2014	Looming for
Learning for Sustainability National	2014	Learning for
Implementation Group established,		Sustainability National
convened by the Scottish Government		Implementation Group; Scottish Government
Publication:	2016	Learning for
Vision 2030+: Concluding Report of the	2010	Sustainability National
Learning for Sustainability National		Implementation Group
Implementation Group		implementation Group
implementation of oup		

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