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INSIGHTS INTO ENGLAND'S EDUCATION POLICY ON CLIMATE CHANGE AND SUSTAINABILITY

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Abstract

This paper critically evaluates the UK government's sustainability and climate change strategy for the education and children's services systems in England. The approach followed was a critical discourse analysis of the strategy document, which was then compared to qualitative data gathered from more than 200 teachers and teacher educators who co-created a manifesto for education and environmental sustainability. Our study reveals that the government's strategy prioritizes economic concerns and focuses primarily on a "net zero" policy agenda and increased science-focused knowledge and skills. The political dimensions of climate change are overlooked, which has a depoliticizing effect and leads to the strategy being perceived as a "placebo policy" that fails to address fundamental policy problems. This approach contrasts significantly with the perspectives of teachers and young people, who consistently call for pro-environmental action at all levels, including policymakers. We argue that sustainability and climate change education have been lacking in policy documents and have been largely ignored in responding to the climate crisis. To ensure sustainability is embedded in education and to address social and power inequalities in policy-making, we recommend a co-creation process involving teachers, teacher educators, and young people to develop policies that will serve to align policy and practice.

INTRODUCTION

In November 2021, the UN Climate Change Conference concluded with commitments from education and environment ministers to recognise the role of education in creating a sustainable and 'climate positive future' (UN Climate Change Conference, 2021). A specific commitment was made to integrate climate change and sustainability into core components of formal education, including the curriculum, assessment and teacher education, and to work with stakeholders to 'respond to the needs and lived experiences of all communities' (UN Climate Change Conference, 2021). Shortly afterwards, the UK Secretary of State for Education announced the government's intentions to put 'climate change at the heart of education' (DfE, 2021), through the publication of

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a draft sustainability and climate change strategy for the education and children's services systems in England (DfE, 2021), followed by the publication of the strategy as a policy paper in April 2022 (DfE, 2022b). Although strategy and policy are often used interchangeably, strategy is not policy; strategy is the means by which policy can be achieved, and there is much interaction between them (Parliament, 2010). Strategies are therefore more focused on actions. The sustainability and climate change strategy for the education and children's services systems in England (DfE, 2022a) identifies five 'action areas': (1) Climate Education; (2) Green Skills and Careers; (3) Education Estate and Digital Infrastructure; (4) Operations and Supply Chains; and (5) International (DfE, 2022b). Three initiatives are driving the strategy: the National Education Nature Park, Climate Leaders Award; and Sustainability Leadership. For each action area, goals are set for dates until 2030 (DfE, 2022b). In this paper, we analyse the strategy using critical discourse analysis and complement this with the analysis of empirical data from stakeholder (youth, teacher, teacher educator) perspectives, collected in April– June 2021, prior to the announcement.

To understand what putting climate change at the heart of education means, we need to consider what factors influence teaching practice in English schools, and how these relate to policy. Allison (2010) found that the curriculum, assessment, leadership, teacher perceptions and personal fears were strong influences on pedagogy, based on a culture of performativity, noting that 'English teachers … have the greatest intentions of providing the best education they can for their pupils; however, they feel obliged and pressured to focus on what is likely to be tested in response to the Government's approach to accountability' (p. 62). Accountability systems, specifically school inspections, were found by Ehren et al. (2015) to have a prescriptive, rather than an evaluative function, as schools take action to align with standards in advance of any inspection visits. The enactment of policy cannot be separated from the social and political context in which it was created (Vincent, 2019), so given the current culture of performativity, this means that if climate change and sustainability are to be at the heart of education as it stands (leaving aside desires to break away from performativity), they need to be evident in curriculum, assessment and inspection policies which hold teachers and school leaders to account.

A survey of teachers' perspectives on climate change education in England found that teachers were supportive of action- oriented climate change education that begins at primary age and includes the concepts of social justice and mitigation (Howard- Jones et al., 2021). Furthermore, research on the perspectives of teachers and young people from across the United Kingdom found a desire for four cross- curricular approaches to education for environmental sustainability (EfES): (1) knowledge for action; (2) critical thinking, questioning and data literacy; (3) research, innovation and creativity; and (4) communication and networking (BERA, 2021). These perspectives are important to include in policymaking, to honour commitments to involve teachers and young people in decisions about sustainability in climate change (DfE, 2021; UN Climate Change Conference, 2021). In the following section, we outline ways that policies can be framed as problems and understood as 'placebos', and then briefly consider existing research on educational policy on climate change and sustainability.

POLICY 'PROBLEMS' AND 'PLACEBO POLICIES'

Gale and Molla (2015, p. 811) argue that policymaking can be seen as an act of 'problem constructing' which is central to the practice of government. Taking a 'problems' approach to policy analysis (as formulated by Bacchi, 1999) can help explain why an educational phenomenon is formally taken to be a policy 'problem' in a particular moment in time. Policy problems can be defined as 'a gap between a current situation and a more desirable future one' (Hoppe, 2011, p. 23). Problems can be structured (where there is near consensus on the normative issues and a high degree of certainty about related knowledge), unstructured (where there is discomfort with the *status quo*, a high degree of uncertainty in knowledge and volatility in public opinion) or moderately structured (with differing levels of agreement on either the goals or the knowledge needed to solve the problem).

