



Doctorate in Educational Psychology

***From “powerless and alone” to finding “all the great people who care”:
a co-operative inquiry with young people exploring eco-anxiety and
constructive ways of coping***

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2019 - 2022

Acknowledgements

Firstly, my most profound thanks to my amazing co-researchers:

To Bobbie, Carrie, Daisy, Rey and Sara - I am still inspired and moved by our conversations.

To Mrs Frost, Ms Gale, Mr Ice and Mr Snow – you are incredible supportive adults and a pleasure to work with.

My especial thanks to Mr Snow for taking on the additional role of link teacher. Your interest and reflections were truly valued.

My thanks also go to my research supervisor, Vicky, for her insight, reflections and support throughout the entire process, and my personal tutor, Dale, for three years of thought-provoking conversations.

To my fellow TEPS - I am so lucky to have gone through this doctorate alongside such a wonderful group of people.

And finally, to Michael, Ada and Angus, for food, hugs and welcome distraction.

Summary

This thesis is separated into three sections.

Part 1: This consists of a narrative literature review. It starts with a visual overview of key events, policies and climate research and then explores current understanding of eco-anxiety and how this may be experienced and felt by children and young people (CYP). Strategies for coping from the wider literature are then examined. This is followed by an exploration of the school microsystem and the implications for eco-anxiety. Next, these areas are drawn together in a closer look at research relating to managing eco-anxiety in education-settings. It ends with the rationale for the current study and the research questions.

Part 2: This is the empirical paper. It explores practical research into eco-anxiety and how to constructively manage it with young people (YP) and their supportive adults (SAs) through co-operative inquiry (CI) in a high school in Wales. It begins with a summary of the literature, followed by an account of the researcher's ontological and epistemological position. The methodology and procedure followed for the CI is then described. Two separate, but linked inquiries were used: the first with five YP (13-14 year olds), the second with four SAs (teachers from their school). The data was analysed using reflexive thematic analysis, and the themes developed from this are presented in the results section. This is followed by a discussion, linking the findings to theory and the literature. Implications, limitations and suggestions for future research are discussed.

Part 3: This final section is the critical appraisal. This critically reflects on the researcher's experience of conducting the study and the decisions made throughout the process. It offers reflections on ontology and epistemology, the CI approach, ethics, building the inquiry groups, data analysis, and writing about co-researchers. It also reflects on the contribution to knowledge, practice and the dissemination of findings.

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Abbreviations

AEP	Association of Educational Psychologists
BPS	British Psychological Society
CBT	Cognitive Behavioural Therapy
CCC	Climate Change Committee
CI	Co-operative inquiry
COMOIRA	Constructionist model of informed reasoned action
COP26	The 26 th Conference of the Parties
CYP	Children and young people
DfE	Department for Education
EP	Educational psychologist
IPCC	Intergovernmental Panel on Climate Change
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
RTA	Reflexive thematic analysis
SA	Supportive adult
SLT	Senior leadership team
TEP	Trainee educational psychologist
UK	United Kingdom
UNFCCC	United Nations Framework Convention on Climate Change
YP	Young people



1. MAJOR LITERATURE REVIEW

Word count: 10292

1.0 Structure and scene setting

1.1 Introduction

“Based on current projections, today’s adults may be the last generation with the capacity to take the urgent actions needed to provide a livable world for the world’s children and future generations. Lack of action will result in catastrophic impacts; even with urgent action, worse climate effects are now locked in. How has this changed what it means to be a responsible adult?” (Burke et al., 2018, p.6)

Burke et al.’s (2018) thought-provoking question can be applied to educational psychologists (EPs); what does it mean to be a responsible EP in this context? What is the EP’s role? Allen (2020) reflects that there is a “lack of voice” (p.1) from EPs in this area and has issued a call to action to engage with this field as “there is a role... as a profession to do much more” (p.2), highlighting a role in supporting young people’s coping, but also to “drive change” (p.2). Though Allen (2020) writes this position paper from an Australian context, which may be quite different to the UK due to recent Australian experiences of extreme weather (Flannery, 2020; Verlie, 2019b), it is also important to explore this role in the UK. Climate change was ranked the second most important issue by adults in the UK in 2019, with concern increasing (Corner et al., 2020), while predicted increased temperatures in the UK are likely to lead to flooding and water scarcity, coastal erosion, and increased frequency and intensity of wildfire (Climate Change Committee, 2021).

An emerging role for UK EPs can be seen through the inclusion of “respect for the welfare of humans, non-humans and the living world” (BPS, 2021, p.7) within the British Psychological Society’s (BPS) code of ethics and conduct, highlighting care for the environment as an ethical practice for psychologists. Additionally, an Association of Educational Psychologists (AEP) AGM motion in 2019 acknowledged the climate emergency and introduced an aim to support children and young people’s (CYP) responses (Farley et al., 2021). The AEP’s 2021 Annual Conference also included a session on climate change (Farley et al., 2021), and explored the potential contribution of EPs (Williams, 2021). As the official union of UK EPs, this places climate change firmly into the arena of educational psychology.

This thesis seeks to answer Allen’s (2020) call to action. To do this, young people’s (YP) eco-anxiety responses to the climate and environmental crises are the first focus of this thesis. The theoretical literature around the concept of eco-anxiety is explored and reflected on in relation to the experiences of YP and school contexts. Secondly, support for YP to manage these feelings of eco-anxiety is explored, initially drawing on the wider literature, followed by a more detailed exploration of literature describing coping in education settings.

1.2 Setting the scene through a systems lens

The Intergovernmental Panel on Climate Change (2022) shows climate, eco-systems and human society as coupled systems, dependent on and influencing each other. Similarly, the relevant context of this study - the science, politics, global and local levels, schools and YP - interact and impact one another.

Therefore, to frame this context and consider the interactions, Bronfenbrenner’s (1979) ecological systems model with the added chronosystem (Bronfenbrenner, 1995, 2005) will be used as a structure. Table 1 below gives an overview of the system definitions. Each level will be broadly presented in turn, with the cultural beliefs from the macrosystem, and the implications for the role of the EP, being discussed throughout. The chronosystem and exosystem are presented as visual figures to set the scene, followed by a more detailed exploration of the microsystem, mesosystem and the person.

Table 1: systems definitions

Chronosystem	Changes in the wider culture that may take place within or across generations and may affect a person across their lifetime, including conditions and events in the historical period in which they live and the timing of biological and social transitions
Macrosystem	Consistencies across a culture, subculture or social context, including the ideologies and underlying beliefs of these consistencies.
Exosystem	Connections between settings that the person may not go into but in which events take place that affect what happens in the person's immediate environment
Mesosystem	Connections between settings in which the person actively takes part
Microsystem	Relationships, activities and roles within the settings in which the person actively takes part
Person	Conceptualised as an active agent who affects their own development, they have demand (e.g. age, gender, race, appearance), resource (e.g. mental, emotional and material resources) and force characteristics (e.g. motivation and persistence), which influence their interactions with others

(Bronfenbrenner, 1979, 1995, 2005)

1.3 The chronosystem and exosystem

Key elements from the chronosystem and exosystem at global, UK and Welsh levels are summarised in figures 1, 2 and 3 on the following pages.

Children and young people in the context of climate change

Though climate change will affect everyone, predictions suggest that it will be worse for CYP (Climate Change Committee (CCC), 2021; Sanson et al., 2018; Treichel, 2020), key persons EPs work with. EPs have identified a role as agents of social justice (Pillay, 2020), who perceive a role in removing power differentials for CYP (Schulze et al., 2019). In light of the increased vulnerability of CYP, this suggests EPs may need to apply this to a new context: as agents of social justice to advocate for CYP in a climate-changing world.

Climate research shows that climate change is happening now, and that urgent action is needed (Intergovernmental Panel on Climate Change (IPCC), 2014, 2022; CCC, 2021). Additional cause for concern is suggested by narrowing timelines for mitigation (IPCC, 2022) alongside the criticism of the extent of global and UK action. This concern, as evidenced by the youth strikes (Han & Ahn, 2020), is one that YP are aware of and actively trying to highlight.

Though young strikers have been constructed as agents of change on a global political level (Han & Ahn, 2020), in the UK they have been criticised for disrupting their education (Barton, 2019) where they can “become the scientists, engineers and advocates we need to tackle [climate change]” (Watts, 2019. para. 8). This suggests conflicting accounts of YP. It suggests a power to act, but also that YP’s action is wrong and should wait until they become adults. In fact, Hickman (2020) sees this as, “attempts to silence young people as they speak up on things that are important to them” (p.413). YP’s voices are then vital to consider in relation to climate and the environment. This relates directly to an EP role to advocate for CYP (Farrell et al., 2006) and support their voice (Smillie & Newton, 2020).

Figure 1: **The Chronosystem**: climate change predictions, timescales and the environmental impact of COVID-19

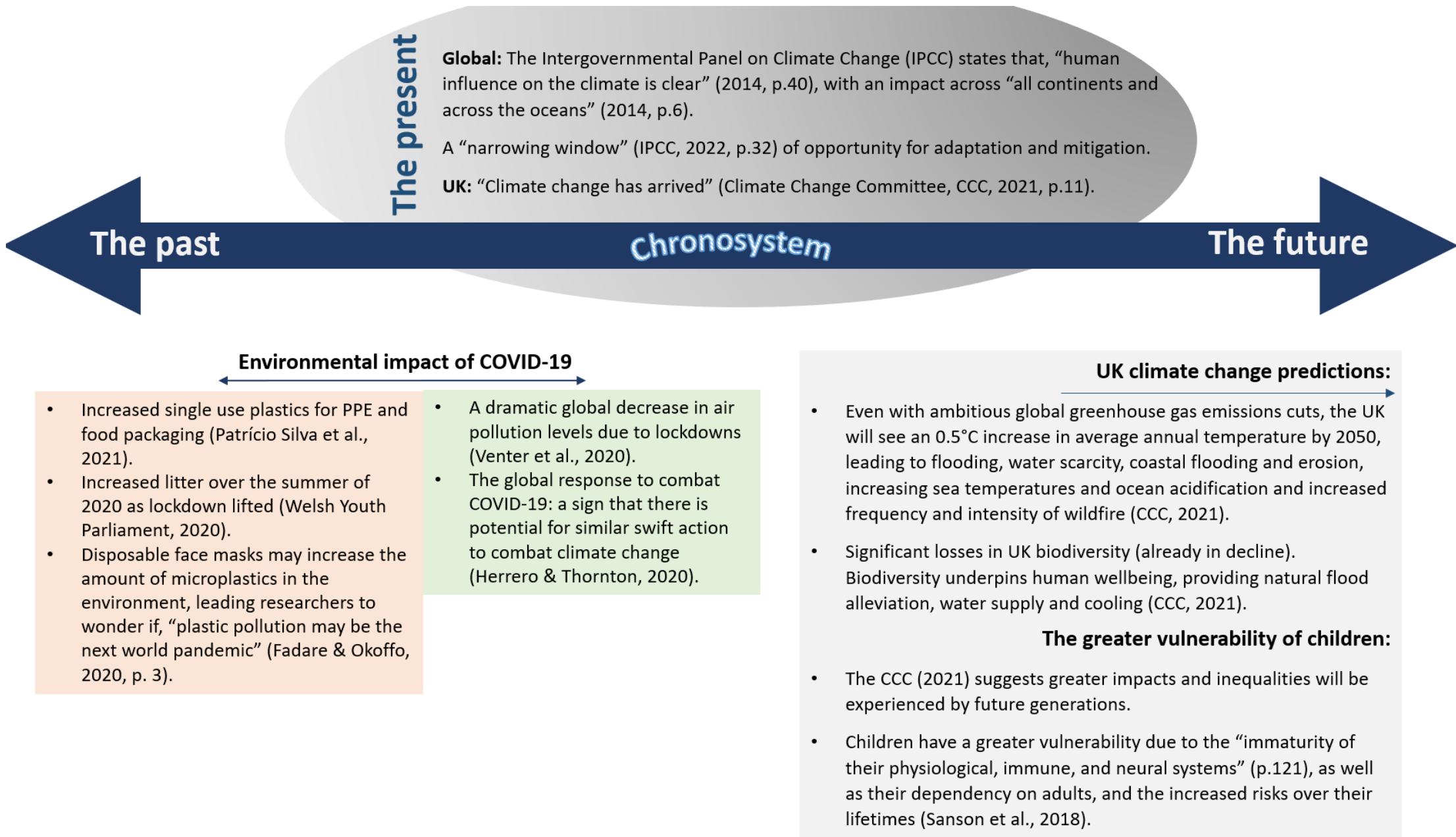
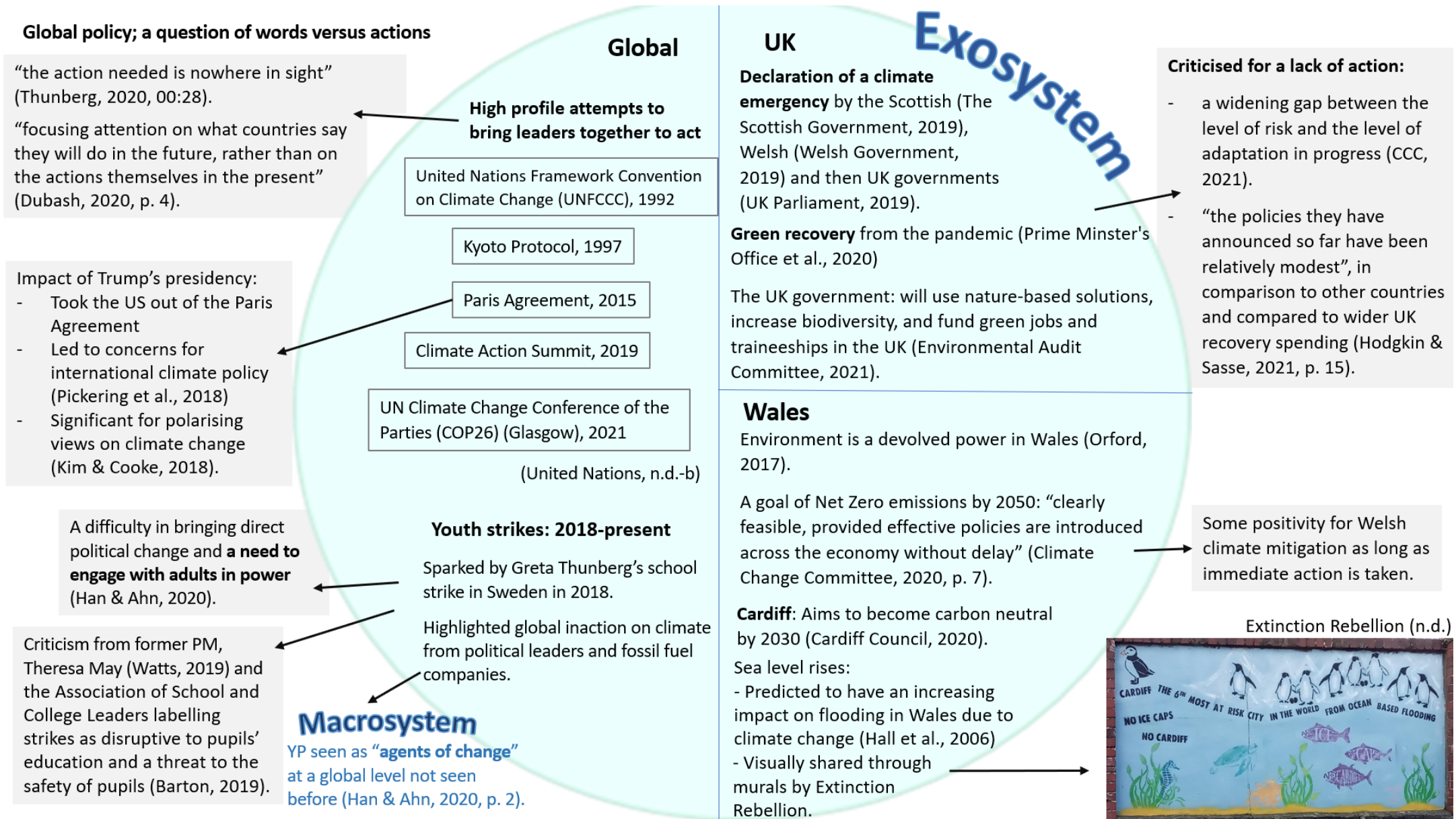


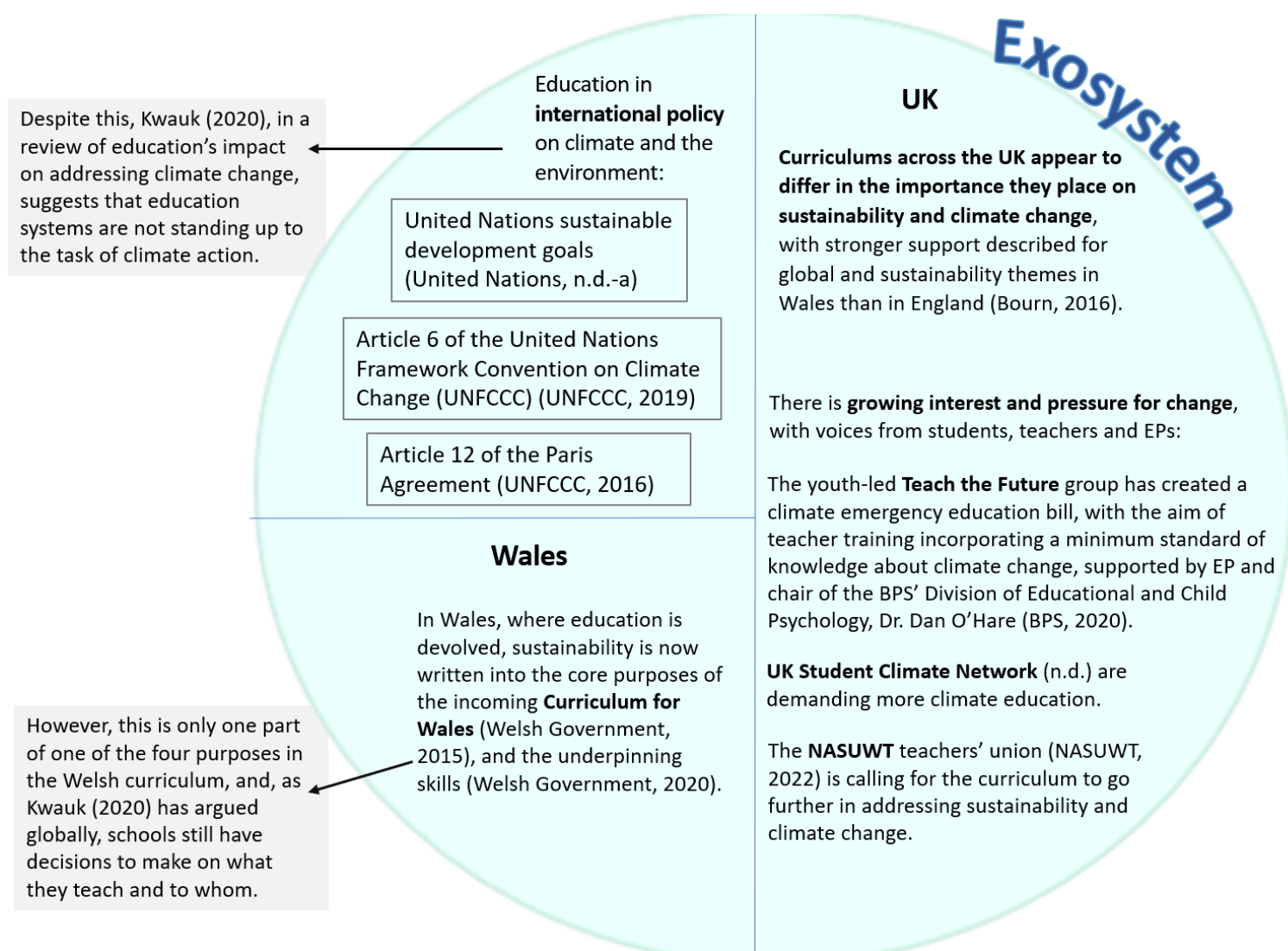
Figure 2. **The Exosystem**: the socio-political context at global, UK and Welsh levels



Climate education and the Welsh context

Climate education has been problematised, despite being a key tool for addressing climate change in international policy (Kwauk, 2020). In the UK, YP and adults are advocating for change in the curriculum and teacher education (BPS, 2020; NASUWT, 2022; UK Student Climate Network, n.d.). Like Kwauk (2020) suggests globally, this suggests that UK climate education is not currently meeting CYP’s needs. However, changes to the Welsh curriculum mean that sustainability is now written into the core purposes (Welsh Government, 2015) and underpinning skills (Welsh Government, 2020). This may positively impact on how Welsh CYP feel about their climate education. However, this is an incoming curriculum, implemented from September 2022 (Welsh Government, 2020), and depends on how it is translated into practice. As a key context for EPs, this suggests it is important to consider the impact of climate and environmental education on CYP, especially in the changing education landscape in Wales.

Figure 3: The Exosystem, with a focus on education



2.0 The person, the microsystem and the mesosystem

2.1 Emotional responses to a climate and environmental emergency

In countries like Wales, climate change is still more often experienced vicariously (Sanson et al., 2019) by exposure through news and social media (Pinsky et al., 2020). However, Kevorkian (2020) suggests that media “can affect viewers as deeply as seeing destruction occurring firsthand.” (p. 221). In fact, studies show a high level of concern from YP (Burgess, 2013; Walker, 2020), with many worried about the state of the planet, the impact of climate change on their lives (Newsround, 2020) and broader environmental concerns, such as plastic waste (Lofstrom et al., 2020) and litter (Thompson et al., 2022).

There are a number of terms used in the literature to describe this worry and there may be variations in how they are understood, as many countries have only recently begun to use specific terminology (Pihkala, 2020b). One term is eco-anxiety. The American Psychological Association (APA) has defined eco-anxiety as “a chronic fear of environmental doom” (Clayton et al., 2017, p. 68). However, eco-anxiety can be used as a broad term for difficult feelings about the ecological crisis, associated with fear, worry, anger, frustration, despair, guilt, shame, and grief (Pihkala, 2020a). Table 2 outlines different related terms and preferences from different authors:

Table 2: Related terminology and alternative definitions

Eco-anxiety: “a chronic fear of environmental doom” (Clayton et al., 2017, p. 68)

Climate anxiety: can be used as a term for parts of eco-anxiety directly related to climate change (Pihkala, 2020a).

Climate distress: a term preferred by Randall (2019) due to the many feelings involved in addition to anxiety.

Hickman (2020) has suggested changing the focus from eco-anxiety to ideas connected with awakening and awareness such as “*ecoawareness, eco-community, eco-agency, eco-aliveness, eco-empathy, eco-compassion, eco-care and eco-awakening*” (p. 422).

Eco-anxiety as dysregulated eco-empathy: ecoanxiety responses can be thought of as resulting from caring about the natural world and a dysregulated part of eco-empathy (Hickman, 2020).

Environmental grief: ongoing loss and grief “relating to the natural world, such as the loss of ecosystems, animal life, plant life, and/or the destruction of the planet” (Kevorkian, 2020, p. 224).

Solastalgia: pain at the “physical desolation of home” (p.96) meaning that normal feelings of solace cannot be found there (Albrecht et al., 2007).

Verlie suggests responses can also be “*embodied*” (Verlie, 2019b, p. 5) and “*affective experiences*” (Verlie, 2019a, p. 753). Verlie (2019b) describes, “sweating, crying, leaning back in our chairs, rolling our eyes” (p. 5), which may not easily be named or understood as emotions (Verlie et al., 2021).

Despite the range of responses associated with eco-anxiety and lack of a clear consensus on definition, there have been some attempts to measure it. Clayton and Karazsia (2020) have

developed scales, which measure the strength of the anxiety, though people describe both strong and weak symptoms (Pihkala, 2020a). Similarly, Hickman (2020) uses the terms mild, medium, significant and severe to describe eco-anxiety. However, this is to support CYP to make sense of their feelings, rather than fit them into a model. Despite this caveat, scales suggest diagnosis and a medical model of mental health.

In contrast to this, eco-anxiety is not thought of as a mental illness or a disorder (Hickman, 2020; Verlie et al., 2021), but understood as a healthy response to ecological threat (Climate Psychology Alliance, n.d.; Hickman, 2020). In fact, eco-anxiety can be seen as a realistic anxiety (Haseley, 2019) or understandable response (Lawrance et al., 2021), where thinking of it as pathological is unhelpful (Pinsky et al., 2020). Bednarek (2019) describes this position as; “I don't see anxiety about climate change as a problem to be solved or a condition to be medicated. To me, it's an important encounter with our awareness of our impact on the world and the reality that the world is facing a climate emergency” (para. 2).

However, even as a healthy response, becoming aware of the climate crisis means people can experience powerful and overwhelming emotions (Hickman, 2020). Hickman (2020) has not seen a fixed pattern of emotions and suggests people can move rapidly between contrasting feelings. She suggests eco-anxiety responses can be thought of as resulting from caring about the natural world and re-framed as a dysregulated eco-empathy. Whilst constructing eco-anxiety in this way reflects the idea of a natural response from a position of care, this positive reframing may perhaps diminish the difficulty of experiencing eco-anxiety. However, Hickman (2020) notes that CYP have valued reframing their feelings this way, subsequently experiencing their eco-anxiety more positively: “connected empathetically with the planet” (p.417).

Implications for EPs

EPs already have an established role in supporting CYP with anxiety as described in the SEND code of practice (Department for Education, 2014), while the HCPC standards of conduct, performance and ethics sets out a role for supporting wellbeing in general (Health & Care Professions Council (HCPC), 2016). Addressing eco-anxiety seems to apply to these roles.

There appear to be both normalising framings and disorder-based constructions of eco-anxiety. However, applying a medical model may be problematic. Billington et al. (2022) suggest that a medical model for mental health, which a measurable eco-anxiety could be seen as, is often inappropriate for the majority of children in school due to the way this lens can focus a problem within individual YP and ignore other factors that impact mental health. This seems crucial in a realistic anxiety, where action in the exosystem is essential for positive long-term environmental outcomes. The lack of consensus on definition may also present difficulty for communicating without a shared understanding of what different people may mean by “eco-anxiety”.

A definition for this study

To clarify terminology for this study, taking on board the above descriptions and definitions, the phrase eco-anxiety will be used as a term that can encompass the many, changing and difficult emotions and experiences that a growing awareness of the realistic threats of the climate and environmental crises can create.

2.2 Young people's responses

Though some adults may wonder how much YP should be exposed to climate information (Grauer, 2020), this information is constantly encountered through media and the daily lives of YP (Lehtonen & Pihkala, 2021).

CYP have expressed anger and blame at adults because their choices have led to the present crisis (Hickman, 2020). For YP eco-anxiety appears to be exacerbated by frustration with leaders' inaction (Walker, 2020), distrust of adults (Newsround, 2020) and politicians (Ojala, 2021) and the inadequacy of others' actions more generally (Trott, 2019). In addition, Hogan (Belkin et al., 2021) links eco-anxiety to perceived inaction across institutions in whom YP place trust, including government, education and business. This is supported by Hickman et al. (2021), who found a correlation between worry about climate change and a sense of being betrayed by government inaction in their global study. They argue that the cause of eco-anxiety is "more powerful 'others' (adults and governments) failing to act on the threats being faced." (p. 9). For EPs, this suggests considering action and inaction in schools is important.

A recent survey also indicated that nearly 64% of two thousand CYP did not believe that people in power were listening to them (Newsround, 2020). Hickman (2020) also reports that many children, "felt like giving up trying to talk with their parents", feeling their worries were dismissed by "parents responding by either saying 'you are worrying too much' or saying 'what do you think we should do about it', which felt as if they were being asked to fix the crisis for the adults" (p. 419). This suggests both the need to listen to CYP and respect their feelings, but also the importance of the relative child-adult power dynamics.

In fact, though an international study, Hogan (Belkin et al., 2021) found that only 26% of five hundred YP surveyed believed they could meaningfully contribute to solving climate change, and suggested there were particular difficulties in YP's agency (their "power to originate action", Bandura, 2001, p.6) and perceived self-efficacy (their "beliefs in their capability to exercise some measure of control over their own functioning and over environmental events", Bandura, 2001, p.10). Children's reflections elsewhere also indicate a belief that CYP have limited capability (Trott, 2017). As CYP are dependent on adults, such as their parents (Ojala, 2013), age seems particularly significant for being able to respond to climate change. In fact, though a small convenience sample, adolescents in a recent UK study noted

their “age and associated lack of power” influenced how they felt (Thompson et al., 2022, p. 7).

In fact, adolescents may have particular challenges. “Late adolescents in general feel more helpless about global problems than children do, probably because they better understand the difficulty and complexity of these threats” (Ojala, 2013, p. 2203). The Newsround (2020) survey combined results from children and teenagers (8-16 year olds), making it difficult to separate out any differences in age groups. However, Baker et al. (2021) found that 14–17-year-olds were described as significantly more stressed about climate change in their study than other CYP age groups, though this was reported indirectly through their parents or teachers.

In addition, eco-anxiety may be particularly significant for YP as they start their lives and think about their future (Lehtonen & Pihkala, 2021). At the same time, CYP “struggle to see a future” for themselves with climate change (Hickman, 2020, p. 421). Adolescents’ developing abstract thinking and reasoning also involves questioning “life and death and the meaning and purpose of why we are here on earth” (Siegel, 2014, p.229), significant in a climate change context. Adolescents, then, appear to be an important group for EPs to be aware of, who may particularly struggle with eco-anxiety.

There also may be challenges with peers. If peers have lower environmental commitment, this can be difficult when YP believe everyone should be environmentally responsible (Eames et al., 2018). This seems particularly important for adolescents, who go through a “time of social reorientation” spending more time with peers (Foulkes & Blakemore, 2018, p.315). For adolescents this may also reflect “conflictual needs” where they may identify as part of a peer group, but also want to pursue their own individual interests (Siegel, 2012, p.356).

Implications for EPs

For EPs it seems important to be aware of the particular difficulties for adolescents with eco-anxiety (see table 3 below). The role Billington (2006) highlights for adults in allowing the voice of the child to be heard also seems particularly apt for this group, who do not feel listened to by parents, institutions or government. EPs may then have a key role in supporting voice for CYP with feelings of eco-anxiety. However, there do not appear to be any studies focusing on adolescents in Wales, suggesting a gap in understanding this group.

<i>Table 3</i>			
<i>Adolescents and eco-anxiety</i>			
A time of ongoing brain restructuring and development	Becoming more politically active and aware, which may leave them feeling betrayed by inactive governments	Making decisions and thinking about their future, whilst finding it hard to see a future for themselves	Still dependent on adults for lifestyle choices and mitigation actions (CYP)

Feeling limited agency and self-efficacy (CYP)	Increased interest in peers, who may not share the same environmental interest	Feeling not listened to by adults (CYP)
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2.3 Unconstructive responses

Ojala (2016) suggests there are “unsustainable ways of dealing with emotions,” around climate change (p.52). In fact, many people in the West seem to put up psychological barriers (Weintrobe, 2013) to defend themselves (table 4 below). Even those who appear uncaring and apathetic may care deeply, but their fear and anxiety can lead to paralysis rather than action (Lertzman, 2015a).

Table 4: Psychological defences

denialism	Where people may use arguments to try to create a debate about climate change where it is not legitimate to have one Weintrobe (2013)
negation	Where they say something is not happening Weintrobe (2013)
disavowal	Where they know about the effects of climate change, but at the same time do not recognise the effect on themselves Weintrobe (2013)

Though Weintrobe and Lertzman’s work is with adults, unconstructive responses have also been described for YP (table 5).

Table 5: Psychological defences noted in studies with YP

Passive responses and fatalism	Threadgold (2012) suggests this comes from a sense of pointlessness in engaging politically and an overall sense of powerlessness.
“two-track thinking” (Threadgold, 2012, p. 26)	A defence mechanism noted in Australian YP, where they separated their thoughts about their individual future and connected life choices, from a future of a doomed environment (Threadgold, 2012).
distancing	Ojala (2012b) highlights distancing as a common strategy that older children, adolescents and young adults all use to regulate worry. This distancing from negative emotions can be done through distraction, avoidance of thinking about the threat or avoidance of information on climate change. Distancing can be less helpful in dealing with stress, and could be seen as a precursor to the disengagement with climate change seen in some adults (Ojala, 2012b).
denial	Ojala (2015a) suggested that Swedish YP may cope with a feeling of powerlessness over the environment using denial of the threat, and found that factors relating to societal powerlessness were associated with climate scepticism.

In contrast to these defences, it is important to develop skills to live with the associated anxieties, as the climate crisis cannot be solved in the short-term (Pihkala, 2020a). Pihkala (2020a) has suggested that “a key question seems to be: how to increase the adaptive potential in people’s experiences of eco-anxiety and to alleviate the paralyzing forms of eco-anxiety?” (p. 7847). Allen (2020) has suggested that this is a role for EPs.

2.4 How can YP constructively manage eco-anxiety?

The difficulty in responding to a realistic anxiety is summed up well in a parent’s tweet:

Figure 4: A parent’s tweet (Monbiot, 2021).



As a response to a real threat, traditional approaches to managing anxiety such as cognitive-behavioural therapy (CBT) are not necessarily appropriate. This is because CBT focuses on learning to see threats as less threatening, but climate change is a real and serious problem (Grose, 2020).

Being with feelings and emotions

Instead, the literature argues for not trying to soothe or heal these feelings (Verlie et al., 2021), but that “support to enable people to process the strong emotions and loss... may help to protect their mental health and wellbeing” (Lawrance et al., 2021, p. 12). Baudon and Jachens (2021), though not focused on CYP, noted a need “to provide a space for the expression of emotion” (p.14) in their scoping review. Creative approaches, such as art, writing and drama, have been used by adults to help express their feelings around eco-anxiety (Baudon & Jachens, 2021), as well as simply talking (Grose, 2020). However, Baudon & Jachens (2021) note a literature gap in evaluating interventions.

Climate cafes are also spaces for expressing emotion. They provide “a simple, hospitable, empathetic space where anyone’s fears and uncertainties about our climate crisis can be safely expressed” without trying to offer advice (Nestor, 2020, para. 2). Variations for YP are being developed and used by an EP from the Climate Concerns and Educational Psychology Interest Group (A. Alway, personal communication, November 04, 2021). However, to date there appear to be no studies exploring the impacts for YP.