The metaphor of the 'placebo policy' has been used (Gustafsson & Richardson, 1979; McConnell, 2020) to describe a policy produced partly or significantly 'for show' in response to a policy problem. In this study, we extend the metaphor to the strategy for sustainability and climate change in education and children's systems services, an appropriate approach given the emphasis on action in a government strategy. The logic is that the politician must appear to do something, no matter what, as long as the issue (often an unstructured or 'wicked' problem) is taken off the agenda (Gustafsson & Richardson, 1979). This can include addressing the symptoms of an issue rather than the issue itself; the placebo offers governments a means of escape, providing a reputational boost and release from an over- burdening of demands on government. The following characteristics are important in identifying placebo policies: a highly complex problem; the need for urgency in response; public visibility of the issue; expectation that the government will act; and the capacity of the government to genuinely address the issue, which will imply taking risks and dealing with criticism (McConnell, 2020). We draw on both the metaphor of the 'placebo policy' and the framing of policy 'problems' in our critical discourse analysis of the strategy for climate change and sustainability, and begin by placing this strategy in a wider national context for both England and the United Kingdom.

EDUCATIONAL POLICY ON CLIMATE CHANGE AND SUSTAINABILITY IN ENGLAND AND THE UNITED KINGDOM

Current policy relating to sustainability and climate change education in England can be characterised as absent (e.g. Greer et al., 2021) and in terms of trajectory, diminished (Martin et al., 2013). The studies by Greer et al. (2021) and Martin et al. (2013) include policies from England, the United Kingdom more widely and those international policies which have influence on education in England. In a recent analysis of England's climate change education policy landscape over a decade (including curriculum, inspection and teachers' standards documents, and policies from a range of government departments and international organisations), Greer et al. (2021) found policy lacking, with education overlooked in responding to the climate crisis. Where policy was found to exist, there was an absence of pro- environmental ambition and the dominance of economic values. This is consistent with research on education for sustainable development (ESD) in UK policy (Martin et al., 2013), which finds that since 2010, the emphasis on sustainable development has diminished in England, attributed to ambiguity over the role of education and training in supporting the green economy, and the sharing of responsibility for sustainable development across government departments. Similarly, in the context of environmental politics, Willis (2017) found that in discussions about the 2008 Climate Change Bill, UK politicians framed climate change as an economic and technical issue and paid scant attention to the human and social dimensions, with the resulting avoidance of difficult realities. Missing from sustainability and climate change education policy work to date is any sense of the need to co- create policy with and for teachers, teacher educators and young people.

The publication of the strategy for education and children's systems services announced post- COP26 allows reflection on the English context, and the extent to which the plans present a continuation of business- as- usual or a shift to embedding (environmental) sustainability in education. Bearing in mind that the strategy is a policy paper, the purpose of this analysis is to identify the trajectory of government (in relation to the promise of putting climate change at the heart of education) and identify convergence and divergence with stakeholder (teacher, teacher educator and youth) perspectives.

THE STUDY

Critical discourse analysis (Fairclough, 2001) is used to analyse the strategy. Discourse analysis is concerned with identifying dominant ideas and those who legitimise these ideas (Burnham et al., 2017). Critical discourse analysis is underpinned by the assumption that language is a social practice which reflects and affects the social context, enabling researchers to identify how signs and symbols are connected to social processes, including those around

unequal power relations. Critical discourse analysis and critical policy analysis have been used to analyse national environmental education policy, for example from Colombia (Mejía- Cáceres et al., 2021) and the United States (Hufnagel et al., 2018). Wood (2019) notes that critical discourse analysis is useful in identifying how discourses are used to persuade readers of particular positions linked to wider ideologies and systems of reference, and identify who is being recruited to maintain and promote associated ideas and ideologies.

In our analysis of the strategy, we focus on how the nature of the problem (and solutions to it) are presented, and the extent to which the existing social order is challenged. Following the method of Wood (2019), we do this by examining how the policy problem is presented in the strategy and by identifying the presence and absence of official discourses. Following Sundaram and Sauntson (2016), we connect the analysis of the strategy to the analysis of empirical data from key stakeholders (teachers, teacher educators and young people) to identify areas of convergence and divergence with the strategy.

The empirical data used to identify stakeholder perspectives were collected between April and June 2021, prior to COP26 and before the announcement of the strategy. The dataset is therefore timely and whilst it does not map on to all action areas of the strategy, it has been collected independently and relates to the question: 'What is needed for education for environmental sustainability?' Following institutional ethical approval (9/3/2020, Reference 20/18) the data were gathered during a series of futures and visualisation workshops (totalling 18 h) with young people (aged 16– 18 years), teachers and teacher educators (Dunlop et al., 2022). The key questions posed to stakeholders included: 'Where are we now?' 'Where do we need to be?' 'How do we get there?' 'What are the barriers and solutions?' These questions are central to what 'putting sustainability and climate change at the heart of education' might look like. Contributions from over 200 participants were recorded, including workshop recordings (audio) and records of Zoom chat, Google Jamboard notes, MIRO boards and Mentimeter contributions (written), and analysed using qualitative content analysis (Hsieh & Shannon, 2005). In this paper, we focus on contributions relating to the policy sphere: what stakeholders identified as needed and what they saw as the barriers to achieving EfES. The questions guiding this study are:

- How is the 'problem' associated with sustainability and climate change education presented in the strategy?
- What discourses about sustainability and climate change education are produced in the strategy?
- How do the solutions to the sustainability and climate change education 'problem' relate to those of teachers, teacher educators and young people?