Cognitive interventions and the need for trust

Studies have also shown a link between YP using meaning-focused coping strategies with greater self-efficacy and wellbeing (Ojala, 2012a, 2013, 2015b). Meaning-focused coping is where climate change is acknowledged, but one can positively reappraise to find a bright side, activate hope or trust in others to act (Ojala, 2012a). Examples of positive reappraisal include thinking that awareness of climate change is increasing or turning worst case scenarios into something positive, such as thinking once climate change is observable people will act (Ojala, 2012b). These strategies “are used to activate positive emotions, not to get rid of negative emotions” (Ojala, 2013).

Having trust in others seems significant due to YP’s frustration with inaction (Walker, 2020). Trust in societal actors is considered important for the development of hope, and may defend YP from feeling personal responsibility to solve climate change (Ojala, 2021). Ojala (2017) suggests a need for trust in others, to trust that one’s own environmental actions will be worthwhile, drawing on attachment theory suggesting trust in others enables trust in oneself (Bowlby, 1973). Ainsworth et al. (1974) describe trust developing from predictable responses from a caregiver, and a lack of trust from unpredictable responses creating insecurity. Similarly, trust in societal actors could be developed from predictable responses to address the climate threat, leading to security.

In addition, though not specifically about YP, Pihkala (2018) has suggested a need for “binocular vision” (p.561) about climate change. This draws on Bion’s term describing differing viewpoints, the conscious and unconscious (1984), the individual and the group (1989), as different ways of viewing the same thing. Pihkala (2018) applies this to climate change to see the good as well as the bad: species lost, but also restored, political inaction as well as YP’s worldwide action.

Action

Despite the negative emotions YP are experiencing, many are engaging with climate change by taking action through protest (Han & Ahn, 2020). In fact, both Sanson et al. (2019) and Pinsky et al. (2020) suggest activism can help manage anxiety. Sanson et al. (2019) suggest that opportunities for active engagement can build YP’s sense of self-efficacy (Bandura, 2001), and their ability to tackle climate issues. Additionally, Hogan suggests COVID-19 has amplified fear and powerlessness for YP because of loss of access to grassroots activism (Hogan, 2020), highlighting its importance as a coping source.

However, Pihkala (2019) argues that focusing on action can avoid emotion, and so action needs to be balanced with emotional awareness. Likewise, Randall (2009) highlights that action can involve loss, as it can challenge lifestyle choices and identity, and suggests working on loss may be necessary to enable action. Though Randall (2009) and Pihkala (2019) describe adults, Nairn's (2019) study of young activists in New Zealand also indicates that care should be given to using action alone due to burnout in climate groups. This suggests action should be used alongside emotional support.

Collective experiences

Additionally, collective experiences seem important (Sanson et al., 2019; Pinsky et al., 2020). A sense of belonging to a community has been found with young Polish activists (Budziszewska & Głód, 2021), while being part of a group for New Zealand YP meant that they did not carry "the burden alone" (Nairn, 2019, p.445). Working with others can also build collective efficacy, where CYP believe they can effect change by working together (Sanson et al., 2019).

Agency

Activism can also be empowering in creating a sense of agency for YP (Budziszewska & Głód, 2021). Having a sense of agency, being able to produce "particular effects in the world and on each other" (Burkitt, 2016, p.323), was a key element for Polish young activists (Budziszewska & Głód, 2021). Organising protests and making their own decisions in an adult-free space made the YP feel in charge and gave an opportunity for voice and decision making that they were unable to do elsewhere due to their age.

However, having agency depends on a person's political, social-cultural and economic contexts (Lertzman, 2015b), as well as being bound up in personal histories and interdependencies with others (Burkitt, 2016). For EPs this suggests a need to be aware of potential limitations of agency for YP in school contexts, where teachers hold the power within "taken-for-granted" social norms (Robinson & Taylor, 2013, p.39) and YP are reliant on adult support for their voice and agency (Billington, 2006).

Summary:

Though there are unconstructive ways of managing eco-anxiety, research with YP and adults, particularly with protest groups, has indicated some promising ways of constructively managing it, whilst respecting it as realistic:

- Being with feelings
- Cognitive interventions and a need for trust
- Action
- Collective experiences
- Agency

The action presented here is focused on activism. Though this is useful, it perhaps does not take account of other ways in which CYP may actively respond, especially within a school context. Therefore, there remain questions about how this could be applied in schools.

2.5 Responses in the school system

Though school is a place where YP encounter climate change information (Sanson et al., 2019), these encounters appear difficult. The knowledge itself is hard; Verlie (2019a) points out that many who are experiencing eco-anxiety are those who are “the success stories of environmental education” (p. 751), who act sustainably, understand climate change, and experience feelings of overwhelm and hopelessness in response. Additionally, CYP can have negative learning experiences. Although they interviewed young adults rather than CYP, Jones and Davison (2021) reported a sense of disempowerment for them as children encountering climate change in education. Therefore, schools are potentially problematic contexts to consider for supporting YP with eco-anxiety.

Opportunities for action

Research has identified action as supportive for managing eco-anxiety (Pinsky et al., 2020; Sanson et al., 2019). However, education around climate change and environmental issues appears to place children as receivers of information, rather than being actively involved (Cutter-Mackenzie & Rousell, 2019), suggesting a difficulty in pedagogical approach.

Additionally, though collaborative action appears supportive (Pinsky et al., 2020; Sanson et al., 2019), the focus of climate education often appears to be on individual actions. Teachers in Ireland seem to concentrate more on individual private actions (Waldron et al., 2019), while in the UK 74% of teachers believed children should be taught about individual actions, compared with 40% supporting education around political, social and community solutions (Teach the Future, 2021). However, many Australian educators described the empowering effect of linking students with others for action (Verlie et al., 2021). So though not universal, there appear to be some hindering narratives around individual action in schools, which run counter to suggested constructive approaches.

Pedagogy

Baker et al. (2021) have suggested that teachers could lead students in action on local community problems. However, Dunlop et al. (2021) have found that local environmental issues, such as fracking, were absent from high school lessons in northern England, suggesting an issue with engaging in meaningful local problems.

Furthermore, Tannock (2020) also details a petro-pedagogy in the UK, where fossil fuel industry interests may be promoted in schools through industry-produced resources, networking and funding education research (Tannock, 2020). Though Tannock shares that it

is unclear how much the industry-curriculum resources are used, they argue the link to industry interests is a significant problem for addressing climate change.

A whole school approach

As trust in societal actors is thought to support coping (Ojala, 2021) and YP appear to distrust institutions (Belkin et al., 2021), developing environmental trust in schools seems important. However, there appear to be issues in whole-school level sustainability. In the UK, climate change education is seen as a “footnote”, difficult to find space for in a full curriculum (Dunlop et al., 2021, p. 293). This has been noticed by students, who have demanded a reform of education (UK Student Climate Network, n.d.), with a recent Teach the Future report surveying UK teachers finding that climate change is mostly limited to science and geography lessons and only seen as integrated across the curriculum in 30% of schools (Teach the Future, 2021).

The presence of sustainability in the underpinning purposes of the new Welsh curriculum (Welsh Government, 2015) positions it across subjects, which may impact this positively in Wales. However, this is yet to be seen. Currently, schools in Wales, “do not have the facilities they need to dispose of a variety of materials sustainably” (Welsh Youth Parliament, 2020, p. 14), making sustainability difficult to model in whole school practice. This seems to reflect practice in England, where many schools do not have the time, resources and knowledge to reduce their own carbon footprint (Pinto & Grove-White, 2020), and in Finland, where YP noted the difference between messages in sustainability education and actual sustainability practices, due to the major use of paper and books (Lehtonen & Pihkala, 2021). Therefore, schools do not seem to model sustainable practices. This has been noticed by CYP and may make it difficult to place environmental trust in their schools.

2.6 Supportive adults in schools

Adults in the school system are crucial to consider to support YP with eco-anxiety, as key “interpersonal relationships” (Bronfenbrenner, 1995, p. 639). In fact, Bourn (2016) sees teachers as agents of social change, while Tibola da Rocha et al. (2020) identifies teachers as essential in working towards a more sustainable future. This view of teachers suggests they could be supportive adults, who enact changes to help YP following Burke et al.’s (2018) concept of responsible adults in the context of climate change.

Teachers

Individual UK teachers have expressed concerns about politically controversial topics, such as climate change, as they do not want to be inconsiderate to people with different views and worry about how the wider community will react (Dunlop & Veneu, 2019). This means that teachers may not commit to a pro-environmental perspective in class. However, this

does not seem true globally, as some Australian educators use exploration of alternative political systems and social movements as a way of empowering YP (Verlie et al., 2021).

Bourn (2016) suggests teachers being apolitical is one of the most challenging aspects for teachers as agents of change. In England the teachers' standards (Department for Education, n.d.) include avoiding expressing personal beliefs that might encourage pupils to break the law, or to exploit their vulnerability, which can make it difficult to support youth activism. Though potentially less applicable to the UK, American teachers have expressed a juxtaposition between feeling they should be apolitical and feeling that it is no longer possible to remain passive in climate discussions (Grauer, 2020). In fact, Lehtonen and Pihkala (2021) suggest that teachers keeping silent about climate change damages intergenerational relationships and alienates YP.

Underlying beliefs

Teachers' actions also need to be seen within the social norms of the macrosystem. Hicks (2018) suggests teachers have difficulty in facing the reality of climate change while also being part of a society that holds a high-carbon lifestyle as "normal" (p.81). Haseley (2019) supports this concept, suggesting that our culture, "aids and abets" (p.113) disavowal with climate change. This suggests social norms may be maintaining homeostasis (Dowling, 2003) in schools, challenging wider environmental efforts, meaning a difficulty for CYP to see the changes they want in their schools.

Leaders

Pinto and Grove-White (2020) have highlighted the importance of working with school leadership for effective environmental change. This fits with the whole-school nature of many of the issues. However, though leaders may recognise the importance of climate, Kwauk (2020) argues they may not take action due to potential impact on attendance, and assessment outcomes from lost instruction time.

These difficulties for school adults supporting CYP are problematic. Pinsky et al. (2020) suggest that a lack of proportional response from adults to address the immense problem of climate change can turn concerned CYP away from climate action. As action is an identified coping strategy, this suggests proportional responses from school adults really matter.

Summary

The new Welsh curriculum encourages integration of sustainability across the curriculum, which is something that YP in the UK are calling for. There is also the potential for teachers to become supportive adults for CYP, as agents of social change, holding key relationships with pupils. However, there also appear to be difficulties, which may impact on CYP's eco-anxiety in schools:

- finding space for climate and environmental education, particularly about local contexts,
- a focus on more individual actions rather than collective,
- a greater focus on receiving knowledge rather than opportunities for action,
- difficulties in putting sustainability into whole school practice and a difference between messages and practices, noticed by CYP,
- challenges for teachers in supporting CYP with strike action, due in part to an expectation to remain apolitical, and
- the pressures on leadership from attendance and assessment needs may also limit pupils' environmental action.

These seem important factors to consider in relation to YP's eco-anxiety and, therefore, it seems important to consider what has been done to support YP with eco-anxiety in school.

3.0 What do we know about supporting YP with eco-anxiety in education settings?

3.1 Introduction

A systematic search was, consequently, undertaken to explore current support for YP feeling eco-anxiety in education settings. The search strategy is demonstrated through the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) (Moher et al., 2009) model (Appendix 2). Following the narrative approach of the wider literature review, a narrative approach has also been taken to share the findings from the systematic search with a qualitative synthesis of the information (Siddaway et al., 2019).

This systematic search was conducted using online databases between July 2021 and January 2022. Databases were selected for a focus on psychology (APA Psycinfo, Scopus, Web of Science) and on education fields (ASSIA, Applied Social Sciences Index & Abstracts; ERIC, Education Resources Information Centre; British Education Index). See Appendix 2.

Table 6

Inclusion	Exclusion
<p>Articles needed to meet the inclusion criteria of being:</p> <ul style="list-style-type: none"> • about children or YP, • feelings/ experiences of eco-anxiety, • how they cope with eco-anxiety, and • situated within education settings or applied to education settings. 	<ul style="list-style-type: none"> • Pre-2012 articles were excluded in order to focus on more recent research, with 2012 as the chosen cut off as the year of the first UK Climate Change Risk Assessment (DEFRA, 2012) and the year of publication of key literature on the topic of eco-anxiety from Ojala (2012a, 2012b). • Direct experience of climate change, such as flooding, was excluded as this search was focused on indirect eco-anxiety.

Keywords and search terms can be found in Appendix 2.

3.2 Overview

Verlie et al. (2021) have suggested that not much is known at a practice level to respond to eco-anxiety in schools. Therefore, the criteria for education settings were kept broad. The twenty-four articles reviewed come from a wide range of educational settings from nursery to university, in schools and in alternative education settings, such as a school conference, summer programme and youth club, as well as theory papers applied to education settings.

- The most studied age groups fell within secondary school settings.
- The identified papers included four theory articles.
- Three articles offer adult reflections on their experiences in education in this area.
- Two articles described wider surveys with educators or parents and two others described surveys with children or YP.
- Three articles offered reflections on university course design mostly from an educator perspective, with one also offering the student perspective.
- Two papers (a dissertation and a journal article) are based on the same study.
- Only five articles described studies conducted in situ in a particular school or schools.

Table 7: an overview of the education-literature studies

Reviewed studies	A specific education setting or settings	General or multiple education settings	Alternative education settings, such as youth clubs	Type: survey, project, intervention, course design, case study or reflections?	Researchers' findings based on reports from adults or from CYP/ CYP's actions?	Age
Surveys						
Baker, Clayton & Bragg (2021): Parents and teachers reporting experiences with: 1- to 5-year-olds (38.3%), 6- to 9-year-olds (48.2%), 10- to 13-year-olds (34.0%) & 14- to 17-year-olds (31.2%)		✓		Survey	Adults	Nursery, primary, secondary
Verlie et al. (2021): Predominately secondary school educators, with some primary educators, reporting experiences with students		✓		Survey	Adults	Primary, secondary
Ojala (2012b): Late childhood/ early adolescence, mid to late adolescence, early adulthood		✓		Survey	CYP	Late childhood to early adulthood
Ojala (2015b): Senior high-school students with an average age of 18.		✓		Survey	CYP	Secondary school
Reflections						
Silin (2017): A teacher's reflections on past experiences of working with nursery children and university students	Unclear			Adult reflections	Adults	Nursery, university
Grauer (2020): U.S. high school students	✓			Adult reflections	Adults	Secondary school
Acton & Saxe (2020): YP and youth				Adult reflections	Adults	General description of children/ YP
Interventions or case studies						

Axelrod et al. (2020): elementary school pupils (first grade; equivalent to UK Year 2) and work with pre-service elementary teachers	✓			Case study of a unit of work	Adults	Primary school
Trott (2017), Trott (2020); youths, aged 10 to 12			✓ Youth club	Participatory research: “Science, Camera, Action”	CYP	Primary/secondary
Bentz (2020): High school students aged between 16 and 18 years	✓			Two art-based intervention projects	CYP	Secondary school
Lehtonen & Pihkala (2021): 11 to 16 year olds.			✓ Workshops as part of environmental school conferences	Workshop	CYP	Primary/secondary
Doyle (2020): 14- to 15-year-olds	✓		✓ Also used an arts venue setting	Intervention project, focused on communication and engagement with climate change	CYP	Secondary
Tayne et al. (2021): 14 to 18 year olds (with university students as mentors)			✓ Week-long summer programme	Project “Lens on Climate Change”	CYP	Secondary/university
Pinto & Grove-White (2020)	✓			Project description	Adults with some quotes from CYP	Primary
Chan & Leung (2020): teens		✓		Description of a computer game intervention	Adults	Secondary
University course designs/ reflections						
Langmaid (2016): Students in a college-level sustainability studies program	✓			Short undergraduate course design	Adults	College or university
Maier, Whitehead & Walter (2018): Undergraduate university students	✓			Undergraduate course design	Adults’ responses, with some YP’s	University

					responses through pre/post questionnaire	
Verlie (2019a): Undergraduates	✓			Undergraduate course	Adults' and YPs' responses	University
Review						
Chawla (2020): A review covering studies from a range of age groups including young children and adolescents		✓		Review	Mixed	Young children and adolescents
Theory articles						
Bergdahl & Langmann (2021): a theory paper related to children and the young				Theory	Adults	General: CYP
Bryan (2020): a theory paper related to CYP				Theory	Adults	General: CYP
Ojala (2017): A review of hope theory and research, related to ESD (education for sustainable development) for CYP.				Theory	Adults	General: CYP
Todd (2020): a theory paper				Theory	Adults	Youth

3.3 What does the education literature tell us?

Embracing feelings

Much of the education-setting literature highlights a need to embrace the feelings of CYP. Bryan (2020) offers an affective pedagogies framework which “stresses the importance of embracing – rather than glossing over – a range of emotions that are associated with the climate crisis” (p.11). Though this is a theory paper, this is highlighted in practice with university students (Verlie, 2019a) and primary school children (Pinto and Grove-White, 2020).

Teachers’ role and their own emotions

However, Todd (2020) wonders whether education *can* be a context to “stay with” these feelings (p.1112). In fact, Verlie et al. (2021) found that though Australian educators reported encouraging students to engage with their emotions, others reported not knowing how to respond to their students’ emotions around climate. This presents an issue for teachers, as potential supportive adults for YP.

Additionally, Ojala (2015b) found that whether teachers took the negative emotions of high school students seriously or not impacted how the students coped. If they did not take them seriously the students were more likely to use hope based on denial, which is linked to lower self-efficacy and sense of control. Teachers were more likely to not take boys’ negative emotions seriously, suggesting some gender differences in coping in school, and the importance of teachers’ awareness of their reactions to different groups (Ojala, 2015b). However, though the study was a wide survey, it did not, as Ojala notes, address the interaction of the students’ and teachers’ responses in detail in classrooms.

A need for teachers to be aware of their own emotions around climate change (Ojala, 2015b; Todd, 2020; Verlie et al., 2021) was also highlighted. The Australian educators in Verlie et al.’s (2021) study indicated that they struggled with their own environmental distress. Some educators acknowledge their own feelings with their students and use it as a point of discussion (Verlie et al., 2021). However, more than half of the teachers and parents in another Australian study felt that their own sadness, anxiety and fear made it difficult to support children’s emotions (Baker et al., 2021). Supportive school adults may then need to attend to their own feelings first (Hickman, 2020), and be supported themselves. However, these studies come from Australia, which has suffered direct effects of climate change, meaning that there may be a difference for UK or Welsh teachers’ experiences.

Creating hope

Promoting, discovering or cultivating hope in CYP was present in many of the reviewed articles (Acton & Saxe, 2020; Doyle, 2020; Langmaid, 2016; Ojala, 2012b, 2015b, 2017; Pinto

& Grove-White, 2020; Trott, 2017; Verlie et al., 2021). Hope is thought to “buffer worry” (Ojala, 2012b, p. 540) and support more constructive responses such as pro-environmental action (Ojala, 2015b). The source of hope for CYP is also important because YP appear to have lower self-efficacy and environmental-efficacy if their hope is based on denial, where they de-emphasise the seriousness of climate change, than a constructive hope associated with pro-environmental engagement (Ojala, 2015b). This has led Ojala (2017) to suggest that educators need to encourage critical discussions of sources of hope, though there are no in situ classroom studies to date.

Additionally, Ojala (2015b; 2017) is critical of theories, such as Snyder’s (2002) Hope Theory, in relation to climate change. This is because it focuses on hope at an individual level and Ojala argues that hope theories like this were not created with global problems like climate change in mind (2017), which cannot be solved by individuals alone (2015b). This suggests that it is important to be aware of the conceptualisation of hope and how applicable it is to climate and the environment.

An alternative, referenced by Verlie (2019a), is active hope (Macy & Johnstone, 2012). It has been developed in work around broader environmental issues as well as climate change. It also explores a wider sense of self and identity, connected to others and the world (Macy & Johnstone, 2012), and so moves away from the individual approach problematised by Ojala (2015b). Building on this concept, Verlie offers a theory of “hoping-mourning” (2019a, p.757). For Verlie, responding constructively to climate change is a practice of “bearing worlds” (2019a, p.757) by working towards a future and also enduring pain or grief. Therefore, mourning becomes a “necessary part of hoping”. This positioning of hope is based on Verlie’s experiences in teaching university students about climate change, and so is also directly created in response to climate change.

For EPs, these hope theories appear to be particularly useful, as they apply directly to the challenges of climate and environmental crises. However, hoping-mourning is based on work with university students, while active hope has been developed from work with adults. How appropriate they may be for adolescents and how they might be enacted in school is not currently known.

Should we be trying to create hope?

Though cultivating hope has been highlighted as supportive (Ojala, 2012b), Verlie (2019a) draws attention to a question on the ethics of doing so. Chapman et al. (2017) reflect that hope is often “intertwined” with climate change engagement and mitigation action (Chapman et al., 2017, p. 850), with studies showing that hope can impact on whether a person engages with climate change (Li & Monroe, 2019). However, Chapman et al. (2017) question the ethics and practicalities of targeting hope as a trigger for desired responses like action. Instead, they suggest that the emotions need to be acknowledged, respected and

explored. A focus on promoting hope may then conflict with a focus on embracing the “range of emotions” highlighted by Bryan (2020, p.11). This is supported by Todd (2020), who suggests that instead of a pre-determined feeling, one should aim for broad sensory exploration to support students. This experiential focus may seem like a more challenging aim for teachers, for whom concrete lesson outcomes are embedded within their role. Nevertheless, it seems important to distinguish hope as a mechanism towards promoting engagement and action, from hope as a source of support or indication of coping.

Spaces for talk and creative expression

In line with exploring emotion, providing spaces for expressing feelings was highlighted as a strategy. Verlie et al. (2021) reports that educators used discussions among peers, shared vulnerabilities and were honest about their own struggles. This sharing seemed to reduce a feeling of isolation. Similarly, Bentz (2020) suggests that group dialogues allowed students a place for disclosure and helped with powerlessness, hopelessness, anger and apathy. Maier et al. (2018) also encouraged students to bring recently encountered topics for discussion at the beginning of each class. However, as their data is from an overall pre- and post-measure for all the students, there is some ambiguity as to whether discussion spaces supported individual students’ stress. As pointed out by the authors, it is unknown whether there was a decrease in stress for those who were worried, or whether there was a difference for those who may have become aware of climate change and felt stressed, but were supported.

Additionally, some Australian teachers have found that making space for emotions has decreased their students’ hope (Verlie et al., 2021). As the specific circumstances are unknown, it would be useful to know which emotional spaces work and which do not, especially if they involve disclosure and sharing vulnerabilities.

A different perspective, offered by Silin (2017), suggests that letting go of worry can create “less worried classrooms, in which students have more time to process their experiences” (p.93). Though this refers to nursery children and may not be applicable to older age groups, it suggests that there may be a balance of talk and reflection.

Creative exploration

A number of articles supported creative ways of exploring YP’s emotions and responses (Bentz, 2020; Doyle, 2020; Lehtonen & Pihkala, 2021; Maier et al., 2018; Tayne et al., 2021; Trott, 2017). Bentz (2020) reflected on the potential for art to engage students deeply and to gain insight into themselves. Similarly, Lehtonen and Pihkala (2021) concluded that their performance approach created a safe space, while narrative distancing and humour were protective factors. However, though students expressed satisfaction and happiness following the performances, the authors did not know whether the approach made eco-anxiety better or worse.

In addition, Doyle (2020) noted that creativity and also playfulness and a “lighter approach” (p.2765), was valued by the YP as an alternative to sending “people into despair with horrifying facts and figures” (p.2765). However, it took time to settle into this way of working and was easier to establish in the arts centre rather than the classroom, suggesting there may be difficulties in establishing these approaches in school.

Spaces for exploration beyond emotion

Verlie (2019a) discusses her undergraduate students learning to live with climate change, describing them learning that their lives were “entangled with climate” (p.758). This is backed up by Todd (2020), whose theory paper suggests giving students the chance to grapple with their changing place in the world, and Doyle (2020) whose students put this into practice, learning about the interconnection of themselves with the world. This suggests spaces for exploring these interconnections are important.

Lehtonen & Pihkala (2021) additionally advocate for exploring social responses to climate change. One group of performers in their workshop struggled with the ambivalence of knowing how people should act and how they really behave, while others explored social alienation. The authors suggest YP need support in these areas. Trott (2020) also supports exploration of wider issues, suggesting discussing political implications and frustrations, as children brought these to the sessions.

Opportunities for nature connection

Todd (2020) advocates supporting students to develop a relationship with the more than human world. Though this is a theory paper, Chawla’s (2020) review provides a strong body of evidence connecting practices of nature connection and coping with environmental concern. Chawla reports that, “children who expressed more connection to nature also reported a greater sense of well-being” (p.628) and YP were more likely to believe in a positive future. Though Grauer (2020) does not indicate whether nature connection itself supports coping, as a headteacher he adds direct practical experience of nature connection in school. He shares that, “students regularly spend time outdoors in our wildlife habitat, we live-stream video of natural environments daily in various indoor locations around campus” (Grauer, 2020, p.45), indicating a means of bringing nature into school spaces.

Conversely, some reservations have been noted in the wider literature in therapeutic prescribing of nature when a special natural place has been destroyed (Kevorkian, 2019). Though Kevorkian’s work has been with adults, Hickman (2020) has noted that children too can experience grief and sadness when going into nature, as this reminds them of its loss. This suggests that CYP may have varied responses to nature connection.

Relational support from teachers

Many of the studies emphasised a need for CYP to have adult support (Acton & Saxe, 2020; Ojala, 2015b; Silin, 2017; Todd, 2020; Verlie et al., 2021), while the wider literature also stresses the relational role of staff as “vital” intervention for YP (Billington et al., 2022, p.107). However, the support involved varied between papers. Bergdahl and Langmann (2021) suggest supportive holding environments that bring adults and children together around an environmental issue. Alternatively, Todd (2020) sees a teacher role as being attuned and receptive to YP’s worries, while Bergdahl and Langmann (2021) and Verlie et al. (2021) suggest helping students feel cared for. However, Verlie et al. (2021) also notes a difficulty described by educators of needing to keep an interpersonal distance and lack of contact after class. This may make care and holding environments difficult to create. These approaches contrast with Ojala (2015b)’s findings where teachers were reported to support coping by being more solution-oriented and positive, and so seem more directive than receptive. Nevertheless, none of these studies are based on in situ classroom studies, and Ojala (2015b) points out that these studies are needed to see what happens in school.

In contrast, Silin (2017) questions how active a role teachers should take. It may be possible, Silin (2017) suggests, to support through “bearing witness”, stressing the role of being alongside the nursery child rather than intervening (p. 94). These differing approaches from differing age contexts suggest multiple ways to support, which may be appropriate to different age groups.

Educators also felt challenged in taking up a supporting role by time limitations, professional expectations, society-wide climate denial, a lack of guidance on what works and questioning their own efficacy (Verlie et al., 2021). Therefore, though teachers may have a valuable supportive role, they may not be in a position to enact it, and may need help to become supportive adults.

Working intergenerationally

Given CYP’s lack of trust in adults (Ojala, 2021), intergenerational connections seem important. Bergdahl and Langmann (2021) advocate for just such a connection. Though a theory paper, they argue for opportunities for adults to “recharge themselves with hope” (p. 11) seen in YP, while YP feel hope from seeing adults take action. However, there seems limited evidence of the impact of adults and CYP working intergenerationally. Though, Maier et al. (2018)’s university course design involved informal cross-disciplinary discussion groups on the topic of climate change with both staff and students, the impact of this is not known. Similarly, the impact is unclear in Tayne et al. (2021)’s study involving university mentors working with the high school students on their films. There is also a lack of detail in Pinto and Grove-White (2020), and though Doyle’s (2020) study highlights the importance of the input from a teacher, it is unclear how the teacher’s role impacted the students. Therefore, there appears to be a gap in the literature.

Relationships with other CYP:

Trott (2017) suggests that some of the success of the group in developing feelings of agency, self-efficacy and empowerment was linked to the supportive group atmosphere with other children. Likewise, Verlie (2019a) noted that hopefulness emerged from connections with other “climate-changed humans” (p. 758) for her university students. However, these studies were undertaken in a youth club and an undergraduate university class, indicating a gap in exploring the supportive peer group for eco-anxiety in schools.

Strategies for the self

Mindfulness (Maier et al., 2018) and resilience (Maier et al., 2018; Pinto & Grove-White, 2020) were highlighted as strategies for individuals. What is meant by resilience is unclear though, which is problematic as there seems to be a lack of consensus on definition in the wider psychological literature (Vella & Pai, 2019). In contrast, Verlie (2019a) advocates for a more relational approach than individual resilience, but also discusses enabling students to identify what works for them personally (Verlie et al., 2021).

Though Ojala (2012b) points out that emotional regulation is a social process involving how people talk and interact, she also focuses on individual strategies. She suggests noticing how climate change is constructed in self-talk and challenging denial or catastrophic thinking, and suggests educators can introduce positive re-appraisal (Ojala, 2017). This has implications for supporting teachers to develop this knowledge.

However, Silin (2017) argues for allowing “the pleasures of forgetting”, fitting with other approaches that give time off from thinking about climate change, such as mindfulness (Maier et al., 2018). Silin (2017) presents forgetting as a way of forgiving the past, though, which may be more difficult with climate change, where past inaction is significant for present difficulties.

Schoolwide action:

Pinto and Grove-White (2020) also suggest schoolwide positive actions are helpful for children to see their learning reflected in concrete action. The authors felt that these actions contributed to hope, though they do not detail how they know this. However, Baker et al. (2021) make a link between school action and Ojala (2015b)’s research, indicating that if students notice more discussion of pathways to sustainable futures in school, they are more hopeful. It may be that schoolwide action creates more talk about pathways to sustainable futures. However, there is not a clear link with seeing whole-school action, how that might be received by pupils and whether it makes a difference for feelings of eco-anxiety. With the lack of detail in Pinto and Grove-White (2020), a child perspective is not strongly established for this.

Opportunities for action

Like the wider literature, there was strong support for CYP taking action to support eco-anxiety (Acton & Saxe, 2020; Trott, 2017). Trott (2017) noted an enhanced sense of agency for the children, associated with a sense of ownership over their projects. Trott suggests that the children's agentic experience made them rethink their beliefs on what children can do. This is mirrored by Tayne et al. (2021), who found through their post-project survey that many students shared a sense of hopefulness due to "their ability to help in small ways" (p. 717). Trott suggests that action did not "absolve" feelings, but did "assuage" them (2017, p. 145). This fits with a conception of a realistic anxiety, where the threat has not gone away, but suggests agentic action, leading to constructive hope, can make it more manageable.

Individual action

Ojala (2012b) and Bentz (2020) discuss individual action as supportive. However, though the high school students in Tayne et al.'s (2021) study also portrayed action in their films as individual, the authors problematise individual actions, even as a way of increasing self-efficacy. This is due to the importance of collective action in tackling climate change. However, the students' framings may be dated as the authors point out that thinking may have changed since the collective global youth climate strikes.

Collective action

Collective action featured more strongly in the education-setting literature (Acton & Saxe, 2020; Axelrod et al., 2020; Pinto & Grove-White, 2020). However, Pinto and Grove-White (2020) do not create a clear link between collective action and an impact on the primary school children's eco-anxiety. Similarly, the action described in Axelrod et al. (2020), where children marched around their school to share their ideas with others, does not include the impact of doing this on the students. Trott (2020) suggests that acting collectively also supported children's concerns about others' inaction. However, despite a generally positive reported outlook, the children still raised concerns about others' inaction, indicating that this had not gone away.

As inaction concerns seem to be directed often at adults (Walker, 2020; Ojala, 2021), collective action involving both adults and children may be beneficial to explore, but did not seem to be present in the reviewed literature.

Developing CYP's awareness of solutions and activism

There was also a strong indication that learning about solutions is supportive, from both school staff (Grauer, 2020; Maier et al., 2018; Verlie et al., 2021) and students (Bentz, 2020; Tayne et al., 2021; Trott, 2017). Verlie et al. (2021) found that educators were helping students explore actions they could take and connecting pupils to activist or environmental groups, though the authors do not know whether these approaches were successful.

Additionally, a Canadian computer game intervention offers a chance to learn about solutions (Chan & Leung, 2020), with the authors suggesting that knowing these will help the target adolescent players to confidently face the future and know how to act. However, as the authors note, no study has assessed how effective the game is. Grauer (2020) goes further to suggest teachers can teach activism. This is unusual for a school. However, the setting Grauer writes about is a private school, which may have more control over curriculum and issues of teachers being political. Nevertheless, it is unclear from these articles whether there is an impact on student eco-anxiety.

A positive impact on eco-anxiety is given, however, by Trott (2017), who also provides a child voice for the importance of solutions. Knowing about solutions “provided a sense of relief, even joy”, though their worries still appeared to sit alongside this (Trott, 2017, p. 111).

Alongside solutions, knowing about climate change itself seems helpful. The primary school children’s comments shared in Pinto and Grove-White (2020) suggest they wanted to know about climate change so that they could take action. Additionally, Trott (2020) links a strengthening of children’s agency and belief in their abilities, to knowledge about what is happening in the world and actions they could take.

For EPs this seems a further implication for systemic work, drawing attention to the importance of school curriculums including climate change and solutions.

Imagining a positive future

Ojala (2017) suggests that hope can be cultivated by showing that an alternative future is possible. This theory is supported by Ojala’s (2015b) survey, where students were more hopeful if they talked about the future and pathways to sustainable development in school, and Verlie et al. (2021) and Bentz (2020), who identified envisioning an alternative future as empowering. Additionally, in the wider literature Hogan (Belkin et al., 2021) suggests imagining a positive future is important, as many students report that they have not given themselves permission to think of alternative futures before.

However, educators reported a difficulty for YP being encouraged to imagine futures like careers in some classes, whilst thinking of the future of the climate in others, and finding it difficult to hold both futures consecutively (Verlie et al., 2021). This suggests that holding an alternative positive future may be hard, and may be an area that YP need space to explore.

Ongoing support

A need for an ongoing approach for eco-anxiety was also suggested (Langmaid, 2016; Maier et al., 2018). Axelrod et al. (2020) reflected that a climate topic needed space for ongoing conversations as “children might not respond immediately..., instead they might react to it at a later point” (Axelrod et al., 2020, p.44). Additionally, some of the 14–15-year-old participants in Doyle’s (2020) study felt that the situation seemed worse than they had

thought, or felt more nervous, also suggesting a need for ongoing support. As Lehtonen and Pihkala (2021) point out, their one-day workshop did not allow for more personal reflection on eco-anxiety for the CYP. This would, they suggest, require more time and the development of trust.

Of the articles describing direct work in schools, only Axelrod et al. (2020) appears to have considered the importance of ongoing support. However, this was in an elementary school, and as adolescents appear to be the most worried group (Baker et al., 2021; Ojala, 2013), secondary school support needs to be explored. Doyle (2020), who conducted a sixteen-week project in a secondary school, does describe the importance of the buy-in from two teachers. However, what the ongoing school support may have been following the project is unknown. Similarly, Bentz (2020), conducting art and climate change research projects with Portuguese 16–18-year-olds over four to five months, worked alongside art teachers in the school, who appeared to have a technical role in developing artwork skills. However, whether there was ongoing support in school is unclear.

Additionally, Verlie et al. (2021) reported that educators lacked time to engage with their students' emotions on climate change. This suggests teachers may not have time for ongoing work. Therefore, exploring opportunities for ongoing support within schools for managing feelings of eco-anxiety appears to be an important area to develop.

Whose voice and how are they participating?

As children do not feel listened to about climate change (Newsround, 2020), and are “subject ultimately to the control of adults” (Billington, 2006, p. 3), it seems important to consider their opportunities for voice and participation.

Ojala (2012b; 2015b) sought a CYP's perspective using questionnaires. However, though Ojala (2012b) used open-ended questions, Morrow (2008) argues that questionnaires are adult-centred tools and do not give the same opportunities for children, who are often more skilled in other ways of communicating.

Additionally, though Axelrod et al. (2020) worked directly with primary school children and ended the climate topic work with a questionnaire that went to parents and children, the authors do not share the children's perspective in their article. Conversely, though Pinto and Grove-White (2020) share children's quotations and indicate a high level of participation, the detail of how the children were involved is unclear.

However, child voice and active participation can be seen through discussions and artwork (Bentz, 2020), performance (Lehtonen & Pihkala, 2021), speculative storytelling and immersive play (Doyle, 2020), film-making (Tayne et al., 2021), and participatory child-led projects in the community (Trott, 2017, 2020). As participatory creative approaches, which allow for depth and multiple ways of knowing (van der Vaart et al., 2018), these may also

give the opportunity for “careful listening to YP” as a way forward to develop other approaches, as suggested by Chawla (2020, p.636). Although, for Lehtonen and Pihkala (2021), there was not enough time for reflective discussions, which, they suggest, would have provided an insight into the meaning for the young performers. However, all these studies included elements of choice for the CYP in choosing their own project or performance focus, something that was valued by the YP for the control it gave them (Doyle, 2020), a sense of ownership (Doyle, 2020; Trott, 2017) and feeling valued as capable actors (Trott, 2017).

It is worth noting that of these studies, only Doyle (2020) and Bentz (2020) took place in schools, meaning less is known about participation in eco-anxiety research for school settings. Doyle (2020), whose UK study was partly in a school, partly in an arts venue, found that the children engaged more fully in the out-of-school location. This is echoed by Lehtonen & Pihkala (2021), who noted that the YP “seemed to be willing to speak about issues related to climate change that are not often spoken of in normal classroom settings” (p.750), and Trott (2020), who reflected that the greater flexibility in youth clubs than structured school environments may have enabled more action and participation. Though these studies are from Finland and America, taken together they suggest there may be a more general difficulty with participation and action in school settings. Doyle’s observation led her to conclude that more opportunities are needed for pupils in out-of-school settings. However, Cutter-Mackenzie and Rousell (2019) suggest that children’s “precious knowings can only come to light if we radically rethink the political positioning of children not only in research, but in... the school” (p.100). Therefore, one can also conclude that there is more work to be done on finding ways *within schools* that reposition CYP to allow greater participation on how to constructively manage feelings of eco-anxiety.

For EPs, this repositioning may not be simply about giving voice as adults with professional power, as some EPs have problematised this as “reinforcing the idea that the only way children and families can be heard is through them” (Schultze et al., 2019, p.391). Instead, this suggests a focus on YP’s participation and a sense of control and ownership, and on methods that encourage listening to YP and supporting them to share their “knowings” (Cutter-Mackenzie & Rousell, 2019, p.100).

Where in the world?

Ojala and Bengtsson (2019) suggest that research should explore the coping strategies of CYP in different countries, so it is important to look at the location of the education-based literature. Most studies are from the U.S. and Canada, though there is also literature from Scandinavia, Australia, Ireland and Portugal.

Of the UK based literature there are only two studies from England (Doyle, 2020; Pinto & Grove-White, 2020), and none from Wales. Pinto & Grove-White write primarily as activists and parents who co-founded the Climate Action Group in their children’s school, while

3.4 What has been learned from the literature?

A summary is given in the tables below:

Table 9

Coping strategies identified in the education-setting literature	<p>The importance of hope Having hope seems to indicate more constructive coping, though hope is one of many emotions related to eco-anxiety and there is an ethical question around trying to cultivate specific emotions.</p>	<p>Spaces for exploring emotions and wider issues Space for supporting and exploring emotion and wider associated social and political issues are argued to be helpful, which may be supported by creative approaches.</p>	<p>Nature connection There is strong evidence from Chawla (2020) about how nature connection can be used to support CYP to cope with eco-anxiety.</p>	<p>Relational and intergenerational support Intergenerational and relational support between CYP and school adults, and peers, can be helpful.</p>
	<p>It is important to consider hope theories developed in relation to climate and the environment.</p>	<p>CYP may benefit from space to grapple with their relationship to the world and how they are connected with environmental problems.</p>	<p>When using nature connection it is worth being mindful of potential distress from being reminded of nature loss.</p>	
	<p>Action Action can support coping, leading to feelings of agency, efficacy and ownership. Action at a collective level seems particularly helpful.</p>	<p>Learning Learning about climate change, solutions and how to take action have been identified as supportive strategies.</p>	<p>Ongoing support seems important.</p>	<p>Envisioning positive futures Supporting YP to be able to imagine alternative, more positive futures seems empowering.</p>
			<p>Schoolwide actions may also be helpful.</p>	

Table 10

Gaps in our understanding	<p>In situ studies in schools In situ work in schools would be useful to explore many of the ideas in practice. In particular, it would be useful to explore how spaces for emotion can work in schools, and the potential of a supportive peer group.</p>	<p>CYP and adults working together There appears to be a gap in the literature on how CYP and school adults might work together in the context of eco-anxiety, including supporting them to take action.</p>	<p>Ongoing support within a school context It would be useful to explore opportunities for ongoing support within school systems for managing feelings of eco-anxiety.</p>

Whole-school approaches

Exploring the impacts of whole-school action, how it might be received by pupils and whether it makes a difference for feelings of eco-anxiety is a gap in the literature. It would be especially helpful to gain CYP's perspectives.

CYPs' full participation in school setting research

There appears to be a difficulty in CYP fully engaging in eco-anxiety research in school contexts. Exploring ways to enable this would be helpful.

A Welsh context

There are no studies from schools in Wales. It would be useful to develop place-based knowledge of what eco-anxiety is for Welsh YP as well as ways to support that work in this context.

4.0 Rationale for the current study and research questions

Allen (2020) has issued a call for EPs to support CYP specifically with constructive ways of managing the emotions of eco-anxiety, which fits with the emotional and social role already established for EPs under the SEND code of practice (DfE, 2014). The literature suggests that eco-anxiety is a realistic anxiety (Haseley, 2019) stemming from an awareness of the reality of climate change and environmental crises (Bednarek, 2019; Hickman, 2020). However, with a variety of connected terminology there does not appear to be a clear consensus on a definition, which may make a shared understanding difficult.

There appear to be particular challenges for CYP with eco-anxiety, stemming from not feeling listened to (Newsround, 2020), not feeling powerful enough to create change (Belkin et al., 2021), and feelings of distrust for adults (Ojala, 2021). However, it seems particularly important to support adolescents. They seem to be the most concerned group of CYP (Baker et al., 2021; Ojala, 2013), who may have better understanding of the threat (Ojala, 2013), are being asked to make decisions about their future (Lehtonen and Pihkala, 2021) and may also have difficulty with feeling different levels of interest in the environment compared to their peers (Eames et al., 2018).

Within the school context there appear to be particular gaps and difficulties:

- The literature suggests CYP are distrustful of adults (Ojala, 2021), but that YP need help from adults (Walker, 2020) and that bringing them together is important for intergenerational healing (Hickman, 2020). Teachers are potential supportive adults for YP in schools. However, there are gaps in understanding around intergenerational approaches bringing school adults and YP together.
- YP do not feel listened to around their concerns about climate and environmental crises (Newsround, 2020). This suggests YP's voice is very important to gain. Paralleling this, difficulty has been noted in YP being able to engage fully in eco-anxiety-related research within schools (Doyle, 2020; Lehtonen & Pihkala, 2021),

while in other settings they have valued participatory approaches (Trott, 2017, 2020) with a sense of ownership and control (Doyle, 2020). This difficulty may be due in part to hierarchical structures within schools (Robinson & Taylor, 2013) limiting participation and decision making. This suggests that it is important to research in ways that support CYP to participate fully in school settings.

- Schools are also a context where YP appear to have difficult encounters with environmental education. They appear to mirror the juxtaposition between words and practice at global and UK levels, with a lack of integration across the curriculum and a lack of facilities to support whole-school sustainability. There are difficulties in supporting collaborative action, highlighted as helpful in the literature. This suggests that schools may be difficult contexts for YP with eco-anxiety. However, there are limited studies that have taken place in situ in schools. This makes schools important settings to research in.

Finally, not only does the current context of the incoming curriculum for Wales with a greater focus on sustainability make this an important time to do research in Welsh schools, but we do not know what the specific sources of distress are for YP in Welsh schools and what constructive ways of managing eco-anxiety will work for them in this school context.

Research questions

Therefore, this research will explore the following questions:

1. *What is eco-anxiety for YP?*
2. *In what ways can YP constructively manage eco-anxiety, with help from supportive school adults?*

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2. MAJOR EMPIRICAL PAPER

Word count: 8134

1. Abstract

This thesis answers a call to action for educational psychologists (EPs) from Allen (2020) to engage with the climate crisis. Eco-anxiety can be seen as a natural reaction to an awareness of the climate and environment emergency. However, there is a lack of consensus on a definition, and no literature exploring Welsh young people's (YP) experiences to date. As there is also a lack of information on supporting YP in situ in schools, a bespoke linked co-operative inquiry approach was designed to use with YP to explore ways to manage their eco-anxiety in a school in Wales, with help from supportive adults (SAs). The main themes created through reflexive thematic analysis suggested these YP's eco-anxiety encompassed responses to "real and scary" environmental problems, a juxtaposition of "climate noise and climate silence" in different spheres of their lives and "feeling disconnected" from friends, adults, a teen identity and their school. They managed this through connection with other YP, staff, school and peers ("Me too, I had the same feeling"), "working with, not alone", emphasising the help of their supportive adults and their fellow young co-researchers, and "making it ok to talk about" through a safe group space. The implications for an EP role and using linked CI are discussed.

2. Summary of the literature

Climate and environmental crises: a role for EPs

Though climate change will affect everyone, predictions suggest that it will be worse for the key people EPs work with, children and young people (CYP) (CCC, 2021; Sanson et al., 2018; Treichel, 2020). Reflecting this, a call to action from Allen (2020) suggests that EPs now need to apply their work supporting CYP in a new context: climate and the environment.

Eco-anxiety

CYP are worried about the environment, whilst also distrusting adults to act (Ojala, 2021), and not feeling listened to (Newsround, 2020) or powerful enough to create change (Belkin et al., 2021). However, adolescents seem the most concerned (Baker et al., 2021; Ojala, 2013).

Eco-anxiety is a broad term for difficult feelings about the environmental crisis (Pihkala, 2020a). However, there is not a clear consensus on definition. It is thought to be a realistic (Haseley, 2019), healthy response to ecological threat (Climate Psychology Alliance, 2020 (CPA); Hickman, 2020). However, there have been some attempts to measure it (Clayton & Karazsia, 2020; Hickman, 2020), suggesting a problematic medical model, placing the problem within the individual (Billington et al., 2022).

The school context

Schools may be difficult contexts for YP with eco-anxiety, who already distrust institutions (Belkin et al., 2021) and perceive differences between environmental-education messages and what happens in practice in schools (Lehtonen & Pihkala, 2021). However, a new Welsh curriculum (Welsh Government, 2015), positioning sustainability across-subjects, may change this for Wales.

Managing eco-anxiety in education-settings

Studies suggested creating spaces for exploring emotions (Axelrod et al, 2020; Maier et al., 2018) and wider social and political issues (Lehtonen & Pihkala, 2021; Trott, 2020). However, these have not always succeeded (Verlie et al., 2021), suggesting a need to find out what works. Though many papers suggest cultivating hope (Acton & Saxe, 2020; Doyle, 2020; Langmaid, 2016; Ojala, 2012b, 2015b, 2017; Pinto & Grove-White, 2020; Trott, 2017; Verlie et al., 2021), EPs need to be mindful of the ethics of targeting specific emotions (Chapman et al., 2017) and drawing on hope theory that is not appropriate for climate change (Ojala, 2015b, 2017).

Learning about actions (Verlie et al., 2021), climate change (Pinto and Grove-White, 2020; Trott, 2020) and solutions (Chan & Leung, 2020; Maier et al., 2018; Trott, 2017), as well as taking action (Acton & Saxe, 2020; Axelrod et al., 2020; Bentz, 2020; Ojala, 2012b; Pinto &

Grove-White, 2020; Tayne et al., 2021), were considered supportive. Ongoing support seems important (Axelrod et al, 2020; Langmaid, 2016; Maier et al., 2018), but it is unclear what this may look like within secondary schools.

Teachers are potential supportive adults for YP in schools. Though the literature also highlights teacher support (Bergdahl & Langmann, 2021; Ojala, 2015b; Todd, 2020; Verlie et al., 2021), teachers have felt challenged to offer this (Verlie et al., 2021), suggesting they may need support to take up this role. Though the literature suggests intergenerational work (Bergdahl & Langmann, 2021; Pinto & Grove-White, 2020), there appears to be a gap in understanding the impact and practice from in situ studies in schools.

YP did not seem to engage fully in some school-based research (Doyle, 2020) with out-of-school settings seemingly more supportive of sharing issues (Lehtonen & Pihkala, 2021). In other settings YP valued participatory approaches with embedded action (Trott, 2017, 2020) and a sense of ownership and control (Doyle, 2020). As YP also do not feel listened to (Newsround, 2020), this suggests researching in ways that involve listening to YP and supporting participation in school settings.

Moreover, not only does the current context of the incoming curriculum for Wales make this an important time to do research in Welsh schools, but specific sources of distress for YP in Welsh schools and what constructive ways of managing eco-anxiety will work for them in this context are unknown.

Therefore, this research will explore the following questions:

1. *What is eco-anxiety for YP?*
2. *In what ways can YP constructively manage eco-anxiety, with help from supportive school adults?*

3.0 Methodology

3.1 Ontology and Epistemology

This study adopted a participative subjective-objective ontology (Heron & Reason, 1997). It proposes that climate change is real, and can be understood as part of the “given cosmos” (Heron & Reason, 1997, p.4), but that our perception of reality is created from the interaction between the given world and our minds’ interpretation. Subsequently, the truth of climate change can be responded to in different ways by different people. This worldview proposes that reality is intersubjective; based on participation and interaction in shared culture, language, beliefs, values and norms. Adopting Heron and Reason’s (1997) stance, the way we respond to climate and environment may depend on our participation together in our family, school, work, peer and protest cultures and practices, our values in these systems and how we interact with environmental social norms (Hicks, 2018; Weintrobe, 2013).

This study follows an extended epistemology (Heron, 1998; Riley & Reason, 2015). Knowledge is based on “diverse ways of knowing as persons encounter and act in their world” (Riley & Reason, 2015, p. 170). This suggests that we know things through interaction with people, places or things (experiential knowing), expression of what we know (presentational knowing), concepts and ideas (propositional knowing), and putting all these together in the way we act in the world (practical knowing) (Riley & Reason, 2015). Therefore, in this study knowledge can be created collaboratively through interaction between the young people (YP), supportive adults (SAs) and the researcher, and interaction with the ideas of climate change and the environment. It can be created through practical experiences in school, added to by how this knowing is expressed and presented.

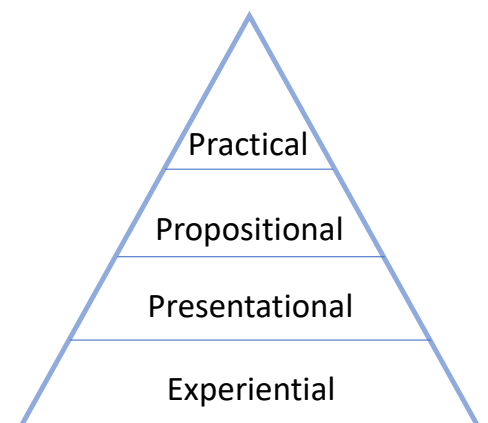


Figure 5: A “pyramid of upward support” (based on Heron, 1998, p.52), showing different ways of knowing feeding into each other.

3.2 Research Design

Co-operative Inquiry

To follow a participative subjective-objective ontology and extended epistemology, this study used co-operative inquiry (CI). CI values, explores and extends understanding through experiential, presentational, propositional and practical ways of knowing (Riley & Reason, 2015). This approach is a form of participatory action research, where a group undertakes a process of reflection and action cycles to develop an understanding of a shared question (Riley & Reason, 2015). (Please see Appendix 8 for the stages of CI).

Riley & Reason (2015) suggest CI is a suitable method for responding to practical, pressing issues in people’s lives. It is “strongly value-orientated” (Riley & Reason, 2015, p.169), which

fits a conceptualisation of eco-anxiety as stemming from caring about the environment (Hickman, 2020).

CI is research *with* people (Heron, 1998). It is a collaborative approach, where participants are seen as co-inquirers (Riley & Reason, 2015). Therefore, it was identified as a method that could support YP to participate more fully in school-based research, addressing previous difficulties (Doyle, 2020).

Key issues from the literature around voice and participation for young people (Doyle, 2020; Lehtonen & Pihkala, 2021; Trott, 2017, 2020), alongside a need for support from adults (Acton & Saxe, 2020; Ojala, 2015b; Silin, 2017; Todd, 2020; Verlie et al., 2021), led to a linked CI, a bespoke design approach, linking two inquiries (described in this chapter). This created opportunities for space for YP to undertake their own inquiry within their school whilst also bringing them together with school staff, constructed as supportive adults (SAs), who could help them. In this way, the design follows calls within climate change education research for a “hand and a voice” for CYP (Rousell & Cutter-Mackenzie-Knowles, 2020, p.203).

A note on terminology:

Co-researchers: *Consistent with a co-operative inquiry the term “co-researchers” is used rather than participants.*

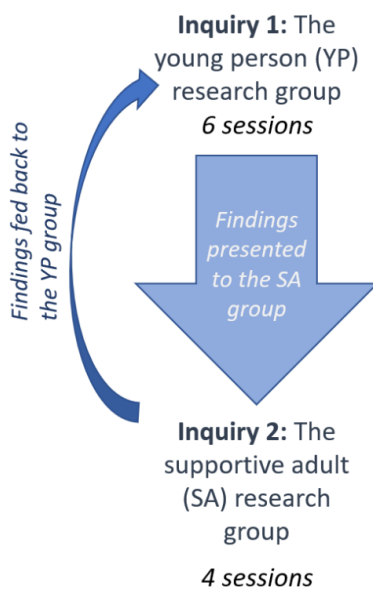
There were two groups of co-researchers, in two separate, but connected inquiries:

1. *The young person inquiry (young people co-researchers)*
2. *The supportive adult inquiry (supportive adult co-researchers, composed of school staff from the young people’s school).*

Table 11

<i>Suitability for young people</i>	<i>Suitability for adults</i>
CI is suitable for working collaboratively with children and young people (Guha et al., 2013) because it uses a facilitator, who can support CYP in the process (Yip et al., 2013). It has been used with teenagers, who are especially satisfied and engaged by the increased involvement in the project they gain through CI (Cesário et al., 2019).	CI has been used with adults in education contexts, described as being useful as “a form of ongoing support for professionals, strengthening both teaching practice and learning whilst also encouraging a sense of community amongst professionals.” (Greenwood & Kelly, 2020, p.215).

Procedure



In this study two separate, but connected and consecutive inquiries were conducted in a high school in South Wales; the first with a group of young people (13-14 year olds), the second with a group of supportive adults (their teachers and leaders). Conducting separate inquiries is recommended for action research when there may be unequal power dynamics in the system (Burns, 2014), and young people are a group who, Cahill (2007) argues, are often not taken seriously and can be barred from decisions about their lives.

Overview

The inquiries were externally initiated (Heron, 1998) by the researcher, a trainee educational psychologist, who was previously unknown to the high school.

Both inquiries involved researcher-facilitated sessions, which used presentational knowing and reflections on the experience of actions taken within and between the group sessions (experiential and practical knowing) to develop propositional knowing on what would support feelings of eco-anxiety and how this could be applied in practice in school. At the end of each session actions were planned to try out before the following session related to the focus of each inquiry (see Appendix 9 for the overview inquiry plan).

Inquiry 1: The Young Person Inquiry

The YP's inquiry began with a broad question (how can we constructively manage difficult feelings of eco-anxiety in school?), but, in line with CI, as they began to "generate and explore issues that are relevant to them" (Riley & Scharff, 2012, p.211) a new focus emerged for the group around whether anybody else cared about the environment, in particular their peers. Presentational knowing was explored through rich pictures, the ideal school, a word carpet of thoughts, selecting visuals to match their feelings, and letters written to their headteacher (see Appendix 11), while experiential knowing within sessions included voicing their letters, and responding to items in the news.

At the end of their inquiry, the YP co-researchers were encouraged to present their learning and experiences around managing eco-anxiety constructively in school. Writing personal letters to their headteacher was the YP co-researchers' chosen method, alongside a more traditional presentation with slides, which they used to structure their talk when sharing their process (Appendix 11).

Inquiry 2: The Supportive Adult Inquiry

The YP co-researchers' letters and presentation formed the stimuli for the second inquiry with the adult supporters. This supportive adult (SA) group started by asking broadly, how can we support these YP? However, this also involved exploring the role that they could have as supportive adults. Presentational knowing was explored through visual mapping, visual barrier tasks and scaling, added to through experiential knowing through role playing conversations.

At the end of their inquiry, the supportive adult co-researchers were asked to present back to the young people. This drew on their new understandings of the young co-researchers' concerns and new ways of working with YP that moved towards partnerships and allies. The SA co-researchers purposely began their feedback with a relaxed discussion on current environmental news (COP26) to try to enable the staff members to show a shared care for the environment in common with the young people.

The researcher-facilitator

Between sessions the researcher-facilitator accessed supervision to reflect on the sessions. This supported a reflexive response to the needs of the groups.

Table 12: Summary of the linked co-operative inquiry procedure

Young Person Inquiry

- The **young person inquiry** was facilitated by the researcher and supported by a link teacher.
- YP co-researchers initially explored how to support themselves with feelings of eco-anxiety.
- The YP co-researchers then chose to focus on finding out about their peers' responses to climate change, and whether they cared.



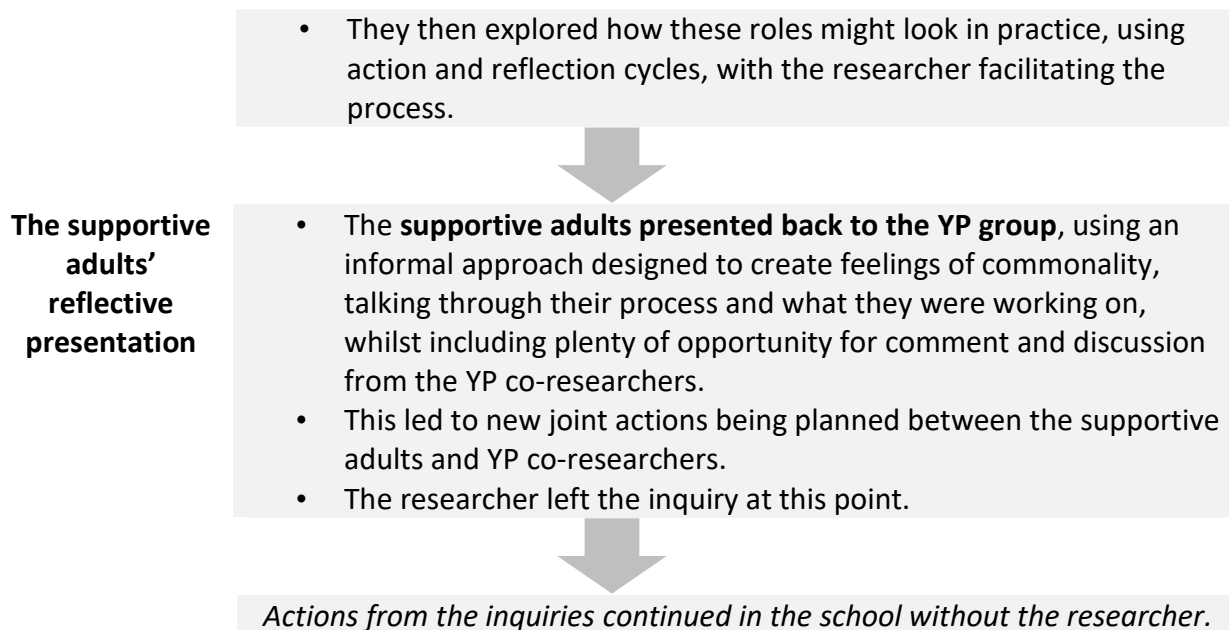
YP co-researchers' reflective presentation

- The YP co-researchers planned and prepared a **presentation of their findings and process to chosen staff members** including their headteacher and staff who had volunteered for the supportive adult inquiry group.
- Presentational knowing: the co-researchers wrote and read aloud letters to their headteacher to share their experiences, thoughts and feelings, as well as sharing a PowerPoint and other visual presentational data generated throughout the inquiry (Appendix 11).



Supportive adult inquiry

- The **supportive adult inquiry used the presentational data from the YP inquiry to begin their own inquiry** into what staff could do to support the YP. This involved looking again at the letters and visual presentational data from the YP inquiry and using this to reflect on their roles as "supportive adults".



By linking the inquiries through these presentations, the study hoped to incorporate the need Walker (2020) describes for young people to bring their concerns and messages about eco-anxiety to powerful adults to enable support and change.

3.3 Building the inquiry groups (recruitment and inclusion criteria)

Recruitment

Information about the study was shared with 12 English-medium high schools in South Wales in April 2021 through their link EPs. One school expressed interest and online information meetings were conducted for interested staff and Year 9 students. The YP inquiry ran for 6 weeks through June and July 2021, meeting for one hour each week after school. The SA inquiry ran over four sessions between late September to early November 2021, meeting for an hour after school each time. (See Appendix 3).

The YP co-researchers

- The YP inquiry group had six spaces for YP in Year 9 (13-14 years old), available on a first-come, first-served basis.
- Five YP, all female, volunteered to take part.
- Three of the YP took up the offer to choose their own pseudonyms, while the other two had one assigned by the researcher (see table below).

Table 13: The YP co-researchers

The YP co-researchers (pseudonyms)	Sessions attended						
	YP1	YP2	YP3	YP4	YP5	YP6	SA4
Bobbie		✓	✓			✓	
Carrie	✓		✓	✓	✓	✓	✓
Daisy	✓	✓	✓	✓	✓	✓	✓
Rey	✓	✓	✓	✓	✓	✓	✓

Sara	✓	✓	✓	✓	✓	✓	✓
<p><i>Notes:</i> <i>Mr Snow (link teacher) and the researcher (the group facilitator) were present for all sessions.</i> <i>All YP inquiry sessions took place in person in the same large classroom in school.</i></p>							
<p>Inclusion criteria</p> <ul style="list-style-type: none"> - The YP needed to self-identify as being concerned about eco-anxiety. The study took the position that eco-anxiety is not a pathological anxiety (Pinsky et al., 2020; Haseley, 2019), but is something that can be felt by anybody who knows about climate change (Clayton, 2020). Therefore, no measure of this was taken. - YP needed to be in Year 9. This was because teenagers are in a “distinctive position” in relation to understanding and action on climate change (Baker et al., 2021, p.12). They are more pessimistic about the environmental future than young adults (Eckersley, 1999), old enough to be politically aware and active (Baker et al., 2021), understand the science, and are aware of the inaction of societal actors (Baker et al., 2021). However, as Riley & Reason (2015) suggest a relatively homogeneous group is needed for co-operative inquiries, the study focused on key stage 3. In order to respect the year group bubbles in place due to COVID-19 restrictions, the inquiry was restricted to one year group. Year 9 was selected as this is the year group with the greatest consistent experience of their school system, due to the impact of COVID-19 school closures on Year 7 and Year 8’s experience of school in person. - Although all the co-researcher volunteers were female, participation in the CI was not stipulated by gender. 							

The supportive adult (SA) co-researchers

Information about the SA co-researchers can be found in the table below.

- Though the headteacher joined the study for the YP inquiry group’s presentation to staff, she was not able to attend the inquiry sessions due to her other time commitments.
- One new member of staff, Mrs Frost, joined for the SA inquiry only.

Table 14: The SA co-researchers

The supportive adult co-researchers (pseudonyms)	Role	Sessions attended				
		YP6	SA1	SA2	SA3*	SA4
Mr Snow (link teacher)	Head of geography	✓	✓	✓	✓	✓
Ms Gale	Geography teacher	✓	✓	✓	✓	
Mrs Frost	Specialist ALN teacher		✓	✓	✓	✓
Mr Ice	Assistant head	✓		✓	✓	✓
Mrs Hail	Headteacher	✓				
<p><i>*The SA3 session was conducted online due to COVID restrictions. All other sessions took place in person in the same large classroom in school.</i></p>						
<p>Inclusion criteria</p> <ul style="list-style-type: none"> - SA inquiry group members were teachers or school leaders from the same Welsh high school as the YP participants. - Adults needed to be qualified teachers working in one of the following roles: 						

- Teachers
 - Middle leaders
 - Senior leaders
- Gender and age were not stipulated for members of staff.
- The researcher aimed to ideally recruit three leaders and three teachers for a balanced discussion within the inquiry group between these two distinctive roles. However, in consideration of the more limited availability of leaders, the researcher proceeded with at least one leader in the group.

3.4 Ethical considerations

The ethical considerations for the study are outlined in the table below, following guidelines from Cardiff University School of Psychology Research Ethics Committee and the BPS code of human research ethics (BPS, 2021).

Table 15: Overview of ethical issues and researcher actions

Ethical consideration	Action taken
Confidentiality and anonymity	<p>Meeting recordings: In order to develop an accurate transcript, meetings were audio recorded. The recording was saved onto a password protected computer, adhering to university regulations. Recordings of the inquiry group meetings were transcribed within a two-week period following each meeting and were held confidentially until transcribed. After the transcription was completed, the recordings were deleted.</p> <p>Original text and visual data (artwork, drawings and diagrams) from inquiry session activities was held confidentially by the researcher until electronic versions were created. Once electronic versions were created, the original text or visual data was returned to the participants (if requested), or destroyed.</p> <p>Transcriptions, text data (including reflections) and visual data (artwork, drawings and diagrams) were anonymised, using pseudonyms matched to gender, ethnicity and culture, with the option for participants to choose their name themselves, as recommended by Allen & Wiles (2016). The real names of the co-researchers were not shared beyond the inquiry groups. Any other names, locations or identifiable personal information were removed or changed. The researcher conducted member checking with the link teacher to check that pseudonyms were not from within the school community.</p>
Right to withdraw	<p>Regular reminders of this right were included in the information sheets, consent forms, opening script for sessions (see CI plan and transcript), and the debrief letters (Appendix 13). Co-researchers were reminded that they could withdraw from the co-operative inquiry process at any time during the inquiry, without a given reason. Co-researchers were reminded that once information had been transcribed and made anonymous, following the two-week period from the meeting the data was produced in, it was no longer be possible to withdraw it from the research.</p>

An outline of the purpose and procedure of the research was provided in an initial gatekeeper letter and research poster.

Information sheets: Two information sheets (Appendix 6) were provided by the researcher to the school to explain the study in more detail: one for YP and one for adults.

Information meetings: Separate information meetings were provided for both interested staff and pupils, where they were given an opportunity to ask the researcher questions in line with advice from Riley & Reason (2015), who suggest that more time may be needed to explain the inquiry process as co-operative inquiry is a less familiar way of conducting research. Those adults who did not attend the initial information meeting, but expressed interest were invited to ask questions of the researcher before signing up.

Informed consent

Consent forms: Following the information meeting, consent forms (along with the information sheet) were sent out via school. For young people who wished to take part a consent form was also completed by their parents.

Please see Appendices 4-7 for the gatekeeper letter, research poster, information sheets and consent forms.

The topic of climate change involves thinking about something that can cause worry and anxiety. It addresses the co-researchers' own wellbeing, coping abilities and, for the adults, potentially their professional role. Therefore, signposting to support within and outside the school was shared at the start and end of the study, as well as regular reminders of this support in the closing script for sessions (see Appendix 9).

Do no harm

As the supportive adults were busy education professionals with potential time limitations, the number of sessions for this group was reduced to 4 and they were able to choose whether to meet weekly or fortnightly.

Due to the potential for conflict between strongly held personal beliefs about climate change, this study followed Cahill's (2007) emphasis on creating a safe space where everyone can contribute, with the facilitator modelling how to validate responses through active listening and to clarify understandings for the group.

A "check in" was used at the start of each session as our "regular method for surfacing and processing repressed distress" (Riley & Reason, 2015, p.188).

The co-researchers were provided with a debrief letter (Appendix 13: young person and supportive adult versions) at the end of the inquiry. For further information or concerns, they were given the details of the researcher, their supervisor and the ethics committee, as well as relevant signposting to further support (internal and external to school).

Debrief

Consistent with CI as a collaborative approach, the researcher will be returning to school to share the findings from their standpoint, but also to give the co-researchers the opportunity to comment on them and share their thoughts. The co-researchers are invited to be part of future dissemination.

Power dynamics

The power dynamics between the researcher facilitating the group and the co-researchers was likely to be exacerbated by the age difference with the young people (Malinverni & Pares, 2017) and needing to be more directive with this group (Yip et al., 2013). The researcher followed advice from Ritterbusch et al. (2020) to give time to develop rapport, familiarisation with each other and participation in decision making (inherent to CI).

Further reflection on power dynamics can be found in Part 3.