Following Sundaram and Sauntson (2016), we compiled a word frequency list (Table 1) as a preliminary step in our analysis. Although not all are revealing about ideologies, this exercise allowed us to identify potential presences, emphases and absences in the strategy.

An overview of our analysis of data gathered from youth, teachers and teacher educators is provided in Table 2, and the shared vision of stakeholders for EfES, which we have analysed through participant contributions, is presented in Figure 1.

ANALYSIS AND DISCUSSION

How is the problem presented?

In the strategy, 'The challenge and the opportunity' presents the problem as follows:

Children and young people are worried about climate change and want to know more about:

TA BLE 1 Word frequencies in the strategy (50 most frequent words, minimum three letters, *count includes words with this stem; number of occurrences in parentheses)

education (187)	opportunity (61)	national (47)	impact (33)	increase (27)

climate (132)	build (61)	provide (45)	environment (33)	carbon (27)
sustainab* (90)	action (61)	strategy (44)	delivering (33)	driving (26)
school (87)	greening (60)	zero (41)	also (32)	estate (26)
setting (86)	young (59)	including (40)	need (31)	park (26)
change (79)	skills (52)	improve (39)	ensure (30)	activity (25)
support (77)	sector (52)	government (37)	practice (29)	new (25)
nature (76)	children (51)	net (36)	resilience (29)	continue (24)
work (67)	learning (50)	energy (35)	share (28)	access* (24)
people (65)	develop (49)	using (34)	careers (28)	local* (5)

- the impact it is having now
- how it will impact their future lives

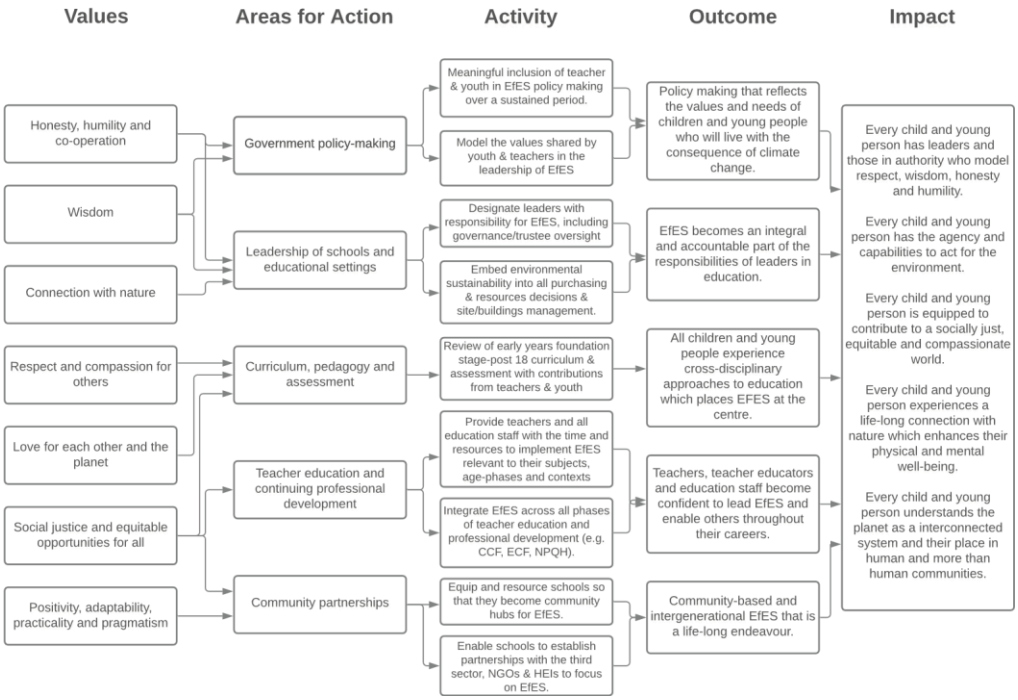
DfE and the education sector have a joint responsibility for preparing children and young people for the challenges and opportunities they will face – with the appropriate knowledge, skills and pastoral care. (DfE, 2022b, 'The challenge and the opportunity')

This frames the problem as young people's worry about climate change. The desire to learn more is presented as the solution to this problem, along with connectedness to nature (introduced in the Climate Education action area). Whilst these are consistent with some of the problems identified by young people (Teach the Future, n.d.; UK Student Climate Network, 2020), it suggests dealing with the symptoms, rather than the causes and consequences of climate change and the educational implications of these.

There is little explicit in the strategy which describes how evidence is being used in the Climate Education action area. Indeed, reference to evidence in the draft strategy: 'share examples of effective, evidence- based climate education already taking place across nurseries, schools, colleges and universities so teachers and leaders can consider how best to adapt to their own settings' (DfE, 2021, p. 13) has been removed in the strategy published in April 2022.

The strategy suggests that increased support, training and resources for teachers on climate education will lead to more teachers having practical ideas about how to include sustainability, climate and nature in lessons, which will 'ensure all young people receive high- quality teaching on the scientific facts about climate change and environmental degradation' (DfE, 2022b, 'Support for teaching'). The policy problem is seen differently by teachers, teacher educators and young people. In contrast to framing the problem in terms of worry that can be dealt with by providing more knowledge and understanding, teachers, teacher educators and young people see the problem rooted in a constrictive educational policy context which does not provide space in the curriculum for youth, teachers and teacher educators to learn *for* the environment. One youth said: 'we are generally taught the theory behind climate change, not how we can actively combat it' and a teacher reflected:

The current English national curriculum is all about gaining knowledge, embedding knowledge and retrieving knowledge. There is nothing about skills for the future.



FIGUR E 1 Synthesis of youth, teacher and teacher educator perspectives on the connections between values, action, outcomes and impact in relation to education for environmental sustainability (EfES).

The 'knowledge- rich' solution presented by the strategy contrasts both with stakeholder perspectives and with evidence from the climate education research literature which identifies knowledge as necessary but not sufficient for responding to climate change (Cantell et al., 2019). This evidence base identifies the need for participatory, interdisciplinary, creative and affect- driven approaches to climate change education which include the social, ethical and political complexities (Rousell & Cutter- Mackenzie- Knowles, 2020). Providing information and education are typical responses to structured policy problems in situations of high degrees of trust (Hurlbert & Gupta, 2015). 'Desire to learn more' can be solved relatively simply by increasing curriculum content, and this is evident in the plans to create a model primary science curriculum, introduce an optional General Certificate of Secondary Education (GCSE) in natural history and provide continuing professional development (CPD) for teachers. That said, the strategy makes no indication that change to the national curriculum will be a feature of plans at secondary level as it sets out that sustainability and climate change education are present in existing science, geography and citizenship curricula, indicating that any change will be a result of school action. Glackin and King (2020) have argued that the existing secondary school curriculum presents a limited vision of education *about* the environment, which privileges technical responses to environmental problems and ignores the role of people and institutions in responding to climate change. Technical responses are consistent with structured problems, as described by Hoppe (2011). Repackaging existing policy in this way suggests an emphasis on being seen to act, rather than acting, characteristic of placebo policies.

Youth, teachers and teacher educators identified a greater range of areas for action related to climate education beyond provision of resources and opportunities for training for teachers highlighted by the draft strategy (Table 2; Figure 1). These areas for action include: (1) government; (2) school leadership; (3) curriculum, pedagogy and assessment;

(4) teacher education and CPD; and (5) community partnerships. Youth, teachers and teacher educators highlighted the important role of exam boards to raise the profile of environmental issues in specifications; they underlined the need for school leaders and government to value and resource teacher CPD focused on environmental education and to specifically include this within existing teacher education policy frameworks (Table 2; Figure 1). Figure 1 presents a vision for EfES which has interlinked activities that go far beyond simply

providing additional resources for teachers. This is consistent with previous research which suggests that resource provision alone is unlikely to impact on practice (Harland & Kinder, 1997). Policies which collate existing activities known to be insufficient to bring about change have been described as 'placebo policies', as they give the appearance of doing something whilst failing to address the problem. Furthermore, the focus on resources associated with the existing curriculum content in a narrow range of subjects in the strategy does not meet the vision of stakeholders as presented in Figure 1.

What discourses are present in the strategy?

We begin by identifying two key discourses present in the strategy (economic framing and depoliticisation) before discussing absences (knowledge for action and responsibility, ethics and values) linked to both our analysis of the strategy (Table 1) and the empirical dataset drawn from stakeholder perspectives (Table 2; Figure 1).

Economic framing

The word frequencies indicate an economic framing of the policy, with 'net' (36), 'zero' (41) and 'careers' (28) appearing in the table (with a further 20 mentions of jobs). This is consistent with the context of the strategy, which includes a commitment to 'Building Back Greener' (DfE, 2022a), delivering a Green Industrial Revolution (DfE, 2022a), achieving the UN Sustainable Development Goals and to existing legislation to meet net zero by 2050 (DfE, 2022a). The economic framing is therefore explicit in the strategy. Activity in the Green Skills and Careers action area is to 'enable them to have the knowledge and skills (in STEM and other key subjects) required for green jobs. Through our education and skills system, we will seek to inspire young people to choose career paths that support the transition to net zero, restoration of biodiversity [and] a sustainable future' (DfE, 2022a, 'Green skills and careers').

There is evidence that placebo measures are being used in the 'Green Skills and Careers' action area, with existing policies collated here, for example with reference to 'continuing the roll- out of T- levels to support young people into "green careers", "map[ping] existing apprenticeship standards against green occupations", and expanding "Skills Bootcamps"' (DfE, 2022b). The economic framing, with education serving the net zero agenda, is particularly problematic in the context of sustainability and climate change education because of the link between (over)consumption and greenhouse gas emissions. The strategy describes how the sector will be encouraged to reduce emissions: by adapting existing and designing new buildings, and reducing emissions from the school commute. However, there are no concrete plans for how these changes might be achieved and how the strategy links to policy from other departments, such as the Department for Transport. Net zero has been described as a 'fantasy' and a 'dangerous trap' (Dyke et al., 2021) because it advances the belief that technology will provide the solutions to climate change, risks outsourcing of pollution (Lenzi et al., 2021) and reduces the sense of urgency needed to reduce emissions now.

Youth, teachers and teacher educators highlighted persistent challenges and problems related to EfES that were rooted in unsustainable economic priorities of growth and consumption. Teachers shared their concerns that they could 'get into trouble for challenging capitalist ideals' (Table 2). Although there is attention to preventing food waste (DfE, 2022b, 'Operations and Supply Chains'), there is scant mention in the strategy of the role of education in driving behaviour change and reducing consumption. 'Support' (7739) and 'opportunities' (6136) appear much more frequently than 'require' (135), 'compel' (0) or 'mandate' (12) in the word frequency list. The restriction of solutions to individual acts of choice or opportunity fails to challenge the structural growth of fossil fuel consumption (Eaton & Day, 2020), which is driving climate change. Young people underlined the need for corporations and governments to take action and not 'scapegoat' the public (Table 2). Educational attention to the link between capitalism and climate change is understood by teachers as a risky activity, as anti- capitalism is identified as an extreme stance (see e.g. DfE, 2020) and therefore subject to the demands of the Prevent duty (DfE, 2015; Home Office, 2021). This is reinforced by comments on political impartiality in the strategy which

mandate one interpretation of democratic values, that 'debates on political and policy change need to be … handled in line with schools' legal duties on political impartiality' (DfE, 2022b, 'Learning in the natural environment'). Rather than opening up discussion about the causes and consequences of climate change, and the role of individuals, societies and governments in responding, framing challenges to capitalism as 'extreme' is likely to discourage teachers and young people from challenging economic models that contribute to continued climate change and climate injustice.

Depoliticisation

Depoliticisation is described as 'the range of tools, mechanisms and institutions through which politicians can attempt to move to an indirect governing relationship and/or seek to persuade the demos that they can no longer be reasonably held responsible for a certain issue, policy field or specific decision' (Flinders & Buller, 2006, pp. 295– 296). Recent research has highlighted the widespread depoliticisation or neutralisation of the political dimension of environmental education (e.g. Håkansson et al., 2019; Slimani et al., 2021).

There is evidence of depoliticisation in the strategy, in the way the responsibility of the Department for Education is presented as joint with the education sector (DfE, 2022b, 'The Challenge and the Opportunity') and in the word frequencies, which list 'school' (87), 'opportunities' (61) and 'support' (77) above 'government' (37) and 'policy' (4). Knutti (2019, p. 23) highlights that successful environmental governance happens 'through clear rules and boundary conditions for everybody rather than by innovation randomly popping up to solve it or people suddenly changing their minds and engaging for a better world'. It is not clear how schools will be supported to take advantage of opportunities, given that school budgets are under pressure and balances are falling, with many schools in deficit (Andrews & Lawrence, 2018).

The education sector (not government) is given responsibility for responding to climate change through 'opportunities' and 'support' without an enabling policy environment which puts climate change at the heart of education policy. However, there are places where there is indication of future requirements, for example in relation to a whole- school approach to food (which governors are given responsibility for) and the requirement for all new teachers in further education to integrate sustainable practices into their teaching. For teachers in schools, there is no such indication. The existing national curriculum, education inspection framework (DfE, 2019b), initial teacher training core content framework (DfE, 2019a) and early career framework (DfE, 2019c) pay scant attention to climate change and environmental sustainability, and this was identified as a current barrier to EfES by teacher educators (Table 2).

Depoliticisation is also evident in how politics features in the strategy. Hay (2007) defines politics as a social activity based on deliberation that happens in situations of choice where there is capacity for agency. The strategy states that schools must deal with political issues in line with legal duties on impartiality.

Schools' legal duties include those associated with the Education Act 1996, which requires students to be offered a balanced presentation of opposing views on political issues. Leaving aside the extent to which balance is possible, the assumption of the desirability of balance has been questioned by Eaton and Day (2020), who argue that 'balance' is a way in which education obstructs climate justice and legitimises industry interests and perspectives by, for example, including industry perspectives and assuming that all perspectives are equally valid. The previously published draft strategy stated: 'it would not be appropriate to encourage pupils to join specific campaigning groups or engage in specific political activity, such as protests' (DfE, 2021, p. 12). Yet, it is unclear what 'specific political activity' might mean besides the protests explicitly mentioned. Ekman and Amnå (2012) describe political activity to include voting in elections, contacting political representatives or civil servants, running for public office, 'buycotting' (actively selecting products which respect social and environmental values) and boycotting, amongst other political actions, some of which are endorsed by the citizenship national curriculum (DfE, 2013). In the published sustainability and climate change strategy, the specific guidance that teachers should

not encourage pupils to engage in political activity has been removed. Instead, there is a reminder for schools about the need to have political impartiality when teaching about political and policy change related to climate change in line with 'schools' legal duties on political impartiality' (DfE, 2022b, 'Political impartiality'). Relatedly, the strategy asserts: 'teaching about climate change, and the scientific facts and evidence behind this, does not constitute teaching about a political issue' (DfE, 2022b, 'Political impartiality').

The separation and/or avoidance of politics in relation to climate change contained in the published strategy is especially problematic because young people need to understand how climate change and sustainability interact with politics, and how they can interact with decision- making processes. Politics was described as '*the elephant in the room*' by one teacher (Table 2), and stakeholders highlighted how important it is for young people to appreciate the role of politics (as well as science and other disciplines) in responding to the climate crisis. Stakeholders wanted more opportunities to work with policymakers in a sustained way in relation to EfES (Figure 1). By removing the political dimension, the problem is presented as less complex or 'wicked', and one that can be solved by greater knowledge and understanding of 'the facts', despite a well- established knowledge– action gap in relation to climate change (Knutti, 2019). Downplaying disagreement and the political dimensions of sustainability and climate change shifts issues into an unquestioned (depolitical) sphere, which disempowers teachers and young people from negotiating disagreement and taking action. One teacher educator noted that there was a '*need for policymakers to support practice— a feeling that government is failing to commit to change*'.

The result of the economic framing and the turn to depoliticisation emphasises knowledge without action and downplays the role of responsibility, ethics and values in sustainability and climate change education. We now discuss these absences in more detail.

What discourses are absent in the strategy?

Knowledge for action

The word 'action' (61) is ubiquitous in the strategy. The opening 'Scope & Purpose' asserts that the government is 'committed to climate action' (DfE, 2022b) and the strategy is constructed around five 'action areas'. In the foreword, the Secretary of State for Education states that: 'The UK requires the education sector to play its role in positively responding to climate change and inspiring action on an international stage' (DfE, 2022b). The sense of urgency communicated in the foreword to the draft strategy (DfE, 2021, p. 4) has been removed and instead the education sector is required to 'play its role'.

Within the Climate Education action area, the idea of action is present in the description of the National Education Nature Park and Climate Leaders Award:

We will also ensure all children and young people, whether they live in an urban area or rural one, have opportunities to feel empowered through practical positive action. (DfE, 2022b, 'Climate Leaders Award')

Whilst there is a sense from the labelling and brief description of the Climate Leaders Award that this initiative seeks to recognise and value the actions that young people take in the context of the environment, the framing lacks ambition for the scale of contribution young people have already made and will make in the future, and the contribution it will make beyond that already offered by the Junior Forester Award and John Muir Award is not clear. The strategy wants young people to '*feel* empowered' rather than *be* empowered, and despite the name 'Climate Leader', notions of agency and autonomy are entirely absent. The award will focus on 'developing their connection with nature' and 'establishing a sustainable future for us all'.

Connectedness to nature is evident in the strategy, for example in 'learning in the natural environment', where the focus is on opportunities schools can provide, such as growing vegetables and making sustainable choices. There is also introduction of the National Education Nature Park, which views the education estate as a virtual National Education Park where young people can observe, monitor and improve biodiversity in their places of education. This contributes to the desires of stakeholders for 'every child and young person [to experience] a lifelong

connection with nature which enhances their physical and mental well- being' (Figure 1). The concept of environmental emotions and 'inclusion with nature' (Schultz, 2002) is long- established in the literature. Schultz (2002) identified the cognitive, affective and behavioural components which together describe how committed an individual is to the environment. Relatedly, Carmi et al. (2015) developed a measurable construct of environmental emotion which included 'connectedness to nature, biospheric environmental concern, and commitment to protecting nature' (p. 187). However, these initiatives driving the strategy are seemingly part of an optional, extracurricular offer, rather than a formal mandatory curriculum. It is important that engagement with environmental sustainability in educational settings is not tokenistic. As one young person put it: 'Greenwashing is a massive thing within education as tiny changes are made (like having water fillers or recycling bins) to distract from a much bigger systemic problem' or as another put it: 'we got a vegetable patch when we asked for large systemic change'. In the strategy, particularly the Climate Education action area, there is an absence of viewing education in its entirety as an opportunity for young people to develop knowledge for action, where education provides them with capabilities so that they can *act for the environment*. This is in contrast to the vision for EfES shared by stakeholders (Figure 1), with outcomes that include an emphasis on EfES as an integral part of cross-disciplinary education that every child and young person experiences, so that 'every child and young person has the agency and capabilities to act for the environment' and 'every child and young person is equipped for a socially just, equitable and compassionate world' (Figure 1).

There is an aim to introduce a natural history GCSE in 2025, which will give young people 'a further opportunity to engage with and develop a deeper knowledge and understanding of the natural world' (DfE, 2022b), and reference is made to an existing environmental science A level. Whilst other subjects (citizenship, economics, food preparation and nutrition, geography) are mentioned sparingly, science is presented as the place for sustainability education. There is little recognition of the need for education that cuts across disciplines and which critically examines political decision- making and (in)action. Notions of knowledge for action are also minimal in the descriptions of the role of teachers within the Climate Education action area. Instead, there is an emphasis on teaching *about* the environment by providing teachers with access to professional development so that 'young people receive high- quality teaching on the scientific facts about climate change and environmental degradation' (DfE, 2022b, 'Learning about the natural environment').

The strategy promises CPD, the sharing of best practice in how sustainability and climate change has been incorporated into teaching and teacher training, and consideration of steps to support teaching of sustainability more broadly across the curriculum. However, it is unclear that the key mechanisms to achieve this (e.g. the National Professional Qualification; DfE, 2022a) include any reference to climate change, sustainability or environmental education. Furthermore, this focus on a 'knowledge- rich curriculum', predominantly located in science education, does not correspond to the vision set out by stakeholders (Figure 1). Teachers, young people and teacher educators emphasised the need for cross- disciplinary approaches so that the current 'silences' and 'gaps' relating to climate change and sustainability in policymaking relating to national curricula and teacher education are addressed.

There is a suggestion of a role for teachers to 'co- design, create and continually improve packages of optional, free, adaptable digital curriculum resources and video lessons' through a new curriculum body, but mention of environmental sustainability in this is absent. In this conception of sustainability and climate change education, knowledge for action is absent for both teachers and the children and young people they teach. As with the Climate Leaders Award, there is a sense that 'climate change and sustainability activity' could be limited to extracurricular provision which is reliant on the generosity and support of individual members of staff in schools, and which not all young people will be able to access. This is in direct contrast to the EfES that stakeholders would like to see, where 'teachers, teacher educators and education staff become confident to lead EfES and enable others

throughout their careers' (Figure 1). This vision requires a well- resourced educational offer that is available to every child and young person.

Responsibility, ethics and values

Ideas of responsibility are limited within the strategy. There is the description of the 'joint responsibility' held by the DfE and the education sector to prepare young people 'for the challenges and opportunities they will face— with the appropriate knowledge, skills and pastoral care' (DfE, 2022b). There is evidence of shifting responsibility in both the strategy and the Education Secretary's speech introducing the strategy, where he says: 'Together, I know that Phoebe and her generation can do this, and they have our full backing' (DfE & The Rt Hon Nadhim Zahawi MP, 2022). Implicit in this statement is the idea that it is young people who have the responsibility to meet the challenge of climate change rather than those currently in positions of authority and leadership. This placing of the burden of responsibility for climate change on youth (and teachers) and away from school leaders and policymakers is recognised by stakeholders (Table 2) who call on those in authority— including governments, exam boards and parents— to take greater action in relation to EfES (Table 2).

Apart from these two statements, ideas of responsibility are almost absent from the strategy. There is no sense of a national responsibility to provide leadership and accountability for sustainability and climate change action that is framed by the privileged position England has in terms of the economic resources gained over centuries of unrestricted carbon emissions and the extraction of natural resources through colonial project. Less still is there in this strategy an understanding of 'carbon colonialism' through the continued outsourcing of carbon emissions by wealthy nations to poorer nations (Dehm, 2016, p. 1 in Parsons & Fonseka, 2021). Absent too is a sense of responsibility to address past and current colonial relationships and their persistent sociocultural and economic legacies of colony– coloniser/imperialist relationships to colonised communities (de Sousa Santos, 2018; Le Grange, 2016). This means nations, including England, who bear much of the responsibility for the climate emergency and are far better equipped to reduce the impact than those nations they have colonised, who have contributed little to the current crisis.

The strategy states that data and evidence will underpin baselining, monitoring and evaluation. Key stakeholders also called for sustainability and climate change education to be built into accountability systems. Whilst accountability can drive what happens in schools and classrooms, there is a tension because such systems commodify teaching, learning and assessment and incentivise the use of data to create competition between teachers in the internal (school) market (Pratt, 2016)— which contributes to unsustainability. As one of the teachers reflected:

> As long as schools are driven by results and league tables this builds unsustainable structures that pressurise teachers and take them away from focusing on developing their knowledge and understanding. We need that to change if we are going to build a more sustainable education system.

There is little sense of a move away from accountability in the strategy, with the proposed introduction of a climate literacy survey to benchmark progress in climate knowledge, although it is not yet clear how this will be used.

A key difference relating to responsibility between the perspectives of stakeholders and the strategy is the way 'action' is framed, with 'action areas' (DfE, 2022b) and 'areas for action' identified in the youth, teacher and teacher educator vision for EfES (Figure 1). In the latter, the areas for action represent different levels of responsibility so that it is clear— in the context of shared responsibility— where the power lies. Although the strategy states that the work will be guided by young people (amongst others), action in the strategy tends to be presented as being 'provided to' rather than 'created with' teachers. These issues of responsibility echo wider neoliberal practices, where teachers are made responsible, or 'responsibilised', into 'negotiating and fulfilling demands relating to both state- imposed accountability practices and social justice agendas' (Done & Murphy,

2018, p. 142). In this case, young people and teachers are made equally, if not more, responsible than government for action in education in relation to climate change and sustainability.

Ideas of ethics and values and the different frameworks and approaches used to incorporate ethics and values into education are almost entirely absent from the Climate Education action area. Several references to value (other than economic value or value for money) and fairness included in the draft are not present in the published strategy. For example, the role of education to 'deliver social value to the community' (DfE, 2021 p. 16), the need to 'take strong climate action, better the environment and provide a fair working environment grounded in social value' (DfE, 2021, p. 21) and 'build a better and fairer world for future generations' (DfE, 2021, p. 14), which could be read as implicitly including ideas of intergenerational justice, are all absent from the published strategy. With the limited and largely absent ideas of responsibility, ethics and values across the strategy, it is perhaps unsurprising that social justice and decolonisation are not part of its conceptual framework.

In the vision for EfES presented in Figure 1, shared values underpin and are the starting point for areas for action and desired activities. This is in contrast to the draft strategy, where activities are driven by action areas with strategic aims achieved as a result of impact on young people. Youth, teachers and teacher educators wish to see that their desired impacts are a consequence of all of the areas for action (not separated) and activity is for the benefit of *all* young people not only those able to avail of optional, additional, extracurricular activities. The strategy sees controversies such as political issues as difficulties to be avoided, with 'balance' to be engineered, whereas teachers, teacher educators and young people want educational spaces for authentic discussion, disagreement and managing controversy in low- risk situations where partnership with community groups is encouraged and valued (Table 2).

The lack of frameworks based on values and ethics encompasses a further important absence: ideas of emotions. This is a notable absence, as when describing the challenge and the opportunity the strategy notes that: 'young people are worried about climate change' (DfE, 2022b, 'The challenge and the opportunity'). Hope is mentioned only in the foreword, as something that must be offered so that students can be agents of change. In a large- scale (>10,000 participants) international study of climate anxiety, Hickman et al. (2021) found that the majority of young people worried about climate change, with governmental responses to climate change rated negatively and associated with feelings of betrayal rather than reassurance, indicating the need for governments to make meaningful policies to act on the fundamental causes of young people's worries. Apart from framing young people as 'worried', the strategy does not consider in detail the ways in which education should incorporate emotions, nor how this could be achieved. For example, the policy states the aim to 'empower all young people to be global citizens' (DfE, 2022b, 'Action area 1: Climate education') and for teachers to 'provide free access to high- quality curriculum resources through the National Education Nature Park online hub, so that teachers in all settings and subjects can confidently choose those that will support the teaching of sustainability and climate change' (DfE, 2022b, 'Support for teaching'). However, specific ideas of emotional literacy, or the emotional capabilities that young people will need to develop through education to enable them to respond to climate change, are lacking.

CONCLUSIONS

In this study, we have analysed the perspectives of young people, teachers and teacher educators in relation to EfES, alongside a critical discourse analysis of the strategy for sustainability and climate change (DfE, 2022b). There is some evidence that the strategy responds to some of the recommendations of Greer et al. (2021), most notably in strengthening connections between government departments, but there is less action on connecting climate change within curriculum and examination specifications, or reorienting STEM education towards climate change amelioration or reversal of environmental harms. The study adds weight to previous work which argues that in environmental education policy in England, economic values dominate and there is an absence of pro- environmental ambition (Glackin & King, 2020; Greer et al., 2021; Martin et al., 2013). In our analysis of

the strategy, we see evidence of this in the dominance of economics in the framing of the policy, and the absence of values throughout. In addition, we see attempts to depoliticise sustainability and climate change education, transferring responsibility to schools and teachers, without the budgetary commitment to ensure teachers have time to plan and respond to the demands of climate change for their specific subject. This contrasts with what teachers, teacher educators and young people want from their leaders; they see economic priorities as part of the problem, demand environmental rather than economic sustainability and call for pro- environmental action at all levels, including from policymakers.

Through its repurposing and reframing of existing policy, with an emphasis on knowledge not action, *feeling* rather than *being* empowered and presentation of actions as choices, the strategy presents cosmetic rather than fundamental change. As such, it is at risk of becoming a 'placebo for policy', leaving teachers and young people no better equipped to deal with the climate crisis. Placebo policies offer government an escape route from a policy trap where there is an urgent, visible, complex problem (climate change and education) and an expectation that the government will act. The placebo gives government the control over the agenda, protecting their longer- term governing and ideological trajectory, and in this case shifts responsibility (and therefore potential blame) to schools, teachers and even young people. Whilst attention to and support for sustainability and climate change education is necessary, and many of the strands of activity in the strategy are to be welcomed (including those relating to the education estate), there is a need for greater governmental responsibility for change, and a stronger commitment to resourcing that addresses additional demands made on teachers (e.g. time and workload). More scientific knowledge is not the solution to young people's legitimate worries about the climate crisis, and there is an existing evidence base to suggest what educators and young people need from sustainability and climate change education (cf. BERA, 2021; Howard- Jones et al., 2021). There needs to be attention paid to what is ruled out (politics, action, values) as well as what is ruled into the strategy, to avoid maintaining the unsustainable status quo. A number of education- relevant bills are currently passing through parliament, including the Environment Act 2021 and Education (Environment and Sustainable Citizenship) Bill. There is an opportunity for policymakers to meaningfully engage with the evidence base to realign approaches such that they are consistent with evidence from the field and to set forth clear mechanisms to put sustainability and climate change at the heart of education.

CONFLICT OF INTEREST

No potential conflict of interest was reported by the authors. Both authors have made a substantive contribution to the writing and the underpinning research.

DATA AVAILABILITY STATEMENT

Research data are not shared.

ETHICS DECLARATION

Institutional ethical approval was obtained prior to the commencement of this study (9/3/2020, Reference 20/18).

PATIENT CONSENT STATEMENT

All research participants consented to take part.

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