3.5 Data analysis

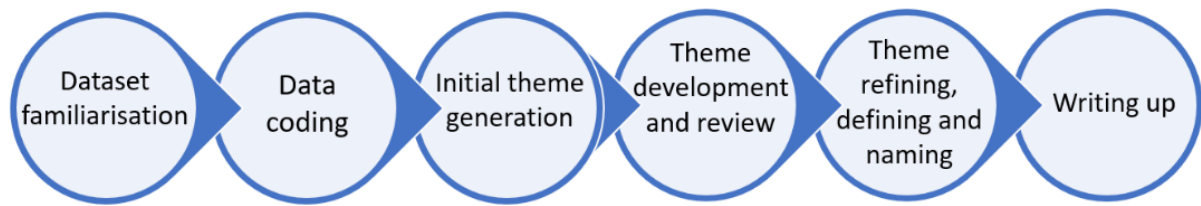
Reflexive thematic analysis (RTA) is based on the idea of meaning being tied to the context in which it was produced (Clarke et al., 2015). This suited a study focused on eco-anxiety and how it could be constructively managed in a Welsh high school context. With its reflexive nature (Braun & Clarke, 2022) the researcher could also recognise the subjectivity of their interpretation and influence as a researcher present throughout the inquiry process, working closely with the YP and SA co-researchers.

RTA (Braun & Clarke, 2022) was used to analyse both the young person inquiry group and the supportive adult inquiry group as one overall data set. The bringing together of the young people and adult supporters in sessions 6 and 10, and the way the findings of one group were the starting point of the next, meant that the inquiries are part of one whole piece of work. The study followed the updated 6-stage process of Braun & Clarke (2021a; 2022), which is shown in the table below. A description of how the process was applied by the researcher within the analysis can be found in Appendix 14.

An inductive approach to generating themes was taken. This meant codes and themes were created from the data (Terry, 2021), while still acknowledging the researcher's active involvement in theme generation, where the analysis is guided by the researcher's standpoint (Braun & Clarke, 2021a). This acknowledges that the researcher can only have a "partial and situated take" (Braun & Clarke, 2021b, 34:48) on the data due to their distinct history and experiences, and it is likely to be different to that of the co-researchers if they were to perform the analysis.

The study undertook both a semantic and latent analysis, looking at both surface meaning and the assumptions and logic underpinning it (Braun & Clarke, 2021a). It seemed important in the context of co-operative inquiry to include the expressed knowing of the co-researchers. Alongside this, from a subjective-objective ontological position, the researcher considered how they were perceiving, interpreting, and articulating their experience of the wider world, their school system and themselves.

Figure 6: The RTA process (Braun & Clarke, 2022)



Detail of the application of RTA to this study can be found in Appendix 14.

3.6 Quality criteria

Yardley’s (2015) criteria for qualitative research were used to assess the trustworthiness of the study and its subsequent findings, alongside Heron’s (1998) specific criteria for quality in CI. The criteria and the steps taken to address these are outlined in the following tables.

Yardley’s (2015) criteria

Table 16

<i>Sensitivity to context</i>	<ul style="list-style-type: none"> • A literature review was carried out to explore the developing meanings of eco-anxiety, as well as the context at a global, UK, Welsh and school level. Attention was paid to previous research in psychology and a range of further disciplines, including education, political action and policy, due to the scope of the research. • Approval for the study was granted by the Cardiff University School of Psychology Research Ethics Committee. • Sensitivity to the co-researchers’ perspectives was shown through the ground rule of being able to disagree with the researcher and each other. In addition, the external positioning of the researcher meant that they were not an authority figure from within the school, which may have helped to avoid concerns about sharing negative information. Consideration was given to the layout of the classroom used for the CI sessions. This was in order to create spaces more open to discussion (Bartle, 2021), more equal, and different to the normal classroom space the co-researchers were used to, in order to address concerns from Doyle (2020) about more limited engagement in research in school. • Including teachers, leaders and pupils in the study allowed a more diverse range of perspectives to be expressed and explored from the school context to address the research questions. Having a separate YP inquiry prioritised their voices, which were less prevalent than adults in the literature review. • The opportunity to use different forms of presentational knowing and not stipulating the form of the presentations and feedback to the other inquiry group supported views to be expressed in ways determined by the co-researchers. • The use of a reflective diary and CI reflective questions (based on Heron, 1998) supported the researcher to be aware of their assumptions, and adjust in subsequent sessions.
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<p><i>Commitment to rigour</i></p>	<ul style="list-style-type: none"> • The linked CI approach used allowed for an “in-depth engagement with the topic” (Yardley, 2015, p. 266) over time. • Analysis of data: the process of RTA (Braun & Clarke, 2022) was followed, and a detailed summary of what this looked like for this study can be found in Appendix 14. • A research diary, use of reflective questions for CI, and regular supervision supported continued reflection and reflexivity over the course of the study.
<p><i>Coherence and transparency</i></p>	<ul style="list-style-type: none"> • The transcripts are available separate to the thesis, whilst a full coded transcript is included in Appendix 18. • A description with visual examples of how RTA was applied can be found in Appendix 14. • The overview inquiry plans with opening script outlines are in Appendix 9.
<p><i>Impact and importance</i></p>	<ul style="list-style-type: none"> • The implications for EPs, schools and policy are explored to show the practical impact and importance of the study for the EP role and supporting eco-anxiety in school contexts, following Allen’s (2020) call to action for EPs.

Criteria for CI

Specific criteria to assess the quality of CI (Heron, 1998; Riley & Reason, 2015) were used as reflective questions following each inquiry meeting (see Appendix 18).

The questions enabled the researcher to reflect on the experiences and assumptions within the sessions, which then informed the process and content of the next session. Particularly relevant aspects to this study are highlighted in the table below.

Table 17

<p><i>Authentic collaboration</i></p>	<p><i>Did anyone dominate the discussion, or were any voices left out?</i></p> <ul style="list-style-type: none"> • Some co-researchers spoke more than others, with some speaking more as the inquiry went on. Rounds were often used within sessions to make sure that voices were not left out. • To try to mitigate dominance of the researcher’s voice, the researcher brought transcript extracts in from the previous session for the YP inquiry and used the gathering time of the group to ask the co-researchers to review them, and consider their interpretative annotations. • These were always written as questions in order to support the co-researchers to challenge the researcher’s thinking. Rey, from the YP inquiry, reported in session 2 that she liked the questions, and that it brought something else to discuss to the group. • The researcher’s visual summaries were reviewed by the supportive adults in their gathering time. • Consistent with a subjective-objective reality and Heron’s (1998) description of agreement in co-operative inquiry, the findings by the researcher were treated as one standpoint, amongst different possible personal versions of the findings within the inquiry groups.
<p><i>Challenging consensus thinking</i></p>	<p><i>Anyone in the group can question the group at any time to check for collusion, by asking devil’s advocate questions – why should we...?</i></p> <ul style="list-style-type: none"> • This did occur, with the question being asked by both the researcher and the link teacher. It was not used by the young people, though they did disagree with each other and the adults. Permission to disagree became an important part of the opening script for each session.
<p><i>Managing distress</i></p>	<p><i>What is the regular method for managing distress?</i></p> <ul style="list-style-type: none"> • Each session started with a check-in. This was our “regular method for surfacing and processing repressed distress” (Riley & Reason, 2015, p.188). No repressed distress was reported. • The researcher protected herself emotionally by calling the research supervisor and using rich pictures and writing for reflection and support as needed throughout the inquiries. See Part 3 for further reflection.
<p><i>Reflection and action</i></p>	<p><i>What was the balance like between reflection and action?</i></p> <ul style="list-style-type: none"> • Sessions were most often spaces for reflection, with action occurring in between sessions. However, sometimes action was present in the sessions themselves, such as YP6 and SA4, where the co-researchers took action in connecting with the other group.

4.0 Results

4.1 Introduction

A reflexive thematic analysis of the linked YP and SA inquiries, treated as one data set, was conducted to answer the questions:

What is eco-anxiety for YP?

In what ways can young people constructively manage eco-anxiety, with help from supportive school adults?

The six main themes are presented as a thematic map (Figure 7). Each theme and subtheme will be presented in turn alongside data extracts and illustrative visual data (following Gaultier & Green, 2015) created in the inquiry sessions and in actions between sessions.

Transcription

Transcription was based on the orthographic transcription conventions from Braun & Clarke (2013), including noting significant paralinguistic features (see table 18 below).

Table 18: Transcription notation

Feature	Notation used (based on Braun & Clarke, 2013)
Laughing, clapping	((laughing)) and ((clapping)) signals a speaker laughing or clapping during a turn of talk. Multiple speakers laughing or clapping at the same time appear on a separate line as ((Group laughter)) or ((Group clapping)).
Pausing	((pause)) signals a significant pause of a few seconds or more ((long pause)) signals a much longer pause
Overlapping speech	((in overlap)) typed before the start of the overlapping speech
Inaudible speech	((inaudible)) best guess or guesses as to what was said indicated in following parenthesis (())
Uncertainty about who is speaking	Where the researcher thought they might know who was speaking, a name followed by a question mark is used (e.g. Hannah?). Where the speaker is unknown, this is labelled as "Unknown group member".
Cut-off speech and speech-sounds	Distinguishable sounds are typed followed by a dash (e.g. wa-, wor-, worl-).
Emphasis on particular words	Underlining
Reported speech (or thoughts)	Inverted commas around the reported speech " "
Identifying information	Changed details were unmarked and appropriate alternatives were inserted into the transcript.
Removed information	When a co-researcher has requested that a detail or section is removed from the transcript a note is placed that something has

been removed to enable readers to understand perceived inconsistencies in the text.

Inquiry session information

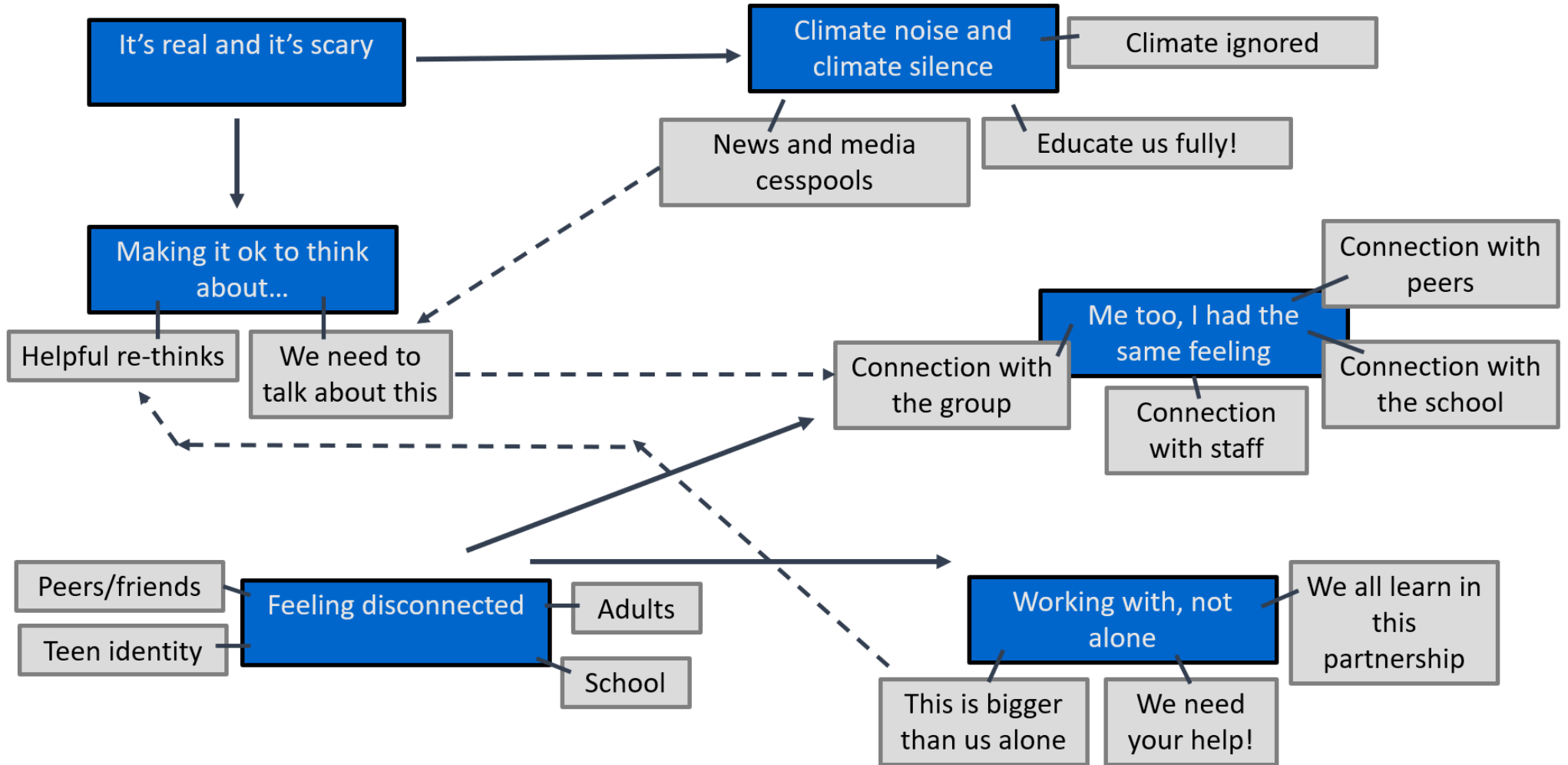
The colour codes and shorthand for each session have been retained for this chapter to help visually illustrate where the extracts are drawn from. The colour key, along with information on the co-researchers present for each session, is given below:

Table 19: Colour codes and co-researchers present in each session

Colour codes for each session	Co-researchers present in each session
YP1: Young person inquiry session 1	Young person group (ages 13-14); Carrie, Daisy, Rey and Sara Facilitator (the researcher) Link teacher (Mr Snow)
YP2: Young person inquiry session 2	Young person group; Bobbie, Daisy, Rey and Sara Facilitator Link teacher (Mr Snow)
YP3: Young person inquiry session 3	Young person group; Bobbie, Carrie, Daisy, Rey and Sara Facilitator Link teacher (Mr Snow)
YP4: Young person inquiry session 4	Young person group; Carrie, Daisy, Rey and Sara Facilitator Link teacher (Mr Snow)
YP5: Young person inquiry session 5	Young person group; Carrie, Daisy, Rey and Sara Facilitator Link teacher (Mr Snow)
YP6: Young person inquiry session 6 <i>This included a presentation to the SLT and those who had already volunteered for the supportive adult group.</i>	Young person group; Bobbie, Carrie, Daisy, Rey and Sara Facilitator Supportive adult group: Miss Gale, Mr Ice, Mr Snow (link teacher) Headteacher: Mrs Hail Members of the SLT (no contributions were included in the transcript)
SA1: Supportive adult inquiry session 1	Supportive adult group: Mrs Frost, Miss Gale, Mr Snow (link teacher) Facilitator
SA2: Supportive adult inquiry session 2	Supportive adult group: Mrs Frost, Miss Gale, Mr Ice, Mr Snow (link teacher) Facilitator
SA3: Supportive adult inquiry session 3	Supportive adult group: Mrs Frost, Miss Gale, Mr Ice, Mr Snow (link teacher) Facilitator
SA4: Supportive adult inquiry session 4 <i>This included feedback to and discussion with the young person group.</i>	Supportive adult group: Mrs Frost, Mr Ice, Mr Snow (link teacher) Young person group; Carrie, Daisy, Rey and Sara Facilitator

4.2 The thematic map

Figure 7: The thematic map



4.3 Theme 1: *It's real and it's scary*

It's real and it's scary

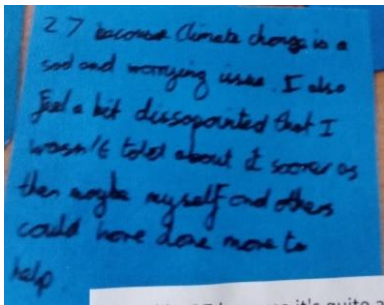
This theme is presented first as it explores the worries and associated thoughts of the YP in response to knowing about climate and environmental crises. It sets the starting scene for the other themes and helps illustrate some of what eco-anxiety might be for them.

Table 20: Theme 1, *It's real and it's scary*

The YP co-researchers expressed a strong sense that knowing about climate change is difficult.

just a bomb when you understand stuff (Sara; YP1, line 1189)

Sara's imagery paints a powerful, potentially frightening experience of that moment of *knowing*. It suggests that this knowing has come out of the blue for her. In fact, the co-researchers often spoke about before and after they knew, sometimes with a sense of guilt expressed in not having known before, as is expressed by Daisy.



Because climate change is a sad and worrying issue. I also feel a bit disappointed that I wasn't told about it sooner as then maybe myself and others could have done more to help (Daisy; YP2, lines 319-325)

For the co-researchers, knowing about climate change seems to be an existential threat to animals and human life, evoking a range of emotions, being scared, worried, angry and stressed.

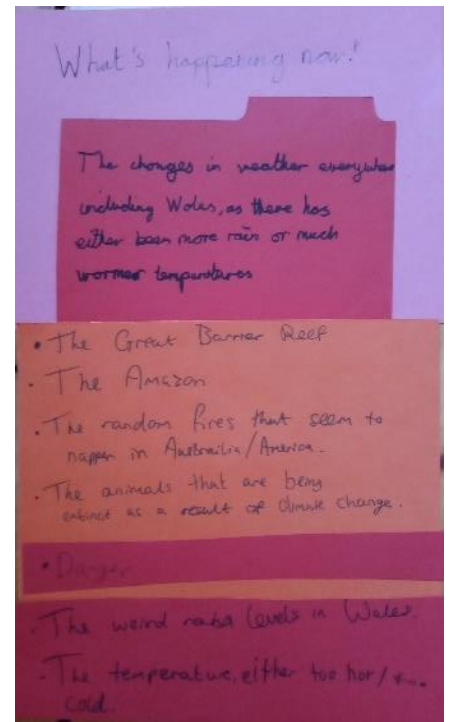
what about like the animals that are already endangered enough are going to lose a place where they can live in their normal habitat and, like, the, us as like humans, we have to have like you know a good, good temperature where we can survive, and what happens when it becomes too low or becomes too high, which is what's happening at the moment, and it just really like scared me (Rey, YP1, lines 264-269)

Rey's thoughts offer a picture of vulnerability, and an awareness that climate change is happening now. This realness of climate change became a frequent theme of discussion in the early sessions.

This climate threat implied real changes in their lives. They worried that what would be real for them and real for their future children may involve the loss of special spaces in the world and the experiences that they could have in it. For instance, Bobbie spoke of not experiencing the Great Barrier Reef:

I really want to like go like snorkelling in the Great Barrier Reef, but due to the impact on the environment, it won't be there by the, by the time I'm the I'm the age (Bobbie, YP3, lines 1360-1362)

Their climate reality also related to loss they already could see in changing weather patterns in their home spaces:



it used to be really cold winters and you can ice skate on the sea. And when I was younger, it was like those the winters were like few metres of snow everywhere. From December to January or February. But now, there's rarely any snow where I used to live. (Sara, YP1, lines 281-284)

So alongside the scariness of climate change was a sense of loss and anticipated loss that could be the reality of their lives.

These pre-existing concerns were brought to the group. However, the YP co-researchers also experienced worry when confronted with information in the group. In session 2 Daisy brought in graphs of temperature predications for the UK with timelines, that made climate not only real as a general concept, but real in relation to their lives, and this was scary:

As you can see timescales. You think "Oh, 2050 is so far away" and you realise we're in 2020 now and that's like 30 years. We'll probably still be here in 30 years and you'll be able to see the difference. It will be quite visible. Yeah, and it's just like really shocked me how visible it was gonna end up being. (Daisy, YP2 688-692)

2050 appears relatively close in the context of a lifetime for these 13-14 year-olds.

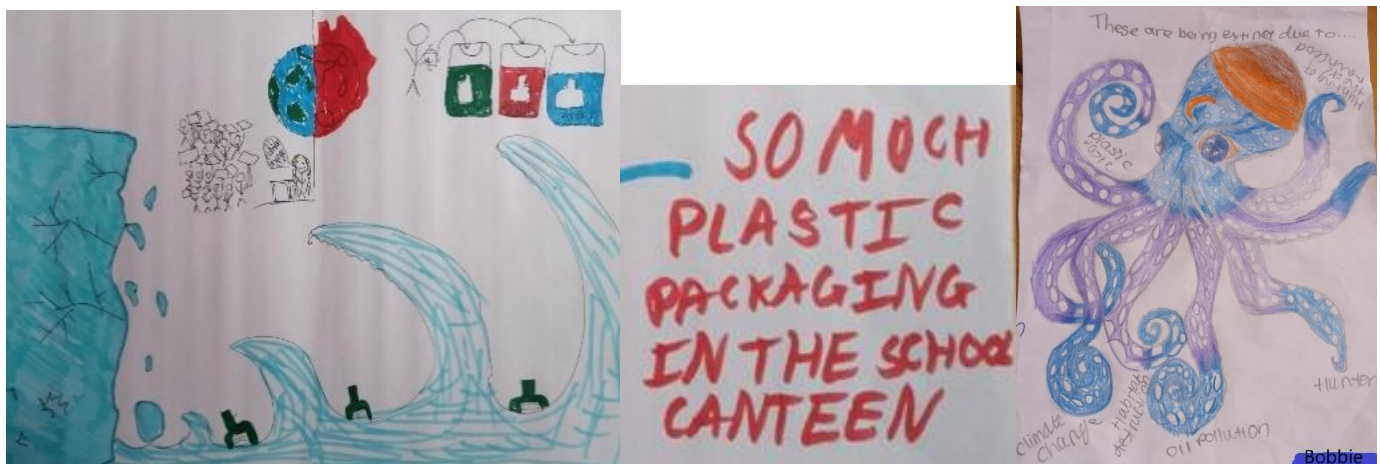
The difficulty of the realness and the scariness of climate change was not just something that the co-researchers struggled with. Rey reflected on what she noticed in her peers' reactions to watching a speech by Greta Thunberg:

they had like a look on their face, which I observed, they were like, they looked like scared, they're like having this like, like body language of like this, what she's saying is right but I don't like it so I'm going to push it away by making fun of her and saying, "oh, blah, blah, blah" (Rey, YP1, lines 598-602)

Rey sees her peers trying to find a way to deal with these difficult, real and scary ideas. This suggests that even though a small group volunteered to take part in this study, they are not the only ones in school who are feeling scared. However, it also suggests their peers may be using a different way of dealing with this difficult climate information, though not in a constructive way.

The co-researchers also brought wider environmental concerns to the group. They were concerned about animals, habitats, plastic pollution and global environmental incidents, such as the Mexico gas leak (another real and scary event, which they brought to the group). They often used powerful language, such as "ruin" seen below in Rey's ideas, implying a sense of total destruction of the environment, which expands from environmental damage in one location to "the world".

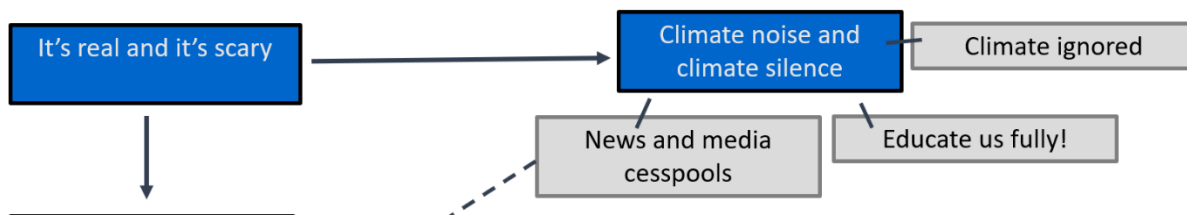
And we're in Mexico Mexico is kinda like have a lot of different, like, different habitats for different animals and the sea is one of them. And having that be in an environ- like that, it can ruin the environment and ruin everything to do with the world basically. So not very good. (Rey, YP5: 709-712)



Bobbie, YP2; Daisy, YP2; Bobbie, YP6

Summary: This theme starts to build a picture of eco-anxiety for these co-researchers as a confrontation with real, scary and difficult to bear climate knowing. This knowing is powerful and creates a reality that is threatening, but also evokes loss and sadness, as their development into adulthood and their life expectations is limited by climate change. It was also both a sudden awakening to knowing and an ongoing process, with new information being brought into the group, and perceived to be felt by a much larger group in the school system than those in the inquiry.

4.4 Theme 2: Climate noise and climate silence



“Climate noise and climate silence” is an overarching theme based on the YP co-researchers’ experiences of a noisy climate presence in some spheres of their life, but significantly not in others. Following on from the difficulty of knowing about real and scary climate and environmental issues, this explores ideas around the spaces in which the co-researchers have and have not come across this information and the impact this has on them.

News and media cesspools

Table 21: Theme 2, subtheme 1: *News and media cesspools*

News and media were the YP’s way of finding out about events in the world, including environmental disaster and political news. Many of the stories they brought to the group were worrying news stories, such as these ones:

Sara: Yeah, this morning, I read from somewhere that in Siberia it's like plus 43 degrees.

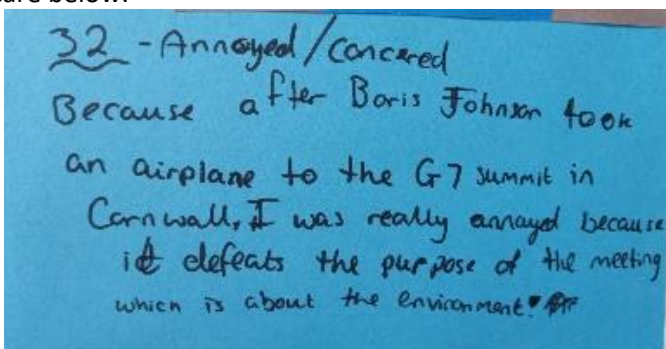
Rey: Yeah I read that.

Sara: So it's a bit worrying (YP4, 133-140)

I was watching it [the Mexico gas leak] on the news and I was like ((pause)) "great" very like sarcastically obviously but [...] I'm trying to be keeping a positive mindset about all this but that really put a dent in it (Rey YP5, 434-436)

They often spoke about how concerning a story was and, in particular around the gas leak, how helpless they felt in seeing these events where no-one seemed able to do anything about it.

News and media also appeared to be an information source on whether or not anyone else seemed to care. This included a lot of reflection on politicians’ actions. Rey describes a powerful leader acting without due environmental care below:



I saw that Boris Johnson took an aeroplane, an aeroplane, I saw on like the team's meeting, which I thought was like really annoying for me because it defeats the entire purpose of this (Rey, YP2, 203-206)

Her annoyance relates to the incongruence she has noticed between action and words. Though the co-researchers often accessed news independently, in this instance Rey had seen a post on the group's Teams page where the link teacher had shared a relevant article with the research group. Rey had a space to come to with this information, however, it does raise a question about support when sharing environmental news.

News and social media also seemed to be a difficult place to be in.

I look through the comments and there was like a cesspool ((laughs)) about climate change about like you know, [...] it basically insists that climate change is stupid why do people talk about it.

(Rey, YP5, 874-877)

"Cesspool" is a strong word, indicating the strength of feeling and disgust when reading these; the comments she encounters are really unpleasant for her. They also do not fit with her environmentally-aware and caring worldview and create a picture of others as very dismissive of this and uncaring.

Interestingly, social media also had an impact on the link teacher, who shared the personal experience of existing in social media echo-chambers by following likeminded people, which the YP agreed with:

I just feel I get overloaded sometimes

(Mr Snow, YP5, 817)

Added to this was a sense of mistrust of social media as a source of fake news:

There's like YouTubers and [...] the young people actually look up to a bit and listen to them more than they do other people because they think they know things, but then they say something [...] which is false information then everyone has a false idea of what's actually going on.

(Daisy, YP1, 1162-1166)

This was picked up on by the supportive adult co-researchers, who reflected on a need to check the source of concerns with young people:

it might be something which I can easily say, oh yeah that's that's just fake news on the Internet

(Mr Snow, SA3, 1281-1283)

Summary: Therefore, news appears to add to a construction of scary and threatening environmental crises. The experiences of news and social media are in themselves difficult, constructed as unpleasant places where the YP encounter worrying stories, a lack of care by politicians, or dismissive comments from the wider public. News also presents a frustrating incongruence between what powerful people say and what they do relating to environmental care. In all, this makes news and social media problematic places to encounter climate information.

Climate ignored

Table 22: Theme 2, subtheme 2: *Climate ignored*

This theme was created out of an enduring sense in the YP inquiry of climate change as ignored, forgotten or de-prioritised in more than one sphere of their lives. Carrie offered a powerful picture of how she saw climate change in the reporting on the 2021 G7 summit:

But I feel it's [climate change] gone, it's just rolled down the hill, and that just makes it feel, I feel like underneath there, it's like in a crowd of people trying to tell what to do and it's just falling and getting pushed down by everybody.

(Carrie, YP4: 1728-1737)

There is a sense of this hugely important issue being no longer present in the talk of these powerful people. It is almost swept out of sight under the words and weight of this crowd, evoking a sense of mistrust in these people to address climate change.

Similarly, many of the YP co-researchers commented on news coverage of events, as well as company advertising and selling trends, as a process of busy active coverage and then sudden disappearance:

They do a massive thing to try and get people's attention to it. They draw it up, and then they make a massive thing, and then it dies down.

(Rey, YP3: 1567-1568)

These growing and dissipating waves of interest in climate appeared to give the impression of cycles of remembering and forgetting. However, for the co-researchers this seemed purposeful ("they draw it up"), portraying a fickleness to news, politics and company interest, rather than true engagement with an important global issue. As Sara comments:

so, what problem is more, most dramatic gets the most media coverage. Like climate change doesn't kill people everyday.

(Sara, YP1, 816-817)

Other priorities also seemed to be often given precedent over the environment, suggesting to the co-researchers that these are considered to be more important issues:

So I just feel that it's still like down, like at the bottom of the list than at the top of the list for important stuff when I feel it should be nearer to the top because it will depend on our future

(Carrie, YP4, 154-156)

This was mirrored in school where they also saw prioritising of GCSE work, or for staff the need to prioritise marking to manage workload.

In addition, both the YP and the SAs saw a prioritising of COVID over the climate. COVID had impacted on environmental care at school in a number of ways, from limiting the option of staff carsharing to keeping the bus engines idling to ensure air flow. It was also very visible in the YP's meeting with the canteen staff, as described here by Mr Ice:

the girls had even bought in, like cookies in their plastic saying you know, "what's this all about, there's loads of plastic here" and they were having to say "well, we wouldn't normally, but with COVID at the moment [...] or we can't do that at the moment we've got to use these, you know, cardboard plates or whatever they are, because at the moment it's COVID"

(Mr Ice, SA3, 700-708)

Therefore, even when trying to take direct action, COVID was, at least in the short term, a barrier, and given a higher priority than climate.

However, probably the most significant and returned to area was that the YP had missed out on education on climate change.

Because our primary school I didn't really learn about climate change. I didn't and throughout year seven and like year eight we like weren't learning about it [...] they should teach that at schools.

(Bobbie, YP2, 6-8)

For Bobbie there is a sense that school has not done its job, by not teaching a topic that is really important. This importance to her was underlined by the fact that this was one of the first things she said to me as the facilitator. This became an important topic for staff too, who realised that this year group would not have had much education on climate change as something they had only recently started teaching in the school.

Though climate education felt conspicuously absent, they did have some education on it. However, this also felt very limited:

Like sometimes in lessons you learn about it, but we don't do anything about it.

They teach us about it, but then they say, but then after we've learned about it, they're like, okay, not doing we're moving on to the next topic now.

(Carrie, YP3, 1514-1517)

For Carrie climate seemed to be something passed over quickly, not given the due attention it deserved.

Additionally, a crucial aspect of action ("we don't do anything about it") also seemed to be missing in her education. This was an idea present elsewhere, especially in later staff conversations.

"Climate Ignored" then adds to the negative picture the YP can construct, showing a fickle interest in climate from news, companies and politics, but also at a school level. Here one could see a notable silence on climate, where it is deprioritised and almost absent from their education. Along with "news and media cesspools", this material constructs a very negative overall impression of the importance of climate in the minds of others.

Educate us fully!

Table 23: Theme 2, subtheme 3: *Educate us fully!*

Though a very negative impression has been built of the limitations of where the YP co-researchers gather their climate information, including an almost absence of it in school, the inquiry enabled an exploration of this. This theme was built around the need for climate education, how the staff explored this and the YP's response.

A need for education was shared by most of the YP co-researchers during the inquiry. This was both for the co-researchers themselves and as a way to help others change their behaviour through education. They felt that this was a significant way forward to create change, as in this example from Rey:

educating people on the dangers of climate change can change the course of how our environment ends up being

(Rey, YP6, 826-827)

There was also a more localised need for education relating to solutions that were being tried in school. This related to a tokenistic impression of current school actions that was expressed by both YP and SA co-researchers:

Carrie: you know the polytunnel I know it's there but I actually don't do anything

[...] I've never actually been in the polytunnel

Mr Snow: You need education about it. Communication about it's poor. [...]

Carrie: They say it's there they say "oh we've got a polytunnel" but they don't teach you about it

YP6, 1523-1540

Carrie suggests that the localised school-solutions, like the polytunnel, needed to be a part of her wider climate education.

Coupled with this was a need to teach and for YP to know about solutions more broadly. This was spoken about by both YP and SA co-researchers. Staff recognised the importance of the YP knowing how to go about creating positive change and that they had a role in teaching them how to do that:

Ms Gale: You can also teach them about positive change and how to action it

Mr Snow: So yeah that's what we said throughout to focus on the solutions and the

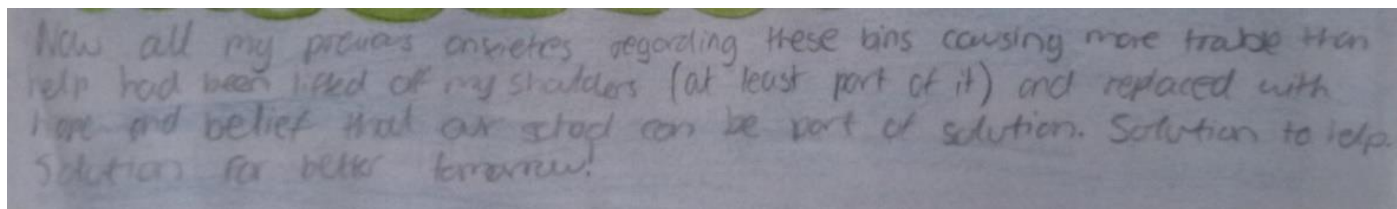
Unknown group member: ((in overlap)) empowering

Mr Snow: what we're doing towards those challenges as well.

SA2: 239-250

They also felt that this would be an empowering experience for the YP.

In fact, this was born out in the activities of the YP inquiry group, where knowing about solutions was related directly to their wellbeing. In reflecting on her experience of researching recycling as part of observing how students used the bins in school, Sara wrote:



Now all my previous anxieties regarding these bins causing more trouble than help had been lifted off my shoulders (at least part of it) and replaced with hope and belief that our school can be part of the solution. Solution to help. Solution for better tomorrow!

(Sara, YP2, 467-470)

Knowing that recycling is something that does make a difference and that school can actually do something meaningful, is really powerful in supporting her with her worry. She added to this in our group discussion that:

I did some research on like recycling and how it works and how we can help. It really gave hope, kind of like our school, even though it's like teeny tiny bit, it still helps, and you make a small difference

(Sara, YP2, 235-238)

Sara feels that school and herself can make a difference, indicating a connection for her between knowing solutions, hope for the future and a sense of self and school-efficacy in environmental action.

Others directly compared the experience of knowing about something positive connected with climate to their negative experience of news. Rey also described a change in her thinking as a result of researching eco-schools and the solutions that they used:

it's been researching about schools and how they help and different school, like how different eco eco friendly eco schools do their do their eco stuff [...] we can beat climate change

(Rey, YP3, 216-219)

She has changed from an implicit previous assumption that climate could not be beaten to this powerful statement that this is possible.

The sense that staff had that teaching about solutions would be an empowering experience was also echoed in their re-envisioning of climate education based on the possibilities of the new Welsh curriculum:

Curriculum is action, like it's empowering the students to make changes in the community in the on a local scale but bigger and so in all of the schemes of work and the learning that they're doing

(Mr Snow, SA3, 1008-1010)

This directly addressed the feeling of lack of action expressed by the YP co-researchers, as action became constructed as an integral part of their education, but also raised the importance of climate as something that would be integrated across their learning.

However, staff also recognised the need to include emotion as part of climate education. They recognised how difficult this topic could be, and sought to change the way they approached it to acknowledge emotion around climate from facilitating discussion of emotion in class to building their planning around it:

it's almost like starting that part of the scheme of work with "How do you feel?" and you've got these different emotions, and then building on that

(Ms Gale, SA3, 1490-1492)

The supportive adults planned to take this wider, planning research about incoming year six students' thoughts and feelings, as well as those already in school.

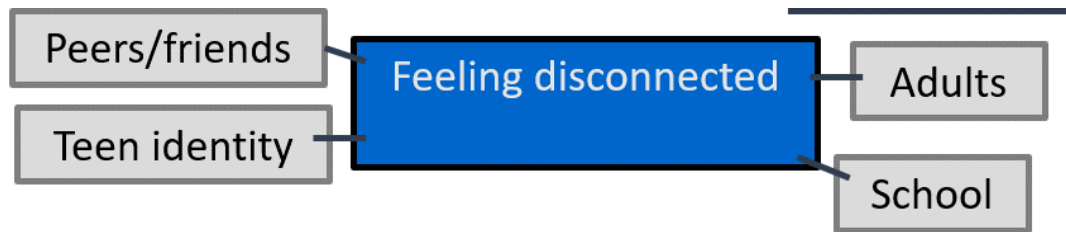
This new approach to education was really valued by the YP co-researchers when described to them in the final meeting. Rey reflected that:

I like, like the cur- curriculum thing I was very comfortable with like, because you know that we're taking it not just from a talking point it's actually going to be stood up talked about... so hopefully that encourages younger, younger generation to take a stand in what they want to talk about. (Rey, SA4, 1883-1891)

For Rey, and the others, this was a sign that climate was going to move beyond an abstract "talking point" and be taken seriously at school. She also indicates the importance of seeing this education for young people to help them to feel confident to talk about climate. The implicit sense being that the younger generation do not necessarily currently feel comfortable doing this.

Summary: Climate at school appeared to move from a silent and absent topic to something that would be fully explored. The YP expressed a need for climate education, previously missing in their schooling and staff explored this in relation to the new Welsh curriculum. What the young people wanted was full education on climate change, crucially including solutions, which are powerful supports for the YP's hope and sense of self and school efficacy.

4.5 Theme 3: Feeling disconnected



This overarching theme was drawn together by a sense of difference and disconnection for the YP co-researchers with many aspects of their immediate micro system and as individuals with their own identity.

Teen identity

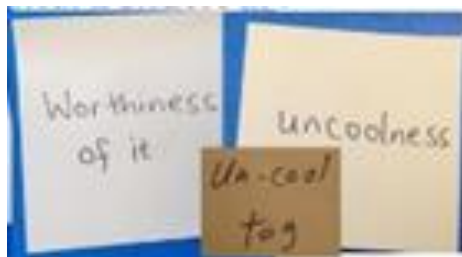
Table 24: Theme 3, subtheme 1: *Disconnected from teen identity*

Disconnection for the YP co-researchers seemed to spark from their own identity as environmentally-caring, and this identity disconnection was the root of creating this mini-theme. Caring appeared to be a negative identity. As Sara noted, her environmental interest and care meant that she felt different:

I did feel so weird, like a nerdy kid.
(Sara, YP2, 1036)

Her word choices suggest a negative social construction of environmental-care, which she associates with younger children (“a kid”).

This was also observed by the supportive adult co-researchers, who identified negative constructions of caring in one of the group activities:



SA3: 1940

Caring also appeared to be not part of a teen identity. When the co-researchers spoke of their conversations with their friends it seemed surprising to their friends that they would choose to think about climate change, while also not being something they “should” be thinking about:

So sometimes because I talk about it with some friends outside of school [...] when we're out in the park I mention it and they're like, "What, why are you thinking about that now? You should be thinking about like we should be doing something more fun"
(Rey, YP2, 1039-1042)

What they should be doing instead is “something fun”. This was also reflected on by the staff group, who noted a strong difference in environmental-care between the co-researchers and their peers and at a wider level between the teens and those in primary school.

They related this to wider societal constructions of protestors and discussed their responses to climate protest and action at a personal level and in how the school acted:

Mr Snow: why do we never as a school support like climate action groups or why do old people get all the

Mrs Frost: Perhaps it's because when you say climate action group automatically I get a negative thought

Mr Snow: And that's part of the problem isn't it

Mrs Frost: yeah

Mr Snow: There is a stigma attached to climate action
(SA1, 1652-1667)

Peers and friends

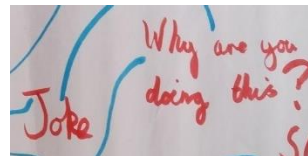
Table 25: Theme 3, subtheme 2: *Disconnected from peers and friends*

The second theme in this area was created from a wealth of talk around peers and friends and how they reacted to climate change.

There was a sense of disconnection with their friends over their interest in the environment:

It's like when we were coming here today and all our friends were just like as soon as we went round the corner are just like "why are they doing that? This is so so boring." [...] Yeah, they said like "well what's the point?"

(Daisy, YP2, 1052-1060)



Daisy, YP2

Their friends do not seem to understand the co-researchers' interest and this appears to create a divide between the co-researchers choosing to be part of the inquiry and the rest of their friendship group. Their phrase "what's the point?", indicating a lack of value and a meaninglessness in climate inquiry, was spoken of repeatedly in different sessions suggesting that this dismissal was something the co-researchers struggled with.

This disconnection seemed enhanced by the way their peers seemed to push away climate information:

A lot of people were laughing at Greta at school, doing impressions of her, [...] because they make fun of what she's saying they're not actually listening to [...] what she's trying to put out.

(Carrie, YP1, 571-574)

This ignoring of the message in Thunberg's words was spoken about over a number of sessions, again implying something that bothered the group. The impression this joking reaction gave to the co-researchers was described by Sara:

Yeah sometimes it feels like climate change has become a one big joke to many people.

(Sara, YP6, 330-331)

An important and significant issue for the co-researchers was not being taken seriously and that was difficult for them, returned to repeatedly. However, as a reaction that they explored together they also shared a different understanding of this joking response with each other, seeing it as a coping mechanism:

We've also learned that um like we've found a way to see how people cope with talking about climate change is as they said like, is a joke, if you know what I mean. So they'd just be like, "Oh, it's not our problem" and then like laugh about it when it's not a laughable matter

not
(Rey, YP6, 336-340)

However, this did take away the difficulty they felt

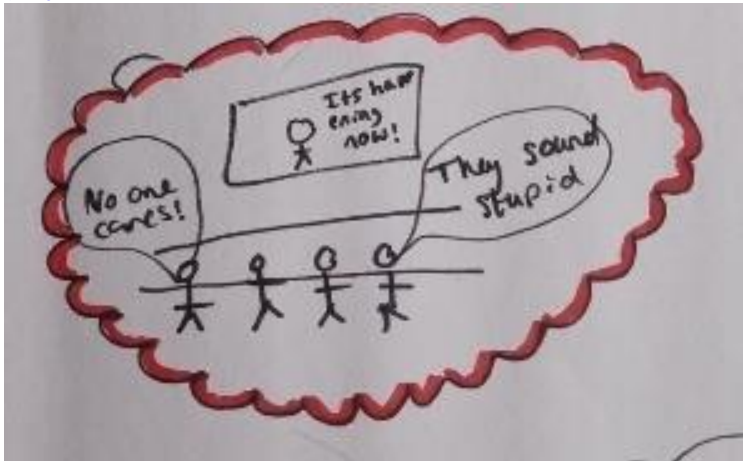
with climate being a joke (“when it’s not a laughable matter”) and they identified their peers and friends changing their reaction as something that would help their difficult feelings around climate change:

• Not to joke about it

YP6

An overall impression was felt by the co-researchers of their peers as uncaring. When looking at each other’s rich pictures of their current experience of being a climate-concerned young person in their school, Rey saw this as a similarity across their representations:

saying like with like other people how they don't really care
(Rey, YP2, 980-982)



Her illustration, above, was tellingly of their peers’ reaction to Thunberg’s speech, outlined in red to show the negativity of this incident.

Not only did their friends and peers block out climate information they were shown at school, but friends also appeared to block the co-researchers when they wanted to talk about it.

so like when like me and Sara in our friendship group we like talk about it sometimes but then like I feel that they like try and like block it, they don't want to talk about it like this.

(Carrie, YP6, 324-326)

This meant that they could not talk to their friends about something they felt was both important and worrying.

This reaction of their peer group and their friends made it difficult to voice their views.

I was made fun of and called Greta Thunberg for speaking out loud for defending my opinion. I know for a fact that I am not the first one, and sadly will not be the last one to experience it... I believe that is the school's duty to stop shaming people for their beliefs and start to give better education.

(Sara, YP5, 2166-2174)



Sara’s words indicate a social cost to being an environmentally-concerned young person in high school, where voicing her thoughts has resulted in a really difficult response from her peers. Her use of “shaming” describes a powerful negative experience. This is echoed by other co-researchers:

it wasn't talked about. And if it was the attitude towards it was one of derision

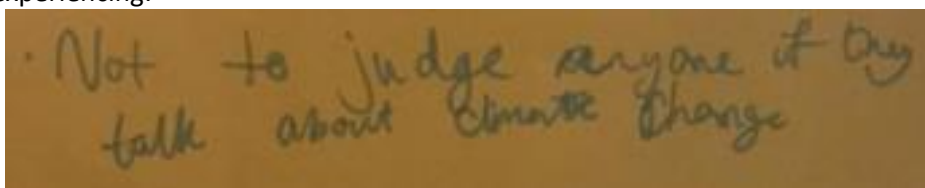
(Daisy, YP6, 728-729)

because sometimes you want to share with people but then you are scared about their about what they think

(Rey, YP6, 265-266)

Rey did not share her thoughts openly because of the anticipated peer response; her voice has been impacted. Daisy moves from a softer language of “joke” she used to describe peer responses in previous sessions to a much stronger expression of “derision” here, suggesting a powerful impact on herself as an environmentally-caring young person whose views are being disdained.

In thinking of what would help them, the co-researchers also identified the feeling of judgement that they were experiencing:



YP6

School

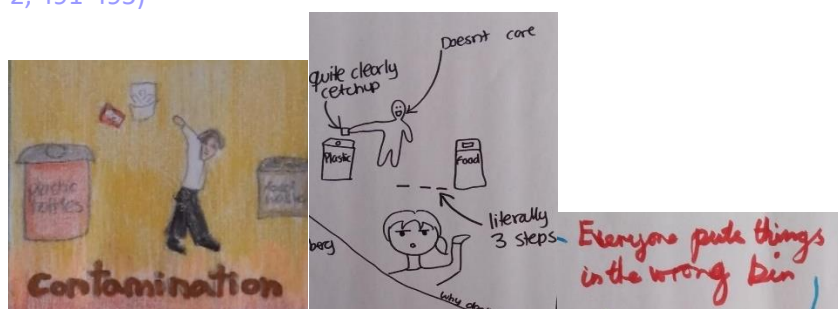
Table 26: Theme 3, subtheme 3: *Disconnected from school*

As well as an overall sense of disconnection with peers and friends, the co-researchers appeared to feel this with the school, which is the focus of this third subtheme.

They noticed a lot of signs of uncaring within the school. Sara comments here on her observations of the other pupils in the canteen and how they used, or rather misused, the recycling system:

people put ketchup packets to the plastic bottle one, which is quite annoying because they can clearly see it said, plastic bottles with large writing, but they still put ketchup in there. So basically destroyed a whole bin worth of plastic from being reused.

(Sara, YP2, 491-495)



Sara YP2, 444; Sara, YP2, 1243; Daisy, YP2, 1288

There was a strong sense of frustration and again strong language (“destroyed”, “contamination”) used to describe the impact of Sara and others seeing this behaviour. The co-researchers know the effect of mixing food waste with the other waste streams on what will happen to it, and therefore, they see uncaring behaviour that damages the environment.

The school as uncaring was also present in their conversation about the school polytunnel, a potential symbol of care, that looks disused:

Carrie: now it's like barricaded up and it just feels like we're not allowed in it.

Rey: I think it's a bit overgrown

Daisy: Year sevens used to go in there quite a bit with their food tech like PSE PE or like food tech all after each other so they used to go in there and do stuff in the polytunnel but I think they've stopped that now

Sara: I walked past it and it looks like it looks really dead

YP6: 1555-1567

Not being allowed in suggests a deliberate exclusion from this school solution, which appears to be abandoned. Viewing this might suggest that the school as an organisation is abandoning climate mitigation solutions.

This seems related to the concern that Daisy raises around the pushing away of responsibility:

we've talked a lot about um how we're worried everyone else thinks it's somebody else's job to fix anything and it's really just all of our future that's going to be impacted by um climate change and global warming. So, yeah realising that's just been a big worry

YP6: 317-320 Daisy

She is concerned about whether anyone is going to step up and take action. Coupled together with seeing peers and school as environmentally uncaring there does not seem to be much hope that people in her micro system will “fix anything”. This was also explored by the supportive adults, who noted the experience of seeing cleaning staff mixing the recycling and general waste bins, and began to ask questions around who should be taking responsibility.

Mr Snow: As schools we don't really have to do that at all do we and it's just not part of our it does not feel like our responsibility but it should be shouldn't it?

Mr Ice: Yeah

Mr Snow: As places where young people come every day
(SA2: 869-876)

The supportive adult co-researchers note the distancing from environmental responsibility as a general accepted social construction as well as the importance of school taking on that responsibility visibly for the young people who go there. As school identity does not seem to include environmental responsibility, this is in direct contrast to the identity of the YP co-researchers as environmentally caring.

The co-researchers' disconnection with school also seemed to be added to by not being listened to by school staff.

And it just feels like people don't listen.

(Sara, SA4, 1805)

However, they experienced a growing frustration when a teacher began blocking their climate talk.

Sara: Also at the end that one teacher that one teacher yes, that teacher. He started talking about how the school is doing enough. Basically, we didn't have time to speak about any more of our stuff. Like we all had lists of questions

Carrie: Yeah

Sara: lists of topics. And basically Rey, and I and someone else got to ask one question. Three people out of eight of us there got to ask

Rey: It was quite hard to get a word in

(SA4: 910-923)

This teacher appeared to block their talk repeatedly with his own. Their narrative that “school is doing enough” dismissed the co-researchers' concerns and the solutions they wanted to discuss. Though other members of staff, including the headteacher, were very supportive, this one teacher's approach still made a big impact on the YP co-researchers, which they could not challenge, but could bring to the group.

Adults

Table 27: Theme 3, subtheme 4: *Disconnected from adults*

As well as the frustration with this particular member of staff, there appeared to be a sense of disconnection with adults more broadly, which is the focus of this final subtheme.

The co-researchers felt a frustration with inaction by adults that they explored over a number of sessions. This sometimes related to parents, but often was broader referring to previous generations.

But twenty years ago nobody cared. Nobody probably um did anything so that's why we're here now

(Sara, YP6, 1694-1696)

This inaction was often felt to be a choice that adults had made, despite knowing about climate change:

I just find it very frustrating that adults have been here longer, and like, I'm sure they've seen it, but they chose [...] they just like put it off

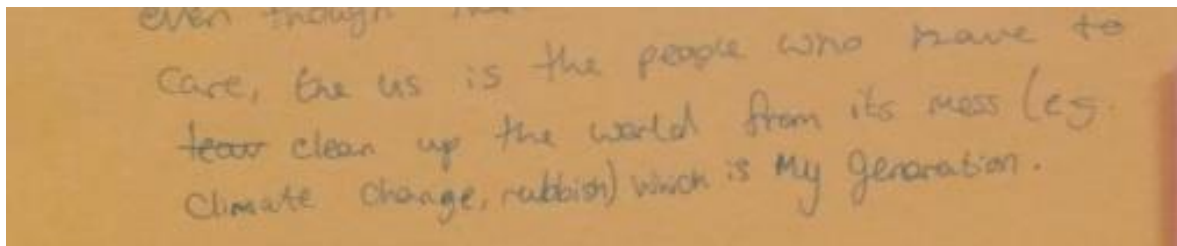
(Bobbie, YP2, 808-811)

To Bobbie adults seem to have deliberately ignored climate change. In fact, many of the co-researchers felt strongly that adults were to blame for the current situation.

So basically adults are, in my opinion, they are kind of at fault because they didn't do anything

(Sara, YP4, 1745-1746)

This inaction meant, for the co-researchers, a difference between previous generations, who had created the problem, and them as the ones who had to clean up the mess:



YP4

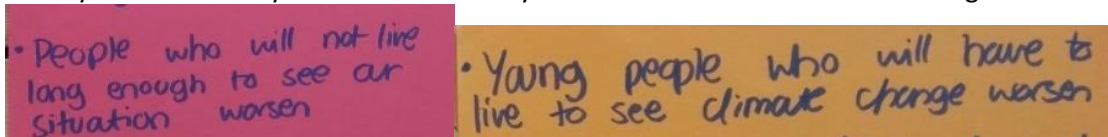
There was also an awareness of the different life experiences that they would be able to have in contrast to those of previous generations.

is really like sad because you can see right now, you can see, our parents having this like life that you know we're supposed to be having and like having a full life, as you would say. If this keeps going on we might not have the chance to do that.

So you can see more like, I don't know, jealousy, of having some sort of, like, living a life before having this worry of climate change

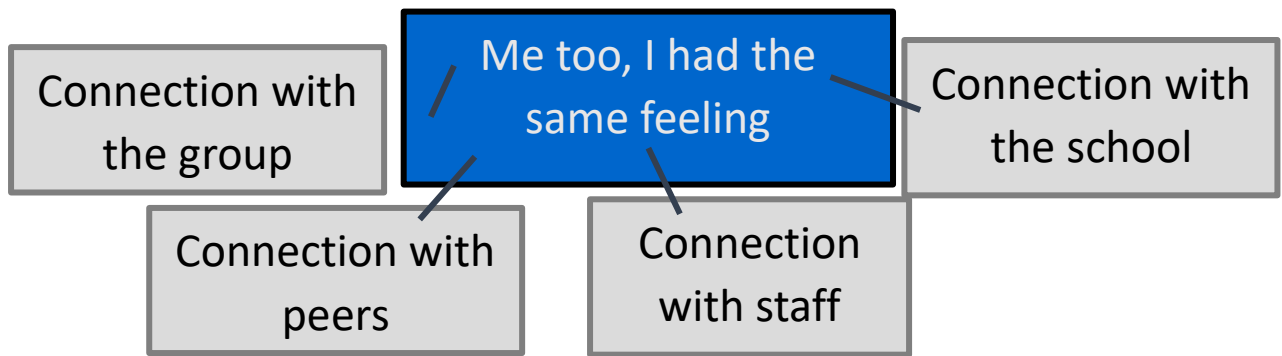
(Rey, YP2, 725-730)

There is an implicit assumption in Rey's reflection that the way their parents have lived is a "full life", which the YP will not be able to live. Knowing about climate change appears to be a weight they have to hold as they think about their lives and their choices in how to live it; on the kind of life they feel they may have expected to live, the life they feel they should ethically live and the life they will be able to live in a climate-changed world.



YP4

4.6 Theme 4: Me too, I had the same feeling; building a sense of connection



Following from the YP co-researchers' feelings of disconnection, this overarching theme and its subthemes encompass the importance of connection for the YP. This connection was felt at different levels; with the YP inquiry group, with their wider peer group, with SAs, and with the school.

This theme is based on talk around the importance of seeing and knowing that others might also care about climate and the environment. As Sara reflected:

*It was kind of calming to know that something, somebody actually cares.
(Sara, YP2, 544)*

For Sara, there is wellbeing in knowing that others care. This is also tied up in the implicit message in "actually care" that previously it was not clear whether others did care, or whether their care was real.

Subtheme 1: Connection with the group

Connection with the group

Table 28: Theme 4, subtheme 1: *Connection with the group*

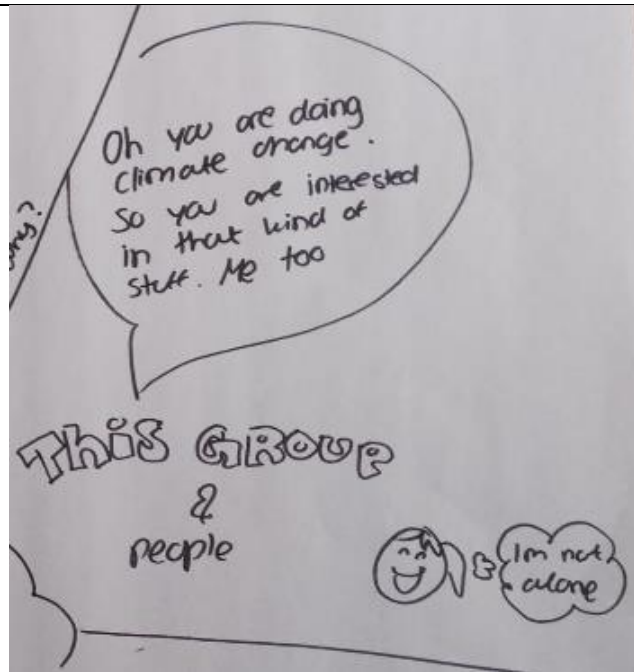
The co-researchers began to comment on the connection they felt with each other from early on in the inquiry. There appeared to be a narrative told around an idea of finding each other. This seemed in part to be about moving from a place of loneliness as a young person who cares about the environment to a place with others, as is explored in the following extract:

Sara: sometimes it felt like I'm the only one who actually cares, who doesn't really understand why people are joking about so serious things, so when I met you guys I didn't feel so alone. [Group laughter]

Rey: Yeah me too! I got that same feeling.

Sara: I did feel so weird, like a nerdy kid.

Rey: [...] then finding other people like you guys to share that enjoyment with and share those like feelings that you can't really share with other people, it's really good to have that like sense of, like, knowledge that you have, these, these, like this place to go to to talk about it when you're feeling, you know, you can, you know, share it (YP2, 1028-1049)



(Sara, YP2, 1244)

Not only have they found others to be with, they also seem to have found others who understand and who they feel comfortable in being able to share their thoughts with. This contrasts strongly with the difficulty they elsewhere describe in doing this with peers and even friends, and even within this conversation, where a climate talk vacuum is suggested (“you can’t really share with other people”). Rey also highlights the importance of a distinct space (“this place”) where this connection, sharing and understanding is possible.

The group is also somewhere the co-researchers seemed to feel they could belong:

The last weeks have been really eye opening for me. Before meeting all these amazing people I felt powerless, and alone with my views [...] worries about climate change. [...] Around a week later on a Thursday afternoon I entered the geography room to find out I wasn't alone, surrounded by all the great people who care. Everyone [...] not just the people worried about our environment have the right to feel like they belong.

(Sara, YP5, 2163-2173)

Sara links a sense of belonging with being with others who also care. The experience of the group as a distinct space is also noted here, where for Sara there is a sense of being held by the group (“surrounded”) akin to being contained.

This distinct group space, with these others who care and understand, seems to create a safe space:

finding these people and ((laughs)) speaking to them about it makes me makes everyone feel more relaxed and just more in a safe environment.

(Rey, YP6, 266-268)

Being able to share with likeminded people was also important:

So we shared our opinions and what we thought of climate change and what we already knew and like other people who think similarly and it was really relaxing.

(Sara, YP6, 256-258)

Sharing with likeminded people seems to have an impact on Sara’s wellbeing. In a similar way, being in the group more generally also appeared to support wellbeing. In the final meeting, Sara was able to reflect on the impact of not meeting for a few months and then returning to the group:

Sara: And calmer

Facilitator: You feel calmer?

Sara: Yes

Facilitator: Because you were saying earlier that you hadn't felt so calm in that between [time]

Sara: Yeah it was so therapeutic
(SA4: 1846-1859)

It felt significant that the group was also a place where Rey felt able to state:

And then me being an environmentalist (YP3, 34 Rey)

This statement followed the recognition the previous week of the importance of being with this group with similar values and interests. It seems as if feeling secure in the group of likeminded people she was able to declare herself as "an environmentalist". She had also linked environmental interest and fun together, two things that had seemed separate when she had spoken to her friends before (as explored in "Teen identity" within "Feeling Disconnection"):

*promoting climate change can be enjoyable because you have that feeling of doing something good for the world and then finding other people like you guys to share that enjoyment with
(Rey, YP2, 1042-1045)*

The group and the inquiry then became something that the YP co-researchers seemed to value:

Facilitator: You are always still, even at this point, allowed to withdraw from the study, that means you can take information out, that means you can stop taking part okay.
Alright.

Unknown YP group member: Aw. I don't want to do that
(YP6, 62-69)

Rey: It was very well we hadn't done it in a while so it was very refreshing I guess.

Facilitator: Ok

Rey: It was nice to have back that experience because over the six weeks or two months we haven't been doing it because I felt a bit like, "oh oh that's nice" and then like I'm not sure about you guys I felt like "oh I missed it" you know what I mean?
(SA4, 1785-1795)

This was cemented through the peer support and encouragement they experienced in the group, which featured throughout the inquiry sessions:

Bobbie: Wow, amazing!

*Sara: There's so many points. I never thought, like. They were really good
(YP3, 717-720)*

There was also a sense of group achievement:

[Clapping]

*Carrie: We did it!
(YP4, 1333-1336)*

This culminated in new friendships being built:

*It's made a really big difference to our everyday lives. We didn't used to be friends
(Sara, SA4, 2331-2332)*

The co-researchers also felt that the inquiry was fun, as can be seen in the way Carrie began her letter to SLT:

*Firstly, I'd like to say that this has been so fun doing this
(Carrie, YP6, 783-784)*

This enjoyment was also evidenced throughout the sessions, which featured a great deal of laughter. This was mirrored in the staff group, which was important as this was a group who struggled with workload and other pressures of being teachers.

((Group laughter))

(SA3, 47)

Summary: The young people expressed a sense of finding their group and no longer feeling alone. This group was a place of understanding, support, safety and belonging with likeminded people, where they could also have fun. It was safe in this place to take up an environmental identity as a young person.

Subtheme 2: Connection with peers

Connection with peers

Table 29: Theme 4, subtheme 2: *Connection with peers*

This second theme related to the importance the group found in being able to find connection with their peers, who they had previously felt very disconnected from.

Having sent out a questionnaire to the pupils in the school (Appendix 10) the co-researchers all expressed happiness at the number of pupils who had responded as a sign that they were interested. The importance of seeing this engagement from other pupils is highlighted in this extract for Rey and Carrie:

Rey: Other people in our school um want to talk about climate change

Carrie: Um other pupils in our school think that they they are doing something to help

[...] it shows us they're doing something here.

(YP5, 1049-1060)

The questionnaire also marked a turning point for the group from thinking that their peer group do not care to thinking perhaps that they do:

many people think that their friends don't care about climate change, because we thought about that [...] but then when we see that questionnaire maybe they do care about it.

(Sara, YP6, 470-478)

It became really important then for the group to reach out to tell others in the school that they were not alone in caring. This perhaps also implies how difficult it had been for them in thinking they were alone in this. This idea was championed by the supportive adult group, who set this in motion in the final session:

Starting perhaps with [...] what we're doing at the moment, why don't we take the picture and put it in Mrs Hail's blog for this week that we are sitting down and meeting and you know just so people understand that actually there are a group of students and a group of teachers with them [...] thinking about ways that things that we can do [...] if there any other like minded people like you out there they that can see that there are others who kind of feel the same way.

(Mr Ice, SA4, 1033-1042)

Subtheme 3: Connection with staff

Connection with staff

Table 30: Theme 4, subtheme 3: *Connection with staff*

As well as finding connection with their co-researcher group and their peers, the co-researchers also appeared to develop connection with staff, which is the focus of this theme.

The YP co-researchers recognised common interests between themselves and school staff following their presentation to their headteacher and the staff research group (plus uninvited SLT). As Carrie reflected:

Um at the start I was nervous a bit but now I feel that because they think similar to us I feel more that we've that we can just talk to them, I feel I have more say of what to say to them

(Carrie, YP6, 1112-1115)

Carrie also indicates a sense of increased power now ("I have more say") in talking to staff about climate, as a result of talking with them. This also implies that she felt less power previously.

This reference to power is interesting also in the context of Rey's practical action of talking with her drama teacher:

I was talking to my drama teacher about it... and I thought that was really good that like someone more like has more of a position of power can give, can care about something like that

(Rey, YP2, 555-561)

Rey recognises teachers as powerful and implies that she does not expect people in power to normally care. So, it is important to her that her teacher does care. Similarly, for all the co-researchers it was important that the supportive adult inquiry group, powerful adults, seemed to care, just like they did.

The connection with staff also seemed formed through the quality of their interaction. Daisy commented on this:

Because it's more conversational and their presentation... because it's a conversation it's more relaxed and then that would generally also helps with feeling more calmer

(Daisy, SA4, 1872-1875)

She, like other co-researchers, valued the informal, relaxed conversation they had with staff in the final session. This is probably in contrast to their normal experience of speaking with staff.

The supportive adult group also highlighted a need for them to listen to the YP co-researchers.

I think we're going to try um much harder to know what to teach basically based on you guys like listen more I guess [...] maybe once I've designed actually, I'd like to show like you guys what it looks like as well. [...] it would be nice to get some feedback.

(Mr Snow, SA4, 1495-1501)

The supportive adult group also then showed value in hearing the YP's opinions.

Staff listening was noted by the YP:

this session it's made me see what the teachers' point of view is and how they actually want to listen like and it's like when I more teachers came to just listen it made me even made me feel like more happy because they wanted to come and listen

(Carrie, YP6, 1809-1812)

Carrie indicates a wellbeing value for her in being listened to by staff, as well as the importance for her in being able to hear what staff thought too. This was a conversation that involved different members of staff including the head talking about what they were concerned about and this was probably an unusual experience for them all, where YP got to talk to SLT from their agenda rather than an adult led one.

Finally, it was also important to the co-researchers to have adults in school who knew how to respond to them:

then we'd have someone say there would be maybe they could be also like a psy-called like trained in like child psychology. [...] like they know what if we want to go to them for concerns they know how to react with us and they also have the knowledge of the environment

(Rey, SA4, 1598-1603)

Rey breaks down the role of the adult into "knowing how to react" and "knowledge of the environment". In this way she is suggesting a dual role for facilitators, with implications for EPs and teachers. This could refer to my role as a

TEP, with knowledge of psychology, and the link teacher's role, who as a geography teacher, also had a good knowledge of climate change, suggesting that this combined knowledge is helpful.

Summary: With staff, the YP also found a sense of commonality in shared opinions and interests, and valued knowing that they cared. Staff who listened, and talked in a genuine and informal, relaxed way was really valued, possibly relating to the distancing power dynamics usually experienced in the school. YP valued the idea of an adult in school who understood and knew how to respond to them.

Subtheme 4: Connection with the school

Connection with the school

Table 31: Theme 4, subtheme 4: *Connection with the school*

The final theme in this collection developed from the growing sense of commonality with the aims and actions of the school, in contrast to their previous sense of disconnection.

The co-researchers noted signs of care in school, from the recycling system to the polytunnel and to environmental news coverage within school. The following exchange illustrates the progress Carrie and her teacher note in how COP26 was included in school:

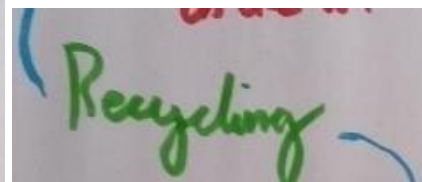
Carrie: Also in school, instead of just saying, "oh, COP 26 is happening" they actually made us watch the videos about it to learn about it so it's

Mr Snow: It's progress yeah

Carrie: not breezed it past and it's just news they've actually the school thought "ah we should tell kids about this".

(SA4, 402-410)

For Carrie, through highlighting COP26 school have also shown that is it important and a role for them to tell pupils about this kind of environmental political event.



YP2: Rey, Bobbie, Daisy

However, signs of care and interest at a school level were not clear initially, as is shown in this extract from session 6, following the first meeting of YP with staff:

Facilitator: I was just wondering did you know about those things?

Rey?: No not all of them

Daisy: Not all of them

Bobbie: No

Mr Snow: I didn't know about half of those to be honest

Facilitator: No, which is interesting isn't it and ((in overlap)) I wonder

Mr Snow: They need to share more don't they

[...]

Bobbie?: ((in overlap)) secrets

Rey: like yeah like I believe they should be spread so that people know that the school cares [...]

Carrie: Yeah and like when they [said] that they planted trees I didn't know about that

Daisy: ((in overlap)) Me neither

(YP6, 1479-1520)

The exchange indicated that though school was taking some pro-environmental and climate mitigation actions, they had not communicated this with their pupils, or their staff. As Mr Snow noted, there was a need to share this helpful information and not, as Bobbie suggested, keep it a secret.

The importance of sharing this information was highlighted by Daisy:

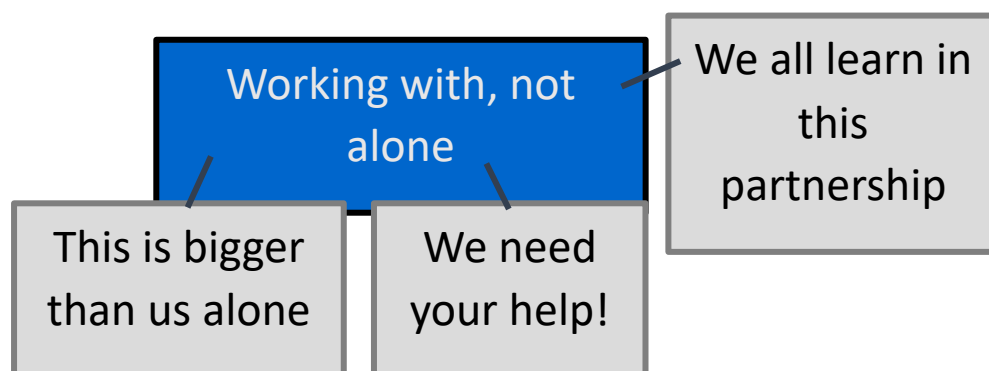
during this session we've learnt more about school and to help us see it in more of a positive light in terms of climate change cos at the beginning we were just like "well what's the school really doing?" and then she [the headteacher] told us all these things which was just like "wow"

(Daisy, YP6, 1868-1872)

Hearing that school was taking action was a revelation for Daisy. She also suggests that knowing this would help her to look at school in a different way, which was mirrored in comments of the other co-researchers, who suggested that now they would actively look out for positive actions in school.

Summary: Following their presentation to the head and SLT, the YP were surprised by the interest and environmental action being taken at a school level. They felt that knowing this would make a difference for how they viewed the school.

4.7 Theme 5: Working with, not alone



As well as connection being important to the co-researchers, so was working together with staff. This main theme and its subthemes draw together ideas on the value and need for this collaborative work.

Main theme: Working with, not alone

Working with, not alone

Table 32: Theme 5, Main theme: *Working with, not alone*

The YP and SA co-researchers both expressed a value and interest in working together. This is shown in the following extract where the YP are speaking to the headteacher:

Mrs Hail: I think the one point we should end on ladies is that actually everything you've said and everything we think and want to do are actually quite aligned so

Group together: ((in overlap)) yeah

Mrs Hail: if we actually work together

YP group together: ((in overlap)) yeah yeah

Mrs Hail: ((it will be)) more powerful

YP6: 1081-1095

This invitation from the head was an exciting and valued moment for the YP co-researchers. It set a precedent for working together, which was interestingly reflected in the final meeting between co-researchers and the supportive adult group where Rey requested a collaborative approach to a planned piece of work by the staff researchers:

Maybe we like, I'm not sure if you guys want to be involved, but I wondered if we could maybe be there as well?

(Rey, SA4, 1914-1915)

The co-researchers added that they would be more relatable than the adults for the year six children who were the focus of the piece of work, indicating an appreciation of what they could offer and a sense of self-value.

In fact, the staff researchers highlighted a need for "partnership" with the YP from early on in their inquiry. This suggests more of an equality than the traditional teacher-student way of working. As explained by Mrs Frost:

Partnerships, because as an adult it's very easy to just do it for them. And you know I remember as a child being really frustrated that people didn't trust you enough and then you end up doing the same thing yourself when you're an adult

(Mrs Frost, SA1, 1099-1102)

The trust Mrs Frost describes as implicit to partnership seemed to be present in the SA-YP work, from a request to look at the school improvement plan from the headteacher, to giving feedback on the climate scheme of work and then the planned joint action with year six. As the official inquiry ended there was a sense that a new group had developed comprised of both YP and SA together.

This sense of being in a partnership was especially important because up until the final meeting, where the YP returned to find out about the SA group's work, the YP felt that they had done all the work.

Sara: Yeah and like up to this point you know last year we did the presentation it kind- and then we did a couple of more presentations this year.

Rey: Yeah.

Sara: [...] it just feels like we're doing all the work?

(SA4, 1798-1806)

This feeling of being the only ones working on the problem seems to relate to a narrative around young people as agents of action.

it's like us like kids it's our generation should doing something about it [...] if they're going on about how how responsible they are why aren't you doing stuff something about it?

(Bobbie, YP2, 811-814)

Bobbie describes an unfair pressure on young people to solve and act on the climate crisis, also described by others in the group. Bobbie underlines this with her contrast of the idea that adults see themselves as responsible with their inaction. For Sara, however, there is a literal feeling of weight on her from this social narrative:

the weight of climate change on my generation's shoulders

(Sara, YP5, 2152-2153)

This pressure was something the adult group were unaware of initially, using some of the language themselves of children as agents of change. However, they recognised the impact this created:

It does put a lot of pressure on them if you frame it in that way that you need to solve these problems as well.

(Mr Snow, SA3, 953-954)

Summary: YP and SA wanted to, valued, and began to work together in the inquiry. However, YP also raised an issue of feeling that they were doing all the work and narratives around children as agents of change were explored with staff. This lent more weight to the need to work together.

Subtheme 1: We need your help!

We need your help!

Table 33: Theme 5, subtheme 1: *We need your help!*

This subtheme was created out of the talk around the need for support that the YP co-researchers and SA identified. This was initially born out of the YP co-researchers' apparent feeling of having limited power and efficacy:

I feel lots of kids eleven to sixteen are trying to do something, but we can't d- but we don't have full control of the steering wheel.

(Carrie, YP6, 792-794)

I'm just a student not Mrs Hail

(Rey, YP3, 836)

Carrie and Rey both felt limitations to their ability to act due to their young age and their comparatively powerless student status contrasted with the powerful headteacher. This may also relate to the scale of the problem of climate change itself, as Ms Gale reflected:

I think they often feel like their singular actions are not going to be strong enough

(Ms Gale, SA1, 315-316)

This reflects wider social narratives around the limitations of individual action in making any difference. However, it points to a possible lack of environmental efficacy in particular, as well as issues of age and position in school hierarchies for self-efficacy and power.

The second issue that the need for help grew out of was a difficulty the YP co-researchers identified in speaking to powerful people in their school, as is shown in this exchange:

Rey: head of years is like someone we can easily talk to [...]

Carrie: And like so then they can tell the headteacher and they can tell you.

(YP1, 1080-1087)

The headteacher appears quite removed from the YP, who recognise different degrees of accessibility for different levels of power within their school. In addition, when preparing to speak to the headteacher and SLT the co-researchers reacted with surprise and worry at my suggestion of relating in a different way to them:

Facilitator: you're allowed to disagree with them [the staff and SLT]

((Group laughter))

Unknown YP group member: Oh no

Facilitator: because this is as you said they need to listen and it's about a conversation so and as long as you are polite of course you can. You can have different opinions and that is absolutely fine.

Carrie: Yeah

Rey?: ((inaudible))

Facilitator: Ah you don't want to get in trouble

(YP6: 87-107)

They were nervous at the idea of talking in a way that might challenge the hierarchical power of staff. This seemed to be because of the expectations and potential consequences within the school system if staff misinterpreted their talk.

Therefore, there was a need to enlist powerful allies:

you have to get to like powerful people to help you, but if they don't do, help you then you don't can't sort of do anything.

(Carrie, YP1, 1066-1068)

This example, though from the first session, is an illustration of an idea that continued throughout the YP inquiry. Carrie expresses this idea strongly; powerful others were necessary for *any* action to be taken.

Fortunately, the staff developed into those allies. They developed a role of facilitators, who could run groups, create action and access to the system:

Mr Snow: So I can send some emails to try to get them to just do, it'll only take just two minutes just to do a couple of questions.

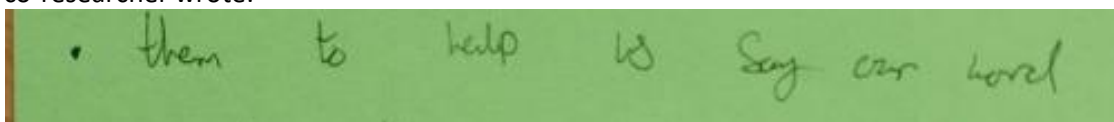
Carrie: Yeah and if we like. Like, sometimes our head of year says it, but like if we get like, maybe Miss Hail, doesn't have to do it, like we get a more higher teacher to say about it, maybe somebody or the form tutors might do

Mr Snow: I can definitely get it in the briefing.

(YP3, 1736-1746)

Mr Snow in this example is able to support the YP to spread knowledge of their pupil questionnaire to the staff briefing, part of the system that was beyond the scope of the YP. Similarly, Mr Ice supported some of the group to meet with canteen staff and to feed back to SLT; both actions that would have been much harder to enact for the YP alone.

For the YP, in particular, they recognised the power of the staff in helping them to have a platform for their voice and their message. When reflecting on what teachers could do to help them manage difficult feelings related to eco-anxiety, one co-researcher wrote:



• them to help us say our word

(YP6, 2319)

This was also a role recognised separately by staff:

try to support them in terms of giving them that platform
(Mr Ice, SA3, 499-500)

This opportunity for a platform seemed especially important due to the importance and power the co-researchers recognised in voicing their beliefs:

I wanted to come in because I feel that I wanted to tell someone what I thought of it, because, like if you don't say anything, nothing will change it, even if we just say something it would help a little bit.

(Carrie, YP1, 296-299)

Carrie expressed a sense that speaking up can create change.

As well as access and power within the hierarchical system of the school, staff additionally felt there was a place to facilitate support through their teaching approaches. They felt that facilitating wider talk about climate and the environment was part of their role:

the facilitating of [...] giving them that space to talk openly about it

(Ms Gale, SA1, 1348-1349)

This was also seen in the context of the new Welsh curriculum, where they saw great opportunity in planning their own climate scheme of work to embed discussion.

As well as support from staff, the inquiry process appeared to be supportive in itself. The opportunities within the inquiry, including presenting to their headteacher and the SLT, challenged (even if only for a little while) the power dynamics in the school:

Sara: after this like after seeing that we could make the teachers actually be a bit er frightened of us ((laughs))

((Group laughter))

Sara: Yeah I feel more powerful

Facilitator: You feel powerful

Bobbie: We could run for um head

Rey: Yes as headteachers

(YP6, 1910-1930)

In this extract the group noted and enjoyed the unusual sense of power over the powerful.

In addition, Bobbie repeatedly enjoyed the idea of being able to disagree with me, an adult:

Facilitator: and I also wanted to remind you that you're allowed to disagree with me.

Bobbie: Yay!

(YP2, 95-104)

This was an embedded reminder in each session's opening script of their position as co-researchers. Viewed alongside the mixture of laughter and real concern in their reaction to being told they were allowed to disagree with the teachers and SLT (quoted already within this theme), this suggests that the inquiry introduced a different way of being with adults. One which made them feel powerful.

The YP also seemed to develop a greater sense of control from the inquiry activities. Rey reflects here on the experience of reading her draft letter to the headteacher aloud to the group:

I felt like you know people I admire so people who um I see people every day, stand up and talk about what they believe in [...] and like it just feels like they have like so much oh power, even though they're like my age or maybe a little bit older, because they have so much power and like so much like control over what they do and like they feel like they can, like it looks like they can change everything. [...] When I was reading I felt like that.

(Rey, YP5: 2077-2086)

For Rey the inquiry activity of creating and voicing this letter not only helped her feel more in control, but she also seems to feel able to create change; a sense of agency and efficacy.

In fact, throughout the inquiry the YP co-researchers began to take up the offer of agency within the inquiry process. As well as enacting their own idea to find out what other pupils thought using a questionnaire for pupils, the YP co-researchers also instigated the connection with their headteacher and the mode of their presentation:

Bobbie: Oh we could invite her [Mrs Hail]!

Mr Snow: She'd love to speak to you about this, she really would.

Bobbie: We could write her a letter!

(YP3, 1869-1875)

In addition, feedback from staff was that the YP were very active in other activities in the school following the YP inquiry. Mr Ice describes a very active and confident approach to a meeting with canteen staff and a feedback meeting with the SLT:

they were there with their notebooks open it looked like the Spanish Inquisition

((Group laughter))

[...] they're very keen. And they talked to SLT about how good you know how useful

they found that stuff on global warming [...] so I think it's you know from the work

they've done with you

(Mr Ice, SA3, 264-274)

The sense of the inquiry having impacted on the YP co-researchers' sense of agency, efficacy and confidence is probably best demonstrated though through the further activities the YP chose to pursue outside of any adult facilitated groups:

I was inspired from the thing we did when I thought I could go for the Welsh Youth

Parliament ((laughs)) and I put my main policies to climate change

(Sara, SA4, 435-437)

Sara expressed that she wanted to bring about change on a bigger scale. Like Sara, Rey had also taken a new step; performing her own radio show, a way to literally use her voice to talk about the things that mattered to her.

Summary: From a YP perspective, the co-researchers needed allies in the staff who were more powerful than them as they felt limited power and efficacy. They valued staff who could support them to act, voice their beliefs and support access to different parts of the school system. At the same time as staff being supportive as powerful allies and facilitators, the inquiry process itself supported the young people to use their voice, feel more self-efficacious and gain confidence, shown through their agency in the group and beyond.

Subtheme 2: We all learn in this partnership

We all learn in this partnership

Table 34: Theme 5, subtheme 2: *We all learn in this partnership*

As well as the power advantages in working together there was a wide recognition around the importance of learning that could take place in this collaboration and partnership, which is the focus of this next theme.

For Carrie being in the group has enabled her to see different viewpoints:

I feel that this has helped me a lot because it's made me see what other people's point

of view and then at this this session it's made me see what the teachers' point of view is

(Carrie, YP6, 1808-1810)

It is the opportunities for connection with staff as well as listening to her fellow YP co-researchers that have helped Carrie to learn something about what others think.

Additionally, the YP learned from listening to each other, as exemplified by Sara's thoughts:

I thought about um how Daisy said um you can all influence two people and then they. So if I like start nagging people "don't do that, put the litter to the bin, don't throw the litter somewhere on the field" [...] Maybe that will make a little change and you know this snowball effect it will grow and grow.

(Sara, YP6, 1892-1897)

Daisy has introduced her to a different way of thinking that actually makes her feel that she might be able to make a difference.

Not only did the YP learn from working with others, but so did the staff. Staff were able to tell each other about the distinctive parts of the school they were each part of, from the ALN base, to the Geography and English departments, and to the sustainability group run by Mr Ice. Here Mrs Frost learns about the school recycling system and the criteria set by the company who collects it:

Mrs Frost: With the recycling [...] is anything going back into the school through doing that?

Mr Ice: Yeah, well there should be. I think you've got to have so much tonnage for certain and it needs to be er you know packaged in certain ways so

Mr Snow: It's not much.

Mrs Frost: Is it is it pretty fussy?

Mr Ice: Yeah very fussy

(SA2, 492-506)

It was clear that members of staff did not always know much about what went on in different school spheres, but being part of the group gave them a space to share that information.

Different perspectives provided by working with others also supported staff and YP to see change. In this exchange the difference in the school is seen by Mrs Frost, which had not been so clear to the other adults:

Mrs Frost: I've been here nineteen years and the change under the current head compared to the previous head is immense [...] because I mean we're pretty invisible as a base but we were practically like under the ground invisible before [...]

Mr Snow: Yeah and I guess if that's obviously shown [that] change can happen in school.

(SA1, 864-878)

YP elsewhere described this impact of an adult perspective from their parents as supporting them to see change in much the same way.

Finally, working within the inquiry group was also a place for the YP to learn about climate change and solutions:

Like, before we had the whole conversation about it I hadn't specifically considered how it would affect my future per se

(Daisy, YP5, 985-960)

I think ((couldn't have)) learnt this much about climate change without them

(Bobbie, YP6, 868-869)

While Daisy reflects on new learning about the impact of climate change on her future, Bobbie directly recognises the role her co-researchers played in her learning.

Summary: When they worked together, the co-researchers learnt from each other; about climate change and solutions, about how different parts of the school worked, about others' viewpoints and how to see change was happening.

Subtheme 3: This is bigger than us alone

This is bigger than us alone

Table 35: Theme 5, subtheme 3: *This is bigger than us alone*

Throughout the process there was also a sense of the problem and the solution being bigger than the efforts of the individuals and this is the focus of the final theme in this collection.

Overall, SA and YP saw climate change as everyone's difficulty and everyone's responsibility. As Rey describes using the pronoun "our" to denote a collective responsibility:

For many years the world has being harassed by our doing, our machines, our rubbish (Rey, YP5, 1994-1995)

Following from this was the need for collective school action, recognised by the co-researchers, and shown here in Daisy's presentation to the headteacher:

I feel that the answer to preventing the climate crisis escalating is right in front of our faces. And that is everyone should do something to prevent climate change from worsening.

(Daisy, YP6, 737-740)

However, a wide collective school response also meant a need for large systemic change within the school. This was in particular recognised by the staff, who comment here on the cleaners, another part of the school system, who currently presented a barrier to pro-environmental action:

if you watched the cleaners bunging everything into a black bag and I said to them "why are you not recycling?" she said because of the problem with the wrong stuff going in the bins and also they didn't have any green bags

(Mrs Frost, SA1, 698-701)

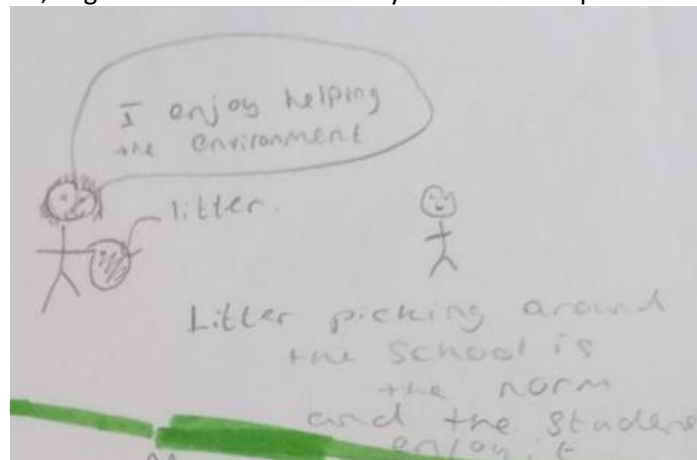
This points to a need to work alongside other parts of the school. In fact the staff group noted the need to reach out to a wider group than those within the school; primary schools, parents and the wider local community.

In addition to this wide level of collective engagement, the SA and YP saw a need for a culture shift:

it's like changing the culture. Like it's about like trying to change like how we think about climate change. Rather than it being this thing which only a few people think about. It's something which the wider school thinks about more.

(Mr Snow, YP3, 742-745)

This desired thinking culture change is depicted in Rey's visual where caring for the environment is a normal and enjoyable part of being a student, in great contrast to how they describe their peers acting currently:



Rey, YP3

The co-researchers wanted this change to be something integrated across the school. This came from a concern about how climate change was currently positioned, voiced by Carrie:

I feel like people think climate change is a topic not an actual problem

(Carrie, YP6, 815)

This isolated topic placement was recognised by staff, who commented on the need to embed change across subject, as well as the need for consistent climate messages across the school. This was a difficulty that they noted from other areas:

It's like the behaviour thing isn't it. A couple of staff don't buy into the behaviour stuff and then no-one might as well no-one do it so. With the recycling as well everyone needs educating and telling

(Mr Snow, SA2, 612-614)

The implications for schoolwide change also then meant staff buy-in across the whole school.

However, having identified the huge potential scope of this change and the number of parts of the system they would need to engage with, the change felt at times too big. As Mr Snow comments:

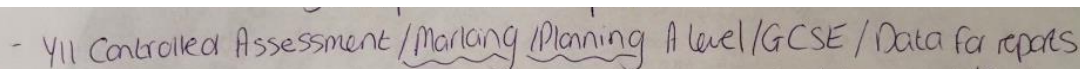
Well obviously some of this will be easier than others you know I have much more control over education I deliver in the classroom whereas I wouldn't know where to go about you know triggering a culture shift within a school you know

(Mr Snow, SA1, 1557-1560)

There is a sense of a limited knowledge and efficacy in making change at this level for staff, mirroring some of the sense of limited power previously explored in the YP. This seemed exacerbated by the barriers that the staff encountered daily as teachers. This particularly included workload as a barrier that impacted on them enacting change:

Mrs Frost: Yeah and stop students throwing the wrong stuff in the bins even though you've got a million other things to do.

Mr Ice: Yeah it's such a big job isn't it just so busy all the time
(SA2, 619-623)



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SA3

Related to this was the even bigger barrier of time:

day to day just smothers the goodwill really and I think there is [...] a lot of goodwill there but it's just they just haven't got time to give up

(Mr Ice, SA2, 746-749)

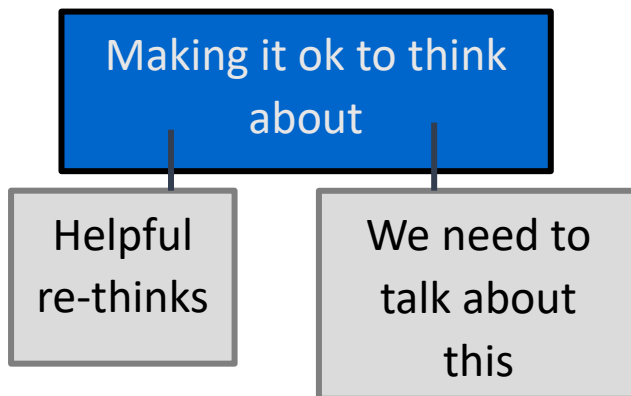


SA2: Visual representation of barriers, with time as the tallest

The day-to-day difficulties of being a teacher are then important for whether or not staff felt they could manage to be supportive adults for the YP co-researchers.

Summary: There was a feeling that the end goal was greater than the scope of the group (and sometimes the ability), with everybody in school holding a responsibility. SA and YP recognised a need for whole-school change; culture change, integration, consistency across the school. This was intimidating for staff, who also felt challenged by their limited time and workload pressures for what felt like such a big task.

4.8 Theme 6: Making it ok to think about



This final overarching theme captures how the co-researchers began to make it ok to think about climate and the environment. It follows on from the difficulties all the co-researchers had with different aspects of climate information and the weight of the task they gave themselves.

Subtheme 1: We need to talk about this

We need to talk about this

Table 36: Theme 6, subtheme 1: *We need to talk about this*

This theme was created out of the discussion about talk and its value for the YP research group that featured strongly throughout the inquiry. In its simplest form this was about the need to talk about climate change. This was particularly clearly put by Rey who stated:

we need to talk about, it's not like because we want to talk about it because it's a need
(Rey, YP1, 782-784)

This need also required a distinct space. As Mr Snow reflected when thinking back on the YP group sessions, he felt he had a role to:

try and create a space where they wouldn't feel stupid to ask questions about like the sea on fire or you know the worries that they have, you know, make it so that they can discuss that amongst themselves and in a space in a classroom where they can do that
(Mr Snow, SA3, 1537-1541)

This distinct space for talk is for somewhere where they will not feel embarrassed and it was noted that though they might try this in class the larger group size may be off-putting for sharing in the same way the YP had in the inquiry group.

The group was identified as a place to have this talk:

Yeah that's it it's a space isn't it to come and like chat and discuss stuff isn't it.
(Mr Snow, YP6, 1983-1984)

This may draw on the other ideas associated with the group as being safe, supportive and with others who care, enabling this open talk.

The talk also appeared to serve particular functions for the YP inquiry group. Here Rey and Daisy discuss a worrying train of thought around additive impact of negative individual actions:

Rey: Everyone thinks that it's only a little bit. If seven point something billion people think that it's only a little bit, then seven only 7.8 billion, loads of car gas, is gonna move into the world.

Daisy: That's a lot more than a little bit.

(YP4, 1600-1606)

This was a troubling idea, as can be seen in Daisy's realisation of what it could mean. In fact, difficult ideas like this were often explored in the group, most often brought up by the YP co-researchers. This included an ongoing discussion around the struggle of being part of the climate problem:

No matter what age we are, we've all done something in our lives to do something to this planet

(Daisy, YP4, 1512-1513)

This was acknowledged by most of the co-researchers alongside the idea of how difficult it is to not create environmental damage, both challenging ideas to hold for young people who care and are deeply worried about the environment.

Despite this difficult talk, this was something the group wanted and valued. This can be seen particularly in the way Rey talks about missing the group space during COP26:

When [COP26] started I was like I wished we talked about I wish it was on when we were doing the actual like meetings [...] So much to talk about

(Rey, SA4, 364-371)

She wanted to bring this climate event with all the associated politics and news to the group and the lack of this distinct talk space was noticed by her.

In fact the talk seemed to be making a difference for the co-researchers' wellbeing:

Yeah last year when we had regular meetings I always felt so calm about the issue but now it feels like back where looking back it was just really calming to speak about it, and relieving that there were people who understood, but now that we haven't met that many times, it's a little bit different.

(Sara, SA4, 1623-1627)

Sara noticed the difference between when she had the inquiry meetings where she could talk about her worries and more recently when she did not. She also notes the value of the regularity of the meetings as supportive. This was not something they could talk about just once, but, as Rey also suggested:

these things need going over

(Rey, SA4, 2007)

Rey also talked about what she valued specifically about talking in the group:

just sitting down and talking can make a whole lot of difference sometimes, especially with something that has so much like negativity around it just taking that apart and just make it into small bits, just like and talking about it in like that way

(Rey, SA4, 1862-1865)

The talk seems to have helped her as a process where the difficult ideas of climate change with its negativity can be grappled with, and by taking those ideas apart and making them smaller it seems to have become more manageable to think about.

Summary: This theme explored the need for talk, how young people used talk and the wellbeing benefit of this. The young people strongly expressed a need to talk about climate and brought difficult news to the group. The group was a space where they struggled with, explored and broke apart difficult ideas. The group was identified as a safe place to do this and the talk they did here supported their wellbeing.

Theme two: Helpful rethinks

Helpful re-thinks

Table 37: Theme 6, subtheme 2: *Helpful rethinks*

Building on the importance of talk, this final theme was constructed from the helpful shifts the co-researchers seemed to experience in their thinking that made the problem and the task seem more manageable.

The first of these helpful rethinks was around building on what they already did. This was particularly true of the adult support group, who, when facing ideas of culture change across the whole school reflected on which subjects already covered some environmental topics and the usefulness of the new Welsh curriculum which they were going to be working on. Another initially challenging idea for the group was knowing how to support the mental health of the young people. However, following our inquiry reflective activities Ms Gale noted:

I think whenever I talk to students about important things, [...] I always tend to try and validate their feelings first you always try and tend to make them understand that it's okay to feel the way that they do. Yeah, I think I naturally do that.

(Ms Gale, SA3, 1404-1408)

She had recognised how what she was already doing was potentially helpful.

The second helpful rethink was used by both co-researcher groups frequently and involved a belief that small changes can make a big difference.

If someone decided to do something to help combat climate change and inspires two other people to do the same and they inspire two more people to do the same after only six times of this there'll be almost two hundred inspired people doing something about climate change

(Daisy, YP6, 769-772)

Here Daisy describes a way of thinking that helps make individual action feel impactful, which was later referred to by Sara.

This ties closely in with a third rethink, where the co-researchers reframed their expectations of what they could change. This was particularly pertinent for the adults, struggling with the idea of initiating a school culture change:

It's like a "micro culture shift", isn't it, you know, within our within our sphere.

We can't change the whole world, but we can change our microclimate.

(Mrs Frost, SA3, 657-659)

Mrs Frost reframes the width of the problem to something more manageable within their spheres of influence in the school. Similarly, others recognised that climate change was not something they should be aiming to solve alone, but looking at what action could be taken at a micro-level.

The final rethink was used by the YP co-researchers when struggling with information from the news. In contrast to the difficulty of the news as an information source with difficult content, they also explored it as helpful:

it can be good because it's like making people aware of it so then it makes people do it like helping

(Carrie, YP5, 748-749)

Carrie, like other co-researchers, reframed news as a helpful way of raising awareness.

Summary: This theme explores how for SA and YP the process of talking *with* their co-researchers gave them helpful strategies to support their thinking. This included building on what they already were doing, valuing the impact of small changes, reframing news more positively and reframing expectations of themselves and their co-researchers.

5.0 Discussion

5.1 Introduction:

This thesis sought to explore:

a) *What is eco-anxiety for YP?*

b) *In what ways can YP constructively manage eco-anxiety, with help from supportive school adults?*

These questions will be addressed in turn. Due to the importance of working *with* these two groups of co-researchers, the second question will be divided into findings for the young people (YP), the supportive adults (SA) and both groups within the school system.

5.2 Eco-anxiety for these YP

Research question 1: What is eco-anxiety for YP?

Feelings and experiences: “just a bomb” (Sara, YP1)

There does not appear to be a clear consensus on a definition of eco-anxiety in the literature, with a range of different terminology (Pikhala, 2020b) evoking different meanings. This study, then, sought to explore the meaning of eco-anxiety for YP within a school context in Wales, a context that appears absent from the literature.

Like previous research, eco-anxiety for these YP appeared to be a real, scary (Hickman, 2020) and difficult to bear (Verlie, 2019a) climate knowing. The realness of climate change, alongside an idea of an existential threat happening now, was difficult knowledge. However, the concerns were also about broader environmental worries; animals, habitats (Chawla, 2020; Hickman, 2020), plastic pollution (Lofstrom et al., 2020) and global environmental incidents. Different elements of loss were evoked; loss of environmental places in general (evoking Kevorkian’s, 2020, concept of environmental grief), loss of known places (reflective of solastalgia, Albrecht, 2007) and also loss of an imagined future life. The YP seemed to experience a confrontation with this knowing, recounting as they did specific moments when they became aware. It seemed, however, to be both sudden awakening (Bednarek, 2019; Hickman, 2020) and an ongoing process. This ongoing aspect is reflective of the “journey” through different responses described by Hickman (2020, p.416) and the process of grappling with one’s interconnection with the world and climate change (Todd, 2020; Verlie, 2019a). As an ongoing process this has implications for intervention; suggesting ongoing support is needed (Axelrod et al., 2020; Langmaid, 2016; Maier et al., 2018).

Harmful media and education silence

For the YP, news and social media were continuous sources of information, while there was a lack of education on climate in school. News and social media contained worrying stories (with similarities to secondary distress, described by Kevorkian, 2020), lack of care, and

dismissive public responses. Social media in general can be both a source of difficulty and support for YP (Foulkes, 2021). However, it initially appeared more negative for these YP.

The co-researchers saw climate as ignored, “at the bottom of the list” (Carrie, YP4), in both contexts. This included politicians (Hickman et al., 2021) in the exosystem, and tokenism in their school microsystem (Bronfenbrenner, 1979). This contributed to a negative image of environmental care and interest from others, as well as a lack of trust in others to act (Belkin et al., 2021; Trott, 2019) across multiple spheres of their lives. The findings indicate that a lack of climate and environment information in school and difficult information from news and media seem entwined with these YP’s eco-anxiety.

A social and developmental context: “alone with my views” (Sara, YP5)

A common difficulty was a dismissal of the YP’s climate interest by friends, who appeared environmentally uncaring, blocking conversations about it. This difficulty may reflect adolescents’ “conflictual needs” between personal interests and a peer group identity (Siegel, 2012, p.356), while the disconnection seems particularly significant for adolescents, who spend more time with peers (Foulkes & Blakemore, 2018).

The YP also experienced a social cost. They described being made fun of, experiencing derision, and choosing not to share because they were scared about friends’ and peers’ reactions. This contrasts with Eames et al. (2018), who concluded that “peer perceptions... were usually not seen as a matter of crucial importance to the students themselves” (2018, p.202). However, they were crucial to the YP in this study. Though, this difference may be because Eames et al.’s interviewees were selected for holding environmental interest rather than concern.

However, similar to Eames et al.’s (2018) findings on teenage culture with a strong focus on other interests, environmental caring was not felt to be part of a teen identity in this study. The co-researchers’ friends considered climate too negative, and not aligned with the fun they should be seeking. In this study it was a source of difficulty, meaning that it was hard to hold an open environmentally-caring identity as a teen in school. This was despite a feeling that their peers may care, and purposely push away and ridicule climate information because of their own fear. This suggests a larger group may be feeling scared, while their responses perhaps reflect this teen identity that sees climate as too negative to engage with.

Disconnected from peers, friends and a teen identity, there was a loneliness as an environmentally-caring young person. Loneliness can be “strongly related to one’s sense of social isolation” (Baumeister & Leary, 1995, p.507). This seems apt for these YP, suggesting that issues of belonging and loneliness are important for understanding their eco-anxiety experiences. A similar pattern is seen in the broader literature on school social disconnection. Social disconnection (from peers, teachers and school) appears to be negatively associated with wellbeing, particularly associated with loneliness (Santini et al.,

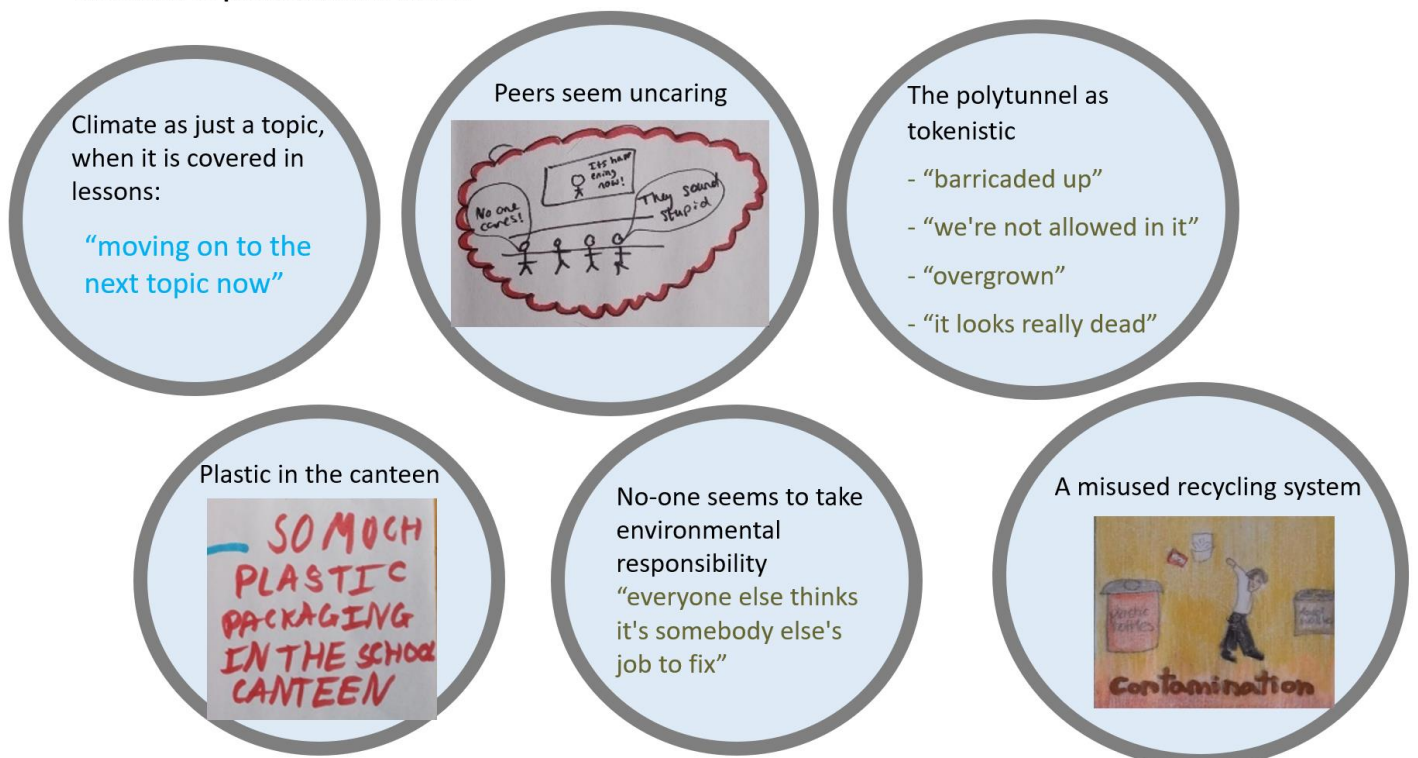
2021). Like Santini et al., the disconnection for the YP in this study was at multiple levels, suggesting a whole school approach (Roffey, 2011) to this sense of loneliness in environmental care is important.

Signs of environmental uncaring in school

Similar to Finnish YP (Lehtonen & Pihkala, 2021) and the Welsh Youth Parliament (2020), the YP co-researchers noted a lack of whole-school modelling of sustainability practices in their school. Signs of uncaring seemed to be everywhere; peers misused the recycling system, the school as an organisation appeared to abandon school solutions like the polytunnel, and no-one appeared to be taking an environmental responsibility. Each of these can be thought of as a moment of punctuation (Dowling, 2003), creating a picture of an environmentally-uncaring school. This perceived inaction in an education institution (Belkin et al., 2021) is challenging in the context of climate change, which requires trust that others will act (Ojala, 2021). However, their punctuation does not suggest environmental trust in their school.

Figure 8:

Moments of punctuation in school



The limits of power felt as a young person in school: “I’m just a student not Mrs Hail” (Rey, YP3, 836)

The co-researchers also felt limited power in school, being “just a student not Mrs Hail”. This has similarities to YP feeling too small to make a difference (Belkin et al., 2021), and feeling

limited capability (Trott, 2017), but shows this in a school setting. This has implications for being able to take action and feel agency, identified as supportive strategies for coping (Acton and Saxe, 2020; Bentz, 2020; Hogan, 2020; Pinsky et al., 2020; Pinto and Grove-White, 2020; Sanson et al., 2019; Tayne et al., 2021; Trott, 2017; Trott, 2020).

Outside the inquiry groups, the YP felt not listened to by staff, particularly when a member of staff repeatedly blocked the YP's voices with their own. In some ways this mirrors Sanson et al.'s observation that "until very recently, [YP] had little voice in discussions of the problem" (2019, p.205). The repeated return to this issue showed the impact of this on the young co-researchers, despite the interest and care they felt from their headteacher. This study adds evidence to the importance of staff's responses to YP (Ojala, 2015b) and highlights the impact of having voices on climate blocked in school.

Disconnection from adults

The YP co-researchers also compared their lives to the lives of their parents, where they expressed sadness and jealousy that they would not get their parents' "full life". This could be conceptualised as hoping-mourning (Verlie, 2019a), where though the group were focused on actively working towards desired change in the inquiry, they also held pain and grief, in this case for the life they had expected for themselves. This suggests that hoping-mourning may be a useful concept to understand experiences of eco-anxiety for YP.

Additionally, there was a sense of disconnection from adults in general. This was partly a division of adults who had made the mess and not acted, and the YP who had to clean it up (reflective of feelings of blame: Hickman, 2020; Jones & Davison, 2021; Lehtonen & Pihkala, 2021). However, the YP in this study also grappled with their expectations of what life could be like for them within the Anthropocene¹. The meaning that the YP took from climate timelines (placing visible change within their 40s) made it real, but also potentially different to the meaning for an older adult, who, Walker (2020) states, "will be less adversely affected than YP over time" (p.11). There is a potential generational difference in how one might understand climate change within one's lifetime, suggesting that opportunities to listen to YP's perspectives are really important for adults to understand.

Summary

For these YP eco-anxiety seemed to be both a sudden awakening to a real and scary climate future and an ongoing exploration of its meaning for their world and their place within it. It was also worry about wider environmental concerns, involving different emotions: sadness, jealousy and loss of places, experiences and life expectations.

Holding this difficult climate knowing, these YP then saw a limited interest and care in the responses of others in different spheres of their lives: political, social media, their school

¹ Anthropocene: the time-period marked by human-induced changes to the environment (Lewis & Maslin, 2015)

and their peers. The incongruence of words and action meant a lack of trust that powerful others would act, and there was a strong sense of loneliness as an environmentally-caring teen. Therefore, experiences of eco-anxiety were also entwined with the information they received and responses they observed, including in their school context. Some of the added difficulty of these experiences may be related to the particular importance of peers in adolescence, as well as the hierarchical positioning of YP in schools, where they felt a lack of power and efficacy. This suggests that school is an important context to consider eco-anxiety for YP.

The discussions of course took place in a school context. If these had taken place elsewhere a different focus may have been found, as it may have in a different school with a more widely shared environmental ethos. Therefore, finding out about the YP's particular school experiences may be a useful and even necessary starting point for EPs wanting to support them.

Figure 9 gives a visual summary, consistent with presentational knowing (Heron, 1998; Riley & Reason, 2015)

Figure 9: Eco-anxiety for (these) YP – a visual summary

Scary, real and difficult to bear knowing

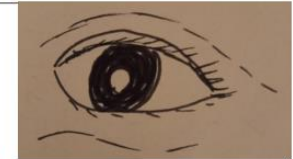
<p>Real, happening now</p> <p>Loss: loss of places, loss of experiences and loss of an imagined future life</p> <p><i>Hoping-mourning</i></p>	<p>Existential threat</p> <p>A bomb of sudden awakening as well as an ongoing exploration</p>	<p>Wider environmental worries; habitats, animals, plastic pollution, global incidents</p>	
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Difficulty with **news and social media as an information source**

- worrying stories,
- lack of care, and
- dismissive public responses

Disconnection from adults, who have made the mess and chosen not to act.

Incongruence between real threat and responses at multiple levels of their lives



Hard to trust in others

Alone in caring

School context

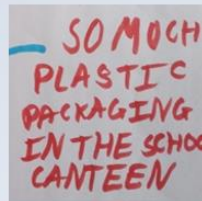
Lack of climate education at school

Disconnection from school: school is uncaring



Disconnection from:

- **friends,**
- **peers and**
- **teen identity**



Limited power of being just a student, **not listened to.**

Social cost to sharing environmentally-caring views

5.3 Constructively managing eco-anxiety

Research question 2: In what ways can YP constructively manage eco-anxiety, with help from supportive school adults?

For the YP co-researchers:

The power of knowing solutions: “we can beat climate change” (Rey, YP3, 219)

Lacking climate education, the students felt strongly that they wanted to be taught about climate change (Pinto & Grove-White, 2020; Trott, 2020). In particular, knowing about solutions (Bentz, 2020; Grauer, 2020; Maier et al., 2018; Tayne et al., 2021; Trott, 2017; Verlie et al., 2021) made a difference for these YP. Knowing about school-based solutions, especially, was directly connected by the YP to their wellbeing and a sense of hope, as well as the idea that a positive climate outcome was actually possible, highlighting the importance of envisioning alternative futures (Belkin et al., 2021; Ojala, 2017).

We can do something

The YP also highlighted the importance of using their localised school-solutions. Knowing about school solutions, such as the recycling system and its impact, meant that the YP felt that school and themselves could make a difference. This indicates a connection between knowing solutions and both a sense of self *and* school-efficacy in environmental action. This builds on the importance of self-efficacy for YP’s constructive coping (Ojala, 2015a, 2015b; Sanson et al., 2019; Trott, 2017, 2019). However, drawing on the importance of collective efficacy (Sanson et al., 2019), it also emphasises the importance of seeing the school organisation as efficacious and able to meaningfully act.

Active hope (Macy & Johnstone, 2012) may be a useful concept to understand the YP’s responses here. This practical hope, where one works actively towards an envisioned, desired future, could be seen in the way the YP envisioned what their school could be like, once they knew about solutions, and then took steps towards it, sharing their vision with senior leaders and planning action with the SA group. This did not mean they relied on feeling hopeful that their desired future was likely (Daisy worried that this might be a false future), but they could actively take steps towards what they hoped for.

From disconnection to connection: the inquiry group

“surrounded by all the great people who care” (Sara, YP5)

Having begun with a sense of disconnection, connection became important for the YP. Connection was particularly powerful in the peer support and encouragement they gave each other in their YP inquiry group, even leading to new friendships. The literature has highlighted the importance of being in a group for activists, children and university students (Budziszewska & Głód, 2021; Nairn, 2019; Pinsky et al., 2020; Sanson et al., 2019; Trott, 2017, 2019; Verlie, 2019a). This study adds the importance of a group for 13-14 year olds in a school setting.

For these YP finding others who cared was of great consequence; they did not feel alone in their caring anymore. This may alleviate a personal weight and sense of isolation with their worries (Nairn, 2019; Verlie et al., 2021). However, the group also seemed to offer containment within the group space, as a safe space with likeminded people, to which they could belong. This created a reciprocal opportunity to express thoughts and feelings to those who understood, which Grose (2020) suggests can protect against loneliness. This draws on Bion's (1959/2013) concept of containment, where powerful emotions for an infant can be contained by a parent. Here, the YP were contained by their peers within their inquiry group. This also stresses the importance of belonging (Budziszewska & Głód, 2021; Ojala, 2017), in this school context. Belonging has been described as an essential human need (Baumeister & Leary, 1995), linked to feeling safety in a group (Siegal, 2014), and important for wellbeing in school (Noble & McGrath, 2008).

This group space was also somewhere that they could take up a visible environmentalist identity. While the YP felt unable to take up this identity elsewhere, the group appeared to give a safe context to do this. Hayes-Conroy & Vanderbeck (2005) suggest, "senses of self... are constructed through interaction in multiple contexts" (p. 312). In this context they could re-construct themselves as openly environmentally caring. Personal interest was aligned within their group, rather than conflicting with a peer group identity (Siegel, 2012). Importantly, with likeminded peers they could reconstruct their interest as fun, reflected in their laughter and personal reflections ("this has been so fun doing this" Carrie, YP6).

From disconnection to connection: with peers, staff and school

As well as developing a connection with their peers through their questionnaire, the YP also found a sense of commonality with the SAs in shared opinions and interests. They moved from constructing adults as at fault and inactive to knowing some cared, reinforcing the supportive nature of intergenerational relationships (Bergdahl and Langmann, 2021; Hickman, 2020). This study also indicated knowing people with power cared was important, suggesting a particular need for teachers and leaders to show their care.

Forming these connections, they could be seen as caring individuals within a network of others who also care. They could feel support and containment (Bion, 1959/2013) within different spaces of their micro-system; within their inquiry group, their peer group, with school adults, with the school, suggesting an operationalising of the holding environments suggested by Bergdahl and Langmann (2021).

Using talk to grapple, process and cope: "we need to talk about [it]" (Rey, YP1)

The group was a space where they struggled with, explored and broke apart difficult ideas, adding weight to a need to grapple with (Todd, 2020) and collectively work through painful ideas (Verlie, 2019a). This included older generations' inaction and blame (Lehtonen & Pihkala, 2021), company, school and family issues, politics (Trott, 2020), and wider environmental news. The group was identified as a safe place to do this, which supported

their wellbeing; “calming to speak about it, and relieving that there were people who understood” (Sara, SA4).

Support through listening to others

Talk made big and difficult ideas manageable. They valued the impact of small changes, and reframed news more positively. This has parallels with cognitive reappraisal (Ojala, 2012a). Though this concept is associated with coping at an individual level, in the group this was constructed in listening to and dialogue with others. The group context enabled dialogue (Gameson & Rhydderch, 2008) between them that seemed to also support a more binocular vision (Pihkala, 2018) of positives alongside the negatives, but also multi-ocular in that they exposed each other to varied ways of seeing.

Support through emotion spaces

Our check-ins each session were also spaces to explore how they felt, which involved confrontation with worrying ideas. However, the co-researchers described their inquiry group space as therapeutic, calming and making a difference to how they felt, suggesting that this was a space in which they could hold these difficult topics with associated difficult emotions. This has similarities with group dialogues supporting YP’s negative feelings (Bentz, 2020). Their talk also drew on the experiential, creative activities facilitated in the sessions, adding to literature highlighting the benefits of creative activities (Bentz, 2020; Doyle, 2020; Lehtonen & Pihkala, 2021; Maier et al., 2018; Tayne et al., 2021; Trott, 2017).

Support through CI and facilitation

The inquiry approach also appeared supportive in itself. Rey valued a role of facilitators who “know how to react with us”, suggesting perhaps an emotional containment by the inquiry facilitator and the group space. This was a “bounded space”, taking place on the same day and time each week (Mawson, 1995, p.69) with a facilitator who, in exploring the experience *with* the co-researchers, was conscious of not trying to find quick solutions. Mawson (1995) argues that this is supportive of a sense of group security. While the literature indicated a gap in understanding what specific emotion spaces worked in education (see the difficulties described by Verlie et al., 2021), this CI space seems to be one that does.

Longer-term support

This grappling exploration was identified by the group as an ongoing process, needing “going over” (Rey, SA4). The multiple sessions allowed them to explore ideas over time, and for the researcher to reflect on the issues they brought and provide supportive activities. This time may have supported the development of trust to support YP’s personal reflection (Lehtonen & Pihkala, 2021). The inquiry ended with the SAs and YP planning new actions together, suggesting there may be ongoing support available in the combined group, but this is unknown at present.

The impact of co-operative inquiry (CI) on the YP

The CI process also led to the YP's own informed and reasoned actions (Gameson & Rhydderch, 2008). This can be seen in the YP taking up agency in choosing the direction of the inquiry and their corresponding actions: choosing to explore their peers' opinions, and to write to their headteacher. This highlights agentic action (Trott, 2017, 2020) and choice (Doyle, 2020). The YP's agentic action culminated in an expression of power after speaking with the SLT; "I feel more powerful" (Sara, YP6). In fact, a sense of agency, confidence and self-efficacy continued past the inquiry boundaries in their subsequent actions: running for Welsh Youth Parliament and hosting a radio show. In this way, the YP co-researchers continued to find ways to constructively manage eco-anxiety for themselves.

However, the embedded action in the CI was balanced with space for reflection. Knowing developed within the reflective space as well as within actions; it was the reflection on the experience of voicing her letter in rehearsal in YP5 that led Rey to feel powerful and able to create change. This draws together the value of having both action *and* reflective space. This study shows how CI can bring these elements together, operationalising a combined approach, advocated for by Hickman (2020), Pihkala (2019) and Randall (2009).

For the supportive adults (SAs)

Managing the enormity of the task as a SA

Like previous research (Verlie et al., 2021), the SA co-researchers felt challenged by their limited time and workload pressures. However, it was also the size of the task they set themselves that became intimidating: whole-school change, including a culture shift. This was tackled by reframing and resizing their task as action within their micro-climates of departments and distinct roles within the school (see Appendix 15). This suggests equifinality (von Bertalanffy, 1971) in that the final aim of whole-school change could be achieved by starting with smaller changes within the teachers' subsystems.

Additionally, elements of their task felt outside of their knowledge-base; they lacked confidence in tackling eco-anxiety. This has parallels with Australian teachers' and parents' struggles with some reporting that they "do not know what to say" (Baker et al., 2021, p.692). This is important for EPs to be aware of as a potential barrier. It was tackled within the inquiry through the teachers role-playing supportive conversations, which made them aware of skills they already had and gave them scripts to use with YP (see figure 10 below).

The CI space, then, allowed the SA group to tackle the enormity of the task of being a supportive adult. Building on what staff already do, and focusing in on their micro-climates within the school, appear to be important aspects for staff, making change feel manageable.

Figure 10: Presentational knowing following SA sessions 3 and 4.

A model of a supportive conversation approach as a way for teachers to draw on what they already do in conversations with YP to offer 1:1 support

Supportive conversations

Avoid

- Don't worry
- Scientists/ government will solve it
- Technology will sort it out
- **Brushing off the issue and trying to finish the conversation**

N.B. **Bold**, ~~strikethrough~~ and speech bubbles denote feedback from the student group in the final session. There a sense that it would depend on how it was said.

Helpful first responses	Examples
Acknowledge and validate the student's concerns	"That's a real worry." "That sounds really difficult"
Normalise their worry/ show commonality	Staff may share how they feel: "I also worry about this" Or: "That's a worry <u>a lot of people in your year</u> share"
Show you are really listening	Repeat back what they have said Give your full attention
Support student to reflect further on their feelings and try to identify any particular sources of worry (e.g. news, social media)	Repeat back what they have said to them so they can hear it and reflect on it. "Has anything happened recently that's made you think more about this?"
Possible next steps	Examples
Support them to notice positive changes	"Some people find that noticing positive change can help. See if you can find three things that have changed for the better. Come back and tell me."
Encourage them to express, reflect on and order their thoughts and feelings further.	"Some people find that writing a letter can help."
Encourage them to connect with a supportive family member/ friend.	"Can you share that letter with your mum?"

Condescending
– depends how it is said

Too abstract

The impact of working in a staff group

The challenges of a SA role also seemed supported by working with other staff, enabling them to learn from their co-researchers. The varied roles and departments, and length of employment became strengths for the SA group, allowing a wider perspective, and greater binocular vision (Pihkala, 2018).

For YP and supportive adults together

Whole school change: pedagogy and curriculum

The co-researchers identified particular whole-school changes that would be helpful, moving from perceptions of uncaring and tokenistic engagement into real interest and care. These included moving away from a “one-off” topic, including action within their education (Baker et al., 2021), integration of climate across the school (Cutter-Mackenzie & Rousell, 2019) and consistent messaging. The new Welsh curriculum was identified by the SAs as providing possibilities for integration of climate across the curriculum and including action, highlighting the importance of the Welsh context.

Partnerships and powerful allies

Though the education-setting literature highlights the importance of adult support (Acton & Saxe, 2020; Ojala, 2015b; Silin, 2017; Todd, 2020; Verlie et al., 2021), the support the YP wanted was not just relational, but very practical. The YP co-researchers needed allies in the staff who were more powerful than them. They valued staff who could support them to act (Sanson et al., 2019), but also who could help them voice their beliefs and support access to different parts of the school system.

Partnership was also important. Students and staff wanted to, valued, and began to work together in the inquiry: when designing their questionnaire and planning new joint actions in the final session. However, students also felt that they were doing all the work. This leant weight to the need to work together, and strongly suggests that adults need to do more than “bearing witness” to their worry (Silin, 2017, p. 94), but take action too (Sanson et al., 2019; Walker, 2020) in school settings.

CI: enabling connections across the school

The linked inquiries developed for this study could be seen as bringing disparate parts of the school together. Students connected with staff, but there was also a wider reach out to SLT, other staff members, different departments, the wider peer group, and a planned connection with year six pupils. This seems important given the separateness of these school subsystems (Taylor, 2003). Deliberately planning for meeting other subsystems was helpful. Presenting to and speaking with the SLT left YP feeling powerful and confident and contributed to reframing most of these adults as caring. The sessions where the groups met together also enabled learning about others’ viewpoints. The inquiry process can be seen as

supportive by providing opportunity for connection, reframing and developing different ways of seeing.

CI: a different way of relating

The CI focus on co-researcher status seemed to disrupt the normal school power balance between YP and school adults. The CI sessions felt like bubbles of space where the “kids” and adults were able to relate differently. The YP commented directly on the reversal of normal power during their presentation to SLT (“they’re the students and we’re the teachers”, Carrie, YP6) and how they valued the genuine, relaxed communication style of the staff group’s feedback to them (contrasting the perceived need for interpersonal distance identified by Verlie et al.’s, 2021, educators). The contrast was apparent in session 6, which acted as a moment of punctuation for the researcher. This highlighted how staff and students normally related, and the way the YP particularly struggled with one adult’s response. One could see the response of this teacher, unfamiliar with CI, as a moment of being disarmed by the YP’s responses, not consistent with their school norms.

CI: potential ongoing change

Though the researcher involvement in the inquiry ended, new actions were discussed between YP and SAs. A new group seemed to form bringing the two inquiry groups together (see figure 11 below). This seems an important step towards ongoing or “self-generating change” (Taylor, 2003, p.146).

Figure 11: presentational knowing (from the researcher) summarising SA4, the formation of a new group

Feedback presentation to the student inquiry group

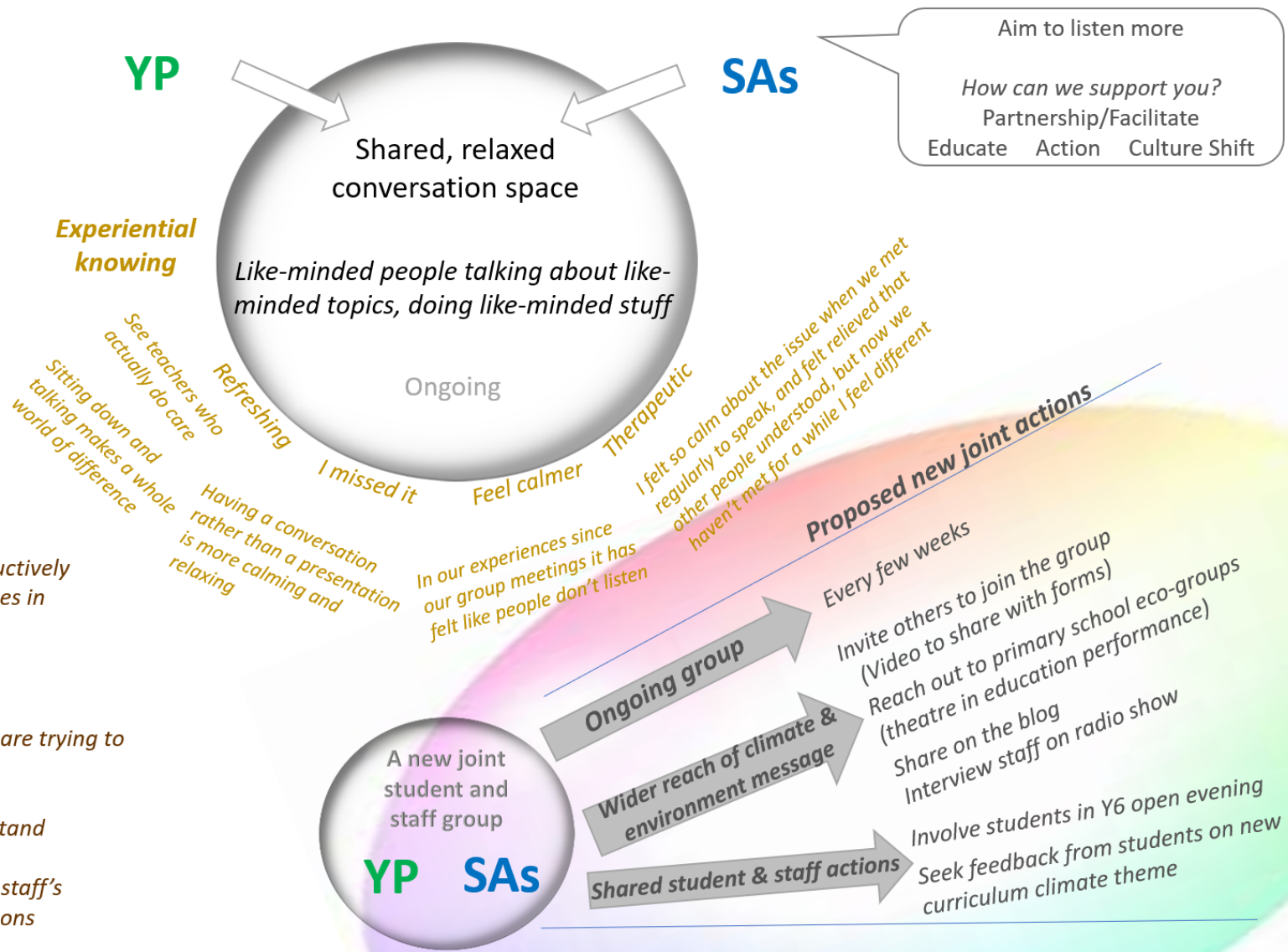
- What we liked:**
1. Curriculum/ education changes
 - Support a positive attitude at a younger age
 - Glad they will have that education and be encouraged to take a stand
 2. The chance to be involved in speaking to younger students

Propositional knowing

What do we know now about constructively managing eco/environmental anxieties in school?

What makes a difference:

- Sitting down and talking
- Seeing that teachers care and are trying to work on the problem
- Being listened to
- Being with people who understand
- Ongoing, regular meetings
- The offer to be included in the staff's actions/ work together on actions



Summary

Knowing that others also cared and a feeling of belonging to a group of likeminded, environmentally-interested and caring people made eco-anxiety more manageable. Seeing environmental care in their inquiry group, with the SAs and at a whole-school level gave a sense of being held in a network of caring others. The group appeared to be a therapeutic space, where talk was used to grapple with climate and environmental ideas as well as giving a space for their feelings, and to take up an environmental identity. Research activities enabled the YP to reframe ideas about peers as uncaring, as well as to learn about solutions and enable them to consider and envision a positive future, supporting an active hope. Connecting with SAs as powerful allies and partners helped the YP to practically act within their school, as well as forming a new relational experience with staff that let them reframe these adults as environmentally-caring.

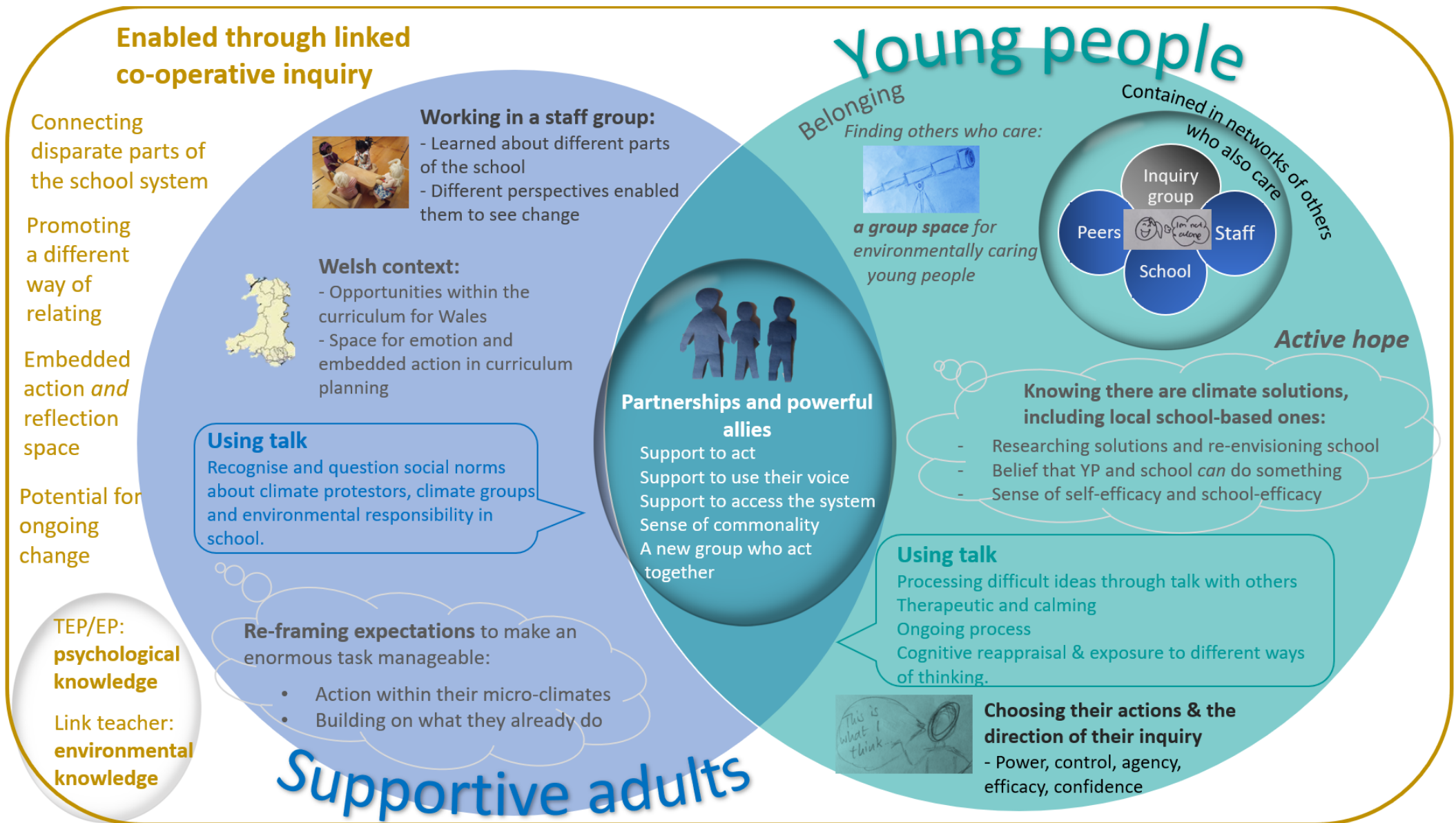
Though challenged by the scale of the task and their workload and time pressures, the SAs were enabled by building on what they were already doing and reframing their role as creating change within their department micro-climates.

Working with others was a source of support for both groups, enabling learning about the school system, climate change, solutions, and to develop new ways of seeing.

These factors were enabled through a process of co-operative inquiry, which suggested that CI itself can be a means of effective intervention in schools: enabling the creation of therapeutic spaces, action and reflection, connection across the system, different ways of relating and the possibility of ongoing change.

The following figure gives a visual summary, consistent with presentational knowing (Heron, 1998; Riley & Reason, 2015):

Figure 12: Constructively managing eco-anxiety for these YP and their supportive adults – a visual summary



6.0 Implications

6.1 EPs

The particular EP roles of “intervention, research and training” (Fallon et al., 2010, p.14) seem especially relevant. Linked CI seems to have potential as an intervention through a research process. As a means of gaining understanding and as a method of service delivery, there are implications for EP training. The process of facilitating this CI has indicated some useful areas for EPs to be aware of. Key learnings on this study’s linked CI process and how it might be usefully developed from this study’s experiences and can be found in Appendix 16 alongside an aide memoire of the process and a reflection on how Kotter’s (2012) model of organisational change may support it.

Developing an understanding of eco-anxiety in context

In using CI as an approach, it is also important for EPs to consider a context-dependent eco-anxiety. The particular experiences of eco-anxiety for YP in this study fed into the direction of the inquiry they wanted to take. Exploring the particular worries of YP is an important starting point from which to develop their own research question aimed at supporting them in their specific experience of eco-anxiety. By giving space to this, EPs can also offer therapeutic support in exploring concerns within a safe contained space, fitting with an intervention role (Fallon et al., 2010).

Coping with rather than eradication

ACT (acceptance and commitment therapy) promotes learning to feel anxiety, and accepting this experience rather than avoiding it (Hayes et al., 2006). Likewise, the approach advocated for here is to move towards an acceptance of the reality of climate change and the enormity of the mitigation task, exploring, not avoiding, one’s difficult responses to this. Further, drawing on active hope (Macy & Johnstone, 2012) and the ACT bus metaphor (Hayes et al., 2012), it can be conceptualised as a journey towards a desired future, which one may not reach, but can take steps toward. Therefore, EPs need to consider acceptance rather than eradication of difficult climate feelings in their approach.

6.2 Constructive strategies for YP

This study has indicated that there are particular strategies that the YP co-researchers found helpful. These are outlined in Appendix 17 to aid EPs in reflecting on their work in this area.

6.3 Work with school staff

All staff may benefit from training on the experience of eco-anxiety in school, and need to consider how YP can be made aware that others care.

This study found that work with staff was important to enable the relational and practical support from SAs that the YP valued. Table 39 suggests points of reflection for staff to support them into the different relational space of CI.

Additionally, curriculum, school-based solutions and communication have been shown to be important. This leads to a key implication: engaging with leaders to support change at this level. To support schools to move from a “culture of uncare” (Weintrobe, 2020, p.355) towards cultures of environmental care, reflection questions are offered in table 38. These can be used by EPs working with senior leaders, potentially as a reflective activity as part of a CI process, as an audit or within consultation.

Table 38

Key questions for reflection with leaders in developing a culture of environmental care

There are particular implications for school leaders, who need to have an awareness of the importance of curriculum*, delivery, communication and school ethos for supporting YP with eco-anxiety.

*Welsh context note: Curriculum is important to consider as the framework is designed to be adapted by schools to suit their context and learners (Welsh Government, 2020), and therefore the degree to which climate is emphasised, integrated and linked to action may depend on school interpretations and contexts. Therefore, discussion of opportunities within the curriculum with individual schools is still important.

- **School-based solutions:**

*How well are school solutions, such as recycling systems or polytunnels, used?
Do pupils understand their impact? Are pupils involved in using them? Do they know how to use them? This has an impact on YP’s efficacy and their sense of school efficacy in tackling environmental crises.
Are all members of staff and departments using these solutions, including cleaners and canteen staff? Do staff understand the impact and how they may be part of a vision of the school as environmentally caring?*

- **Curriculum:**

*Is climate change taught in your school? What previous experience of climate and environmental education have your pupils had at primary school?
How is sustainability included in the curriculum; what opportunities are there? Is climate taught as a one- off topic or integrated across the school and are there consistent messages?
Does the curriculum include education on solutions?
Are pupils able to envision an alternative positive future, knowing about possible solutions?
Does the curriculum have opportunities for collective action at a school or community level embedded within it? Is the action planned to be conducted with others?
Do lesson plans include space for reflection on emotion, environmental events in the news, difficulties in social media, and on wider political issues connected with the environment?*

- **Communication:**

How well are school level environmental actions communicated with pupils? If pupils were asked would they be able to tell you?

Reflecting on the school ethos, supporting belonging and identity:

- Does your school feel they hold an environmental responsibility?
- How are protestors and climate organisations viewed and spoken of? How is being an “environmentalist” seen?
- How is the school framed environmentally to incoming children from feeder primary schools, such as at open days? Is the environment framed as an important aspect of school life from the start?

Table 39

Reflections for staff entering CI spaces:

Supportive adults in school have an important role as partners for YP in creating change that is both better for the YP’s wellbeing and also better for the environment.

In co-operative inquiry YP are *co-researchers*. Some things you can do to support YP in this process to feel listened to, valued and respected members of the inquiry group are:

- Reframe teachers *and* YP as co-researchers,
- Encourage feedback from YP to the adults to disrupt power imbalances,
- Think of your common interests and goals,
- Listen actively to what YP say,
- Comment on and show you value responses from young co-researchers,
- Be mindful to give more space to the YP’s words than your own,
- Consider the layout of the room; does it encourage collaboration and a sense of equality? You can try using circles of chairs and tables pushed together to create a surface for collaborative work.

6.4 Wider system implications

As a current and ongoing issue, the researcher would like to spread the messages of this study more widely. Dissemination with the co-researchers and school has been planned. However, the author would hope to share the results nationally, especially with EPs, through conference presentation, journal publication, a blog article, and work with the Climate Concerns and Educational Psychology Interest Group.

The planned outreach to year six pupils by co-researchers in this study suggests a wider implication for linking high schools with feeder primary schools. This also suggests implications for work at a wider community level than the school, to create supportive communities, who can provide a wider network of others who care.

7. Limitations and further research

This study is based on work in a particular context: two small inquiry groups within one school. This means that the findings need to be understood within this context. As this study is based within a qualitative paradigm, generalisability is not aimed for (Slevitch, 2011). However, detailed information on context has been shared (the linked CI process and group development, as well as a broader contextual scene setting in the literature review) to support readers to make an informed judgement of the “fit” between [my] data set and interpretations, and whatever contexts and datasets/groups they are interested in” (Braun & Clarke, 2022, p.146).

Experiences of extreme weather

The school is not in an area that has experienced flooding, though this has been a serious issue for many areas in Wales, predicted to become more frequent over time (National Resources Wales, 2020). Extreme weather events create “affective experiences” for people (Verlie, 2019b, p.5) and may then impact their experience of eco-anxiety and of managing it. Therefore, work with YP and SAs in areas that have experienced extreme weather is an important area to explore in further research, and one where Allen (2020) suggests there is a role for EPs to help people develop resiliency and manage their responses to these events.

Limitations from the shared characteristics of the young person group

Though positive changes and experience were found for the YP, it is worth noting that the group shared certain characteristics: acceptance of the reality of climate change, white, female and a more privileged school setting. The findings need to be understood in relation to these, meaning that there are gaps in understanding for other groups of YP.

- The YP who volunteered to be co-researchers in this study were already accepting and open to talk about climate and environmental crises. However, this raises a question about those who Lertzman (2015c) describes as paralysed by the anxiety about the future. Though Lertzman’s research is with adults, the student co-researchers in this study also noted some unconstructive defence mechanisms in their peers. However, how to support this group remains unknown and is an important area for future research.
- The YP co-researchers were all female. This may have impacted on the bonding of the group and the friendships and sense of belonging that developed. Additionally, differences in how teachers react to boys’ and girls’ negative emotions have been found by Ojala (2015b), where teachers were less likely to take boys’ negative emotions seriously. The YP whose emotions were not taken seriously were more likely to use hope based on denial associated with lower self-efficacy, an unconstructive form of coping. Therefore, work with boys or mixed gender groups would also be useful to explore.
- The school catchment for this study encompasses an area of relative privilege. However, Threadgold (2012) noted a difference between how concerned disadvantaged and more privileged Australian teenagers were. This was also something discussed by the SA co-researchers in this study, recognising that the

more privileged have perhaps the space and resources to worry about the environment. The privilege of co-researchers in this study may have had an impact on their experience of both eco-anxiety and coping. Therefore, exploring the experience of eco-anxiety and coping with climate change and environmental crises for YP with different levels of disadvantage and privilege, seems an important area for future studies.

- All the YP were from a mainstream school, and were generally very articulate. Though a teacher from the school ALN base was a member of the SA inquiry group, it would be useful to explore how to support YP who have additional needs. The extended epistemology, with its focus on experiential, presentational and practical knowing in addition to propositional (Heron, 1998), has the potential to be supportive of YP with ALN undertaking inquiries.

Unknown long-term outcomes

The long-term outcomes for the co-researchers are not known, including how much the impetus for change will continue in the school, and what further support for YP and their supportive adults may help with this. Therefore, follow up work focused on ongoing change and how EPs may support this would be useful, perhaps drawing on Kotter's (2012) model for organisational change (see Appendix 16).

A need to explore parents' impact and inclusion

Parents were spoken of, but not connected with, in this study. Ms Gale in particular spoke of the potential impact of parents and Mr Snow asked the students about their parents' environmental views. This seems like an important area for further exploration as parents are trying to support their children with difficult climate-related emotions (Baker et al., 2021). Like teachers, Australian parents appear to have concerns about how their own emotions may exacerbate climate anxiety for their children, whilst also seeing a supportive role for themselves in helping their children take action (Baker et al., 2021). It also seems that climate scepticism is highly influenced by parental views for Swedish teenagers (Ojala, 2015a), suggesting an impact on how these teenagers will cope with the reality of climate change. The YP in this study also identified the importance of acting with others, not holding the responsibility alone, which adds impetus to the involvement of multiple people from their microsystems. Therefore, incorporating parent involvement into an inquiry approach, and finding out about both how they can add support, and can themselves be supported, would be a useful avenue to explore as part of wider microsystem scaffolding for YP.

Exploring experiences of eco-anxiety for school adults

This study explored the experience of eco-anxiety for these YP. However, it did not look at what eco-anxiety is to school adults. This is important because they may conceptualise this differently, and this may have an impact on how and what they support in their role as supportive adults. In addition, Baker et al. (2021) highlight that teachers are aware of having strong emotions themselves around climate change, and are concerned about how this may impact their pupils. Therefore, understanding more of eco-anxiety from a teacher perspective may also work towards support for these key supportive adults.

The classroom setting

The young person inquiry group was very supportive of their wellbeing. However, questions remained around how opportunities for talking about climate and environmental emotions might work in a classroom setting. This centred around creating a safe enough space within that class situation. This is an important area to investigate further, especially as it was hypothesised by the young co-researchers in this study that many more of the peer group may be feeling worried, but not coping in constructive ways.

8. Conclusion

This thesis began by reflecting on a new role of EPs in the context of the climate and environmental emergency. So to conclude this thesis, the researcher would like to offer this response to Allen's (2020) call to action:

- In the context of this study within a high school in Wales, this thesis has added to the understanding of eco-anxiety, and ways to support YP to constructively manage it.
- This thesis suggests anxiety about climate and the environment is not something to be eradicated, but instead difficult ideas can be explored, and supported through agentic action, education about solutions and containment in networks of others who also care.
- CI is offered as a way for EPs to work with YP to support them. YP have a voice that is important to be heard, and the process of the linked CI developed in this study enables collaborative working with them, and linking them with SAs, who can help.
- Different groups have been highlighted as agents of change. However, rather than considering individual agents, this thesis argues for collaboration. Being collective agents by having a peer group to be with, and SAs, was extremely valuable for the YP in this school context. The strength in knowingly working together means that YP are not left holding such a problem alone, are in fact enabled further within their school to act and develop feelings of power, efficacy, belonging and an active hope.
- Finally, this thesis strongly agrees with Allen (2020) that there is a role for EPs in addressing the needs of YP in the anthropocene. They can support the wellbeing of YP by engaging in this field, working with schools to support YP and wider systemic change. However, this is a developing role within a changing world, and as Allen (2020) suggests there is "a role... as a profession to do much more" (p.2). Therefore, I would like to end this thesis with the same question Sara addressed to her headteacher;

"You can make a change for the better future. Better tomorrow. So now I'm asking, what will you do?"

9. References

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3. CRITICAL APPRAISAL

Word count: (6091)

1 Introduction

I have chosen to write this appraisal in the first person, reflecting the exploration of my subjectivity and personal learning as a new researcher. I have focused on key decision moments within my research journey, and to remain true to my epistemology, I have included visual presentational knowing (Heron, 1998; Riley & Reason, 2015) and diary entries alongside my written reflections.

2.0 Critical account of the development of the research practitioner

2.1 Reflections on ontology and epistemology

Finding my ontological position as a researcher was initially challenging. My ideas about worldview had developed from positivist thinking (based on a “single, unitary *real* world”, Ashworth, 2015, p.10) as an undergraduate, to using the COMOIRA model (the Constructionist Model of Informed Reasoned Action (COMOIRA) (Gameson & Rhydderch, 2008) on the Cardiff DEdPsy course, which holds social constructionism (Burr, 2015) as a central theory. Considering multiple realities, as social constructionism does, seemed important as I was aiming to work with young people (YP) and adults within a school system, who were likely to have different constructions. Nevertheless, I also felt strongly that I needed to acknowledge the reality of climate change, especially as one distinctive element of eco-anxiety is that it is based on real threat (Haseley, 2019). However, this did not fit with social constructionism. Conversely, Heron & Reason’s participative subjective-objective ontology, posits a “given cosmos” (1997, p.4). From this perspective I could conceptualise a climate cosmos, which, as it is interacted with through our minds, means that we can interpret it in different ways. Thus, it allowed for the sense of multiple realities that I also felt was important to support YPs’ voices, alongside adults’.

Researching *with* YP was important as Hickman (2020) observes that, “whilst there is research examining the impact of climate change ‘on’ children and future generations... this is children’s voices framed through adult perspectives” (p.413). This challenges research that is done “on” YP and suggests the need to provide a platform for their voices. The different perspectives, power dynamics and experiences of children and young people (CYP) mean that they “know things that we, as adults, do not know” (Cutter-Mackenzie & Rousell, 2019, p.100) and additionally may understand the world differently, having different “universes of meanings” (Malinverni & Pares, 2017, p.406). Therefore, the extended epistemology felt appropriate as a way of recognising different knowing (experiential, presentational, propositional, practical; Heron, 1998) of the co-researchers, and enabling different corresponding ways of exploring this. This supported the sharing of the unique knowing (Heron, 1998) of the 13–14-year-old co-researchers.

2.2 Design

The literature highlighted intergenerational blame and division as a part of the experience of YP around eco-anxiety (Hickman, 2020), and this indicated to me a need to work with both YP and adults in my study. Walker’s (2020) paper made me wonder about collaboration between CYP and staff due to the reflections on the need for support from adults for young school strike activists. I felt that the focus should be on a process which enabled dialogue between CYP and their powerful adults in the school system.

To enable this, I first wondered about using reflective teams (Pender & Stinchfield, 2012) as a way for different parts of the system to hear each other. However, I reflected that given the limited power of CYP compared to adults (Billington, 2006) and the typical hierarchical structures of school, this may be unsuitable (see diary entry 1). In an accountability school culture, the idea of others listening in may be very difficult for the staff and possibly evoke inspection and lesson observation, while YP may also be uncomfortable expressing their thoughts and worries in an observation setting.

*Diary entry 1:
"Ethics of using a reflective team – issues of power here? CYP and staff listening in to each other – also think staff would be unwilling to have CYP do this for them."*

Additionally, I recognised that although using reflective teams may enable dialogue, it did not give opportunities to be agentic, collaborative and take action, shown to be supportive in my initial reading of the literature. It felt ethical as part of the responsibility of not doing harm (British Psychological Society, 2021), therefore, to think about whether opportunities for agency, collaboration and action could be incorporated within a research process.

2.3 A co-operative inquiry approach

This led me to co-operative inquiry (CI); a collaborative action research approach (Riley & Reason, 2015). The inherent participatory nature also fitted with Cutter-Mackenzie and Rousell's (2019) arguments for greater participation for YP within climate education research.

*Diary entry 2:
"Co-operative Inquiry! – Action – empowering/ enabling possible here."*

Working with young people within CI

CI research has shown the importance of a facilitator for CYP, who may need support in the process (Yip et al., 2013). As a facilitator, I realised early on that I needed a way of keeping track of what we were talking about in a visual way, in keeping with presentational knowing (Heron, 1998). I developed a sketchbook record of our activities and also tried in sessions 2-4 to make brief visible notes about what we were discussing in front of the group. This drew on Cahill's (2007) collective praxis approach where she made a "wall" of big sheets of paper on which she scribed notes for the group, as a shared reference and memory. This was hard to manage alongside my facilitator role though and suggests facilitation would work better with two people. I had also wanted to try to get the group to record some of this thinking, but their spelling worries and focus on the tasks meant that I did not ask them to do this. I did wonder if this meant I created a power imbalance as the sole recorder. However, given that I found it hard to facilitate and scribe notes simultaneously, perhaps this task would have excluded them from the discussion. In this way, while trying to enable participation, it was necessary to respond to their abilities.

Working with adults within CI

My conceptualisation of supportive adults (SA) came from a need for adult support for YP (Walker, 2020), as well as the challenges of secondary school power dynamics (Robinson & Taylor, 2013) and therefore the need for supportive allies within this setting.

and of my pre-conceived ideas” (p.15). This was difficult and at times nerve-wracking. For instance, I felt challenged on my epistemological position on truth when my YP co-researchers decided to design and send out a questionnaire to their peers. Their knowing, from the percentages and numbers this gave them, was really important to them. These were measurable responses, consistent with a more positivist approach, whereas I had entered into CI with preconceived ideas about different types of knowing. I worried that this may not be consistent with CI. However, when I brought this to supervision, my supervisor’s reaction reflected the agency that this suggested that they had taken up, directing the course of their inquiry. Upon reflection, different types of knowing gives space to quantitative based knowing too, and my letting go of direction gave the co-researchers space and supported them to, as Carrie describes in another context, have more, “control of the steering wheel” (YP6, 794).

Facilitation as enabling participation

The CI approach with its inherent participatory values named in the “co-researcher” title seemed empowering. This naming could be seen as a form of explicit “positioning” (Harré et al., 2009), giving YP rights and duties within the research through this naming. In practice then they should have had a “footing” to enter into the research “unchallenged, as of right” and “taken notice of” (p.12). This does seem to be the case as seen through the direction the YP steered the research in, towards peer opinions, and through their reflections (in YP6) about feeling more confident and powerful. In this way their participation reflected their positioning.

Like Bartle (2021), I often found myself “moving furniture around” (p.200) and it became a running joke that however Mr Snow tried to set up the room in advance I would change something. This was in order to create spaces, which in themselves were potential “technology for change” (Bartle, 2021, p.200). For me, this scene-setting technology involved not just an attempt at visual and communication equality in using circles of chairs or shared table space that we could stand around, but also a deliberate distancing from a classroom scene. The classroom implicitly positioned the YP; in the COVID context the desks of the class were arranged to face the teacher, suggesting a particular focus on the teacher and not on the YP. It also suggests taken-for-granted social norms of teachers’ power relative to YP (Robinson & Taylor, 2013). So I felt that the visible space needed to change in order for the group space to change into a collaborative CI space. This could be seen as deliberate attempt at re-positioning YP through scene-setting.

Understanding myself as a facilitator

My positioning, which felt like being both in and out of the group simultaneously, was something I explored in my own reflections (see diary entry 3 and figure 14 below), group work with my TEP peer group and university tutor using a reverie approach (Bartle, 2021), as well as in 1:1 research supervision. This helped me clarify my role and boundaries, but also acknowledge the importance of my interaction with the group, as

*Diary entry 3:
“Responsibility – I am feeling a responsibility for what this group do – but actually I do not hold that. I am there to facilitate a shared experience of reflection using different ways of knowing.... Feelings of anticipation and curiosity – what will these adults suggest?
They might choose to do something different or similar – but not necessarily wrong or right.”*

facilitator and also relationally as an adult who listens, as a part of the inquiry.

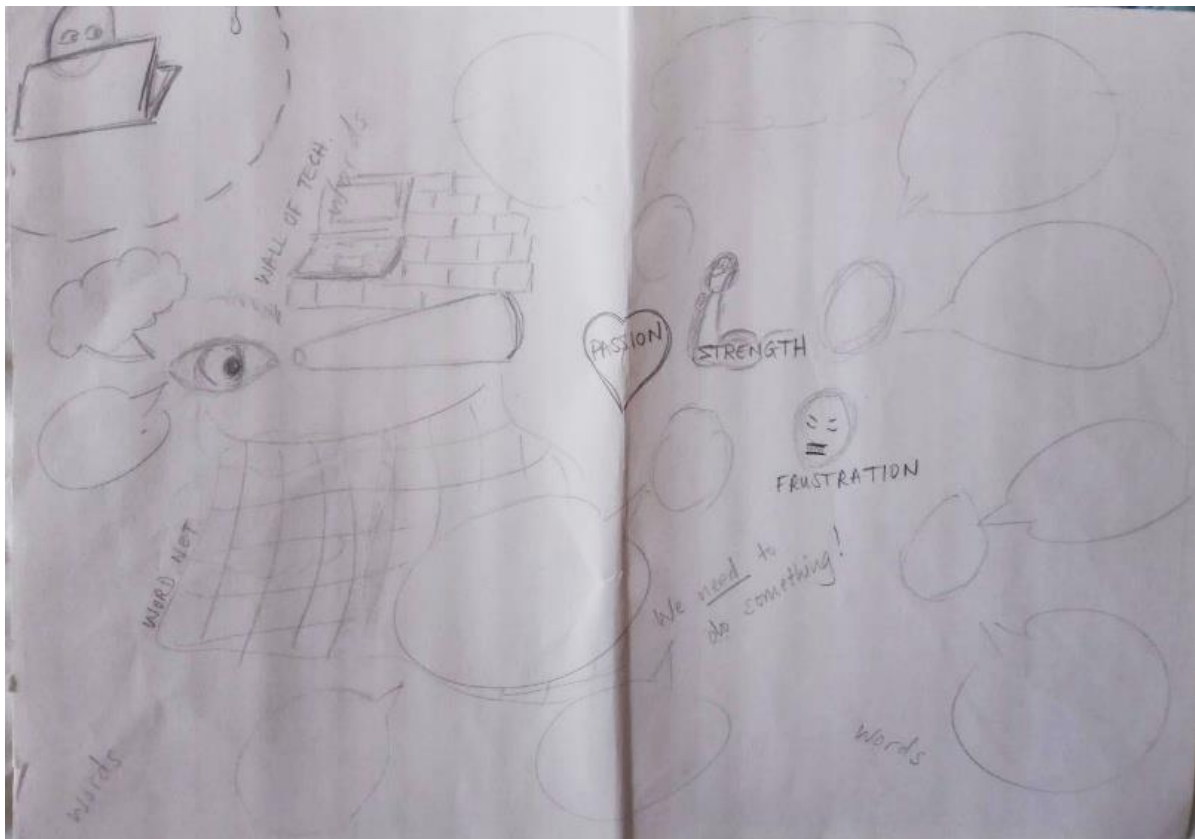


Figure 14: Rich picture reflection of my experience of session 1 of the YP inquiry, exploring the experience of being in the group and yet also studying the group.

Using a research diary also allowed me to recognise my subjectivity as facilitator (diary entry 4). This was not static, but dynamic, as I became more proficient and delved further into a world of climate psychology (Andrews & Hoggett, 2019). I felt this was an opportunity to “interrogate” what I was bringing (Braun & Clarke, 2022, p.13). This also fits with CI as an approach of “research *with* people” (Heron, 1998, p.19), where, even as principally a facilitator, I hold opinions (Cahill, 2007) and my facilitation itself has an impact on the inquiry. One example was when I told the SA group about climate cafes at the end of their second session, a direct result of my growing knowledge of the wider area.

*Diary entry 4:
“I am not a blank slate coming into this process – CI has impacted me as much as impacted them – personal and professional – e.g. supporting change – special interest groups – skilling up toolbox (climate cafes)”*

I went on both a personal and a professional journey as a CI facilitator. I gained a sense of improved competency as facilitator, much like the experiential immersion (Heron, 1998) of CI, where, being in it, I was able to start to live the CI process by the second group. This was supported by using Heron’s (1998) CI skills and validity questions as a reflection process following each session, which helped me reconnect with the process. This felt crucial for me as a researcher new to CI, where I was able to reflect on process, power dynamics and act on it reflexively.

The personal impact:

Post-session reflection, YP session 3:

Radical practice and congruence

"I have also got my family to do a litter pick this week – and I am thinking carefully about how I travel to the school – this week I cycled. So, though these are not the group actions, being in the group, and developing this idea of myself as a climate change researcher, is impacting on my wider actions and decision making. This relates to the fact that I have quickly developed an assumption that in this role I should be modelling care for the environment."

The professional development of CI skills:

Post inquiry session reflection using skills and validity questions:

Riley & Reason (2015) highlight the importance of group processes and have included quality criteria specific to group processes (p.187). I have adapted these for post-session reflection. I am also drawing on Chiu (2006): "Reflection on the participatory process, analysis of power dynamics and researcher reflexivity are often missing." (p.187).

Being present and open: How much was I able to be open to the meaning myself and others put into our discussion and found from it?

Yes in general – but I did bring a concern about keeping pace up this session (which was achieved – there was a good amount of energy – and I made the decision to ban chairs today), which may have meant I did not explore as much in their check in as I sometimes do. It sounded like one of the group was anticipating some action she was going to be taking in the week – and I am not sure I encouraged further exploration of what this meant for her. Similarly it would have been good to be more curious about the reason they wanted to do the questionnaire/ their hopes from it.

Bracketing and reframing: What assumptions and constructs did I notice in this session? Was I able to reframe them or try out different constructs?

What are my assumptions and constructs?

I perhaps assumed was more part of the group than perhaps I am – this was jolted when I felt my position as an outsider to their school system – I did not know how their forms worked, the possibilities of methods for them to send out their questionnaire etc. I have been very aware of my generational difference, but not the school system and outside person difference before. However, it did bring out a really useful role for the teacher sitting in the session – they did have access to this school system in a way I do not.

From transcribing I can see that I held some kind of assumption that I would be a "them" in our us and them exploration activity, as I use myself as an example of generational difference more than once.

Figure 15: extract of post-session reflection using Heron's (1998) skills and validity questions

2.4 Measurements

I decided not to measure my co-researchers' experiences of eco-anxiety, though scales are available (see Clayton & Karazsia, 2020). This was because the literature suggests that this is a concept that is not fixed in definition and is also fluid in people's experience of it (Hickman, 2020). Andrews and Hoggett's (2019) climate psychology perspective highlights the problem of separating behaviour from social context and looking at single factors, which a scale may reduce eco-anxiety to. A scale may also suggest a more positivist tool, whereas I have approached this study qualitatively, highlighting experiences (Ashworth, 2015) rather than discrete cut off points or measurements.

However, a more clearly articulated shared understanding of eco-anxiety may have supported the group in our inquiry. Though I drew this out through our reflective activities throughout the inquiry, a focused reflective activity on this may have been helpful.

2.5 Ethical considerations

The key ethical considerations can be found in part 2, table 15. However, here I reflect on my decisions in practise as the inquiry unfolded.

Power dynamics

I was aware that the power dynamics between myself, as facilitator, and the co-researchers was important to consider, and drew on advice from Ritterbusch et al. (2020) to give time to develop rapport, familiarisation with each other and participation in decision making. On reflection this did work as there was a real sense of a united group, particularly for the YP. This was supported by including a time for sharing of stories (Riley & Reason, 2015) of their week as well as a relaxed atmosphere where they could attend to their needs, such as taking phone calls from parents (see reflection below).

Post-session reflection, YP session 5:

“they needed to attend to personal needs (phone call home etc) just after this task was introduced. The arrangement of the group in the room was haphazard then, adding to the informality...”

Feeling relaxed in the group was one of the things that YP co-researchers specifically commented on as valuable and supportive to them:

Because it's more conversational and their presentation... because it's a conversation it's more relaxed and then that would generally also helps with feeling more calmer

(Daisy, SA4, 1872-1875)

finding these people and ((laughs)) speaking to them about it makes me makes everyone feel more relaxed and just more in a safe environment

(Rey, YP6, 267-268)

I also adopted Cahill's (2007) suggestion to think about keeping quiet as the facilitator. In practice I tried to ask the rest of the group for their thoughts or reflecting and checking what had been said rather than offering my own interpretation. My experiences using active listening skills as a TEP supported these skills as a researcher. I also reflected on the “authentic collaboration” (Heron, 1998) between the co-researchers as part of my post-session reflection:

Post-session reflection, YP session 5:

Authentic collaboration. Did anyone dominate the discussion, or were any voices left out?

Rey still contributes the most, though Carrie is now also very talkative. I have used rounds every session to ensure everyone gets some time speaking -and often check in with Daisy to ensure she has the space to share if she wants.

In connection with an awareness of power dynamics I considered Collier's comments that "participants should have a say in how research unfolds and how they are represented." (2019, p.41). This fitted with the CI approach, aiming to empower co-researchers by involving them in shaping the methods used (Heron, 1998). My co-researchers instigated data collection about their peers, letter writing to their headteacher (YP) and data collection with incoming year six pupils (SA). In practice representation involved encouraging co-researchers to choose their own pseudonym (Allen & Wiles, 2016), the YP choosing a group name ("Young Students' Say on Climate", YP5, line 2499) and supporting them to feel comfortable to take information out of the transcript. I highlighted this choice into the closing script for sessions as well as the final debrief letter (see Appendix 9 and 13).

Diary entry 5:

"Interesting to observe the staff dynamics and ask the YP afterwards for their reaction – they had noticed it and felt that their message was not getting through to the one staff member and they were actually being rather defensive – suggests the importance of the teachers and senior leaders reactions to YP as being really important for how they feel - listened to or lectured?"

A particular challenge came in the YP's last session (YP6), when the whole SLT arrived interested in the YP co-researchers' presentation to the headteacher. One of these was already signed up as a SA co-researcher, however, the rest were not (contributions from this group were not included in the transcripts). In our check-in huddle before we let them into the room the YP had reflected that the adults were there to listen and were happy to proceed. In fact, afterwards they discussed positively that the SLT had come to hear them and shown interest. However, in the moment, seeing a crowd of adults, not all of whom adhered to the semi-circle chair layout we had created for a sense of equality, did mean that the co-researchers initially grouped themselves quite tightly together, seemingly for safety. One of the members of staff, sitting with their arms crossed, was also felt to lecture the group (see diary entry and rich picture below), at odds with the collaborative participation we were aiming for in our CI. I reflected on this session a great deal, and how the SLT probably did not understand the difference of CI and co-researcher status compared to everyday school practice. I concluded that when others enter into the inquiry space in whatever form (even as audience), there is a need to introduce the way CI works so that school staff understand that this is a different way of working with the YP and that in this space they are "co-researchers", which entails a different way of relating than they do day-to-day in school.



Figure 16: Rich picture reflection from YP session 6 (YP6). This shows the staff member as a source of palpable negativity self-positioned outside the seated audience and disconnected from the rest of the staff and the YP.

The pseudonym choices were also something I reflected on in relation to power. The YP used a first name, while the supportive adults were given a title and surname. This does not on the surface appear to be empowering of the YP and maybe distances the staff. However, I followed this because it was reflective of the hierarchical structure of the high school and part of their day-to-day naming practices. It is therefore part of the context of the study, which is important to include (Braun & Clarke, 2022). Crucially, it is also how those YP and staff who chose their own names presented themselves.

Interpretation

As teenagers' "universes of meanings" may be very different to that of an adult (Malinverni & Pares, 2017, p.406) I thought that the data the YP's group produced, in particular, may be interpreted differently by the researcher compared to the YP. Therefore, it was important to use member checking for feedback (Thomas, 2017) on my thinking and that of the SA group. As well as including opportunities for dialogue between the groups as part of the linked CI design, I gave the YP opportunities to co-analyse within sessions, brought transcript extracts back to check their meaning, and checked the SA's supportive conversation structure (see Part 2, figure 10) with them in the final session (SA4). This was also felt to be important for the YP to feel "ownership over the data" (Kornbluh, 2015), which they did exercise in practice by requesting for some information to be taken out.

Researcher care

I was aware that the subject matter may impact on me as well as my co-researchers. However, being with this group actually supported my wellbeing (see diary 6). This diary entry highlights the intersubjective relationships of being involved so closely in research with people (Holmes, 2014) as well as perhaps a vicarious anxiety (Pihkala, 2020) experience.

Diary entry 6:

"Being in the group, and then transcribing I find that I experience their worry twice. However, I have found that right now while working with them, I am the least worried about climate change that I have been in years. This is not stopping me acting – but I have found that seeing others who are passionate, who care, are trying to make change in their system has done something to support me."

In fact, I had more difficulty from becoming immersed in a climate psychology world:

*Diary entry 7:
"I have joined the email mailing list for the discussion group for X Organisation - however, noting that there is a lot of pain and worry being expressed here by these therapists – how can I look after myself while engaging in this topic? Being part of the group is exposing to worry and reminding me of worry about climate"*

I also recall disrupted sleep during this time prior to starting the inquiry groups. What was different about this was that I was not an actor in this space, whereas I was within the inquiry, though a facilitator. This seems to reflect Macy and Johnstone's (2012) theory of active hope; through the inquiries I was an active participant in my own hope, able to visualise a desired future for YP in schools and take steps towards it.

Co-researcher care

I was also aware of a need for care for my co-researchers. As well as the subject matter, there appeared to be a particular nurture need for the SA group around their time commitments. Although, it is possible that my experience of being a former teacher made me more alert to concerns over workload. This created a tension for me as the researcher who was aware of the importance of nurture within a CI group (Riley & Reason, 2015), but also wanting to encourage the adults in practical action to balance the reflection and action cycles of the inquiry and have enough data for reflection (Heron, 1998). Despite many ideas, a shared group obstacle relating to time and workload impacted on their practical action within school, which could have become quite destructive for the group dynamics in frustrating the group (Randall & Southgate, 1980).

Following supervision I decided to directly explore obstacles with the group. This seemed helpful and they were able to start to build actions from what they were already doing; thinking together about environmental texts for the English department, developing work with the sustainability council, an environmental role model for the board in the HI base and interweaving research into a planned year six visit.

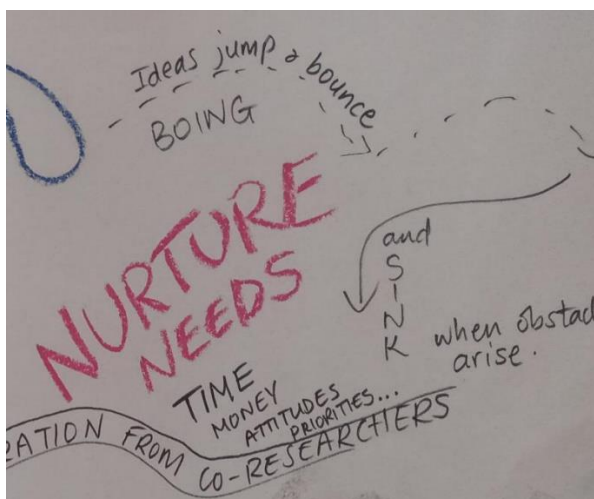


Figure 17: Extract from my rich picture reflection for SA session 2

I had originally hoped to use food as a way of supporting my co-researchers to feel comfortable in our sessions, inspired by Cahill's (2007) reflections on "creating a warm collegial atmosphere understood along the lines of hospitality" (p.5). In addition, sharing food can create a collective space (Jacobson and Rugeley, 2007) and informality that supports the development of trust (Leff et al., 2010). Due to COVID I felt that I could not bring in food to share within the sessions with the YP. However, restrictions changed and I started bringing cake to the SA group in session 2, as did some of the staff. There did appear to be an impact; the cake, and the corresponding jokes about us being a cake appreciation research group, allowed us to develop a relationship based on more than serious issues of climate change. This seems reflective of Riley and Reason's observation that groups' use of social activities, such as eating together, can "build and deepen relationships" (2015, p.189). In particular, during the final session with both staff and YP present, sharing of cake seemed to create a different space, possibly undoing some of the school hierarchy norms through a social practice that staff and YP do not normally do together. It also allowed a sense of celebration and coming together that forms the relaxing phase of Randall and Southgate's (1980) creative group cycle.

I was also aware of pressure the link teacher put on themselves to "do justice to" the YP group. This suggested that this role, having been involved in the YP group from the beginning, is perhaps more vulnerable to pressure. The responsibility was shared between us, as the individual is positioned "within a community of peers" (Riley & Reason, 2015, p.178). However, in hindsight, this would have been useful to add to the opening script for the SA co-researchers (see the aide memoire in Appendix 16).

Diary entry 8:

"Snow's feelings of wanting to "do justice to" the ideas of the YP group. Is he holding a responsibility here?"

2.6 Building the inquiry groups: my co-researchers

The headteacher joined the inquiry in the final YP session, though she was aware that her commitments may make it hard to join the subsequent SA inquiry sessions. Nonetheless, having the headteacher join as part of the group, even as a distant member, felt important given that Taylor (2003) reflects on the importance of headteachers for enabling change, noting that "able and strong headteachers, in fact, are the most effective change-agents in their schools" (p.129).

However, it did make a difference when co-researchers missed sessions or joined after the initial session (diary entry 9). Mr Ice was a valued member of the group, but there was a sense of him as "SLT" from the other co-researchers that perhaps would have been reduced if he had been present for our story sharing of why we were there in SA 1, which included the personal as well as the professional. This led me to conclude that co-researchers must attend the initial session to ground everyone within the group.

Diary entry 9:

"Reflections on when adults have joined the inquiry... Mr Ice missed the first session – wonder about how this impacted on a shared understanding – though wanted him there as a member of SLT."

2.7 Data analysis

My reasoning for using reflexive thematic analysis (RTA) is explored in Part 2. Here I want to elaborate on my decisions around presentational knowing.

Riley & Reason (2015) suggest that many different forms of data analysis would be appropriate for CI. However, I wanted to live the extended epistemology of CI by using a method that would value other types of knowing, especially the presentational. We can reflect aloud on experiential knowing, asking, “what was that like?”, and enabling this to be captured in a transcript. However, presentational knowing, particularly the non-verbal, is missing from this data source. I was also concerned that not including visual presentational knowing would be privileging the spoken and written, and perhaps devaluing images by viewing as a “more naïve or simplistic form of communication” (Reavey & Brown, 2021, p.102).

Diary entry 10:

“I’m questioning just looking at transcription of what is said, when the research process also uses presentational knowing. This presentational knowing may be used for reflection, and then one hopes it might be captured in a transcript, but some of the power of the presentational knowing is the value in that itself. So, I’m wondering whether I can incorporate presentational knowing (photos, drawings, role play... as well as speaking and writing) as part of the data set, as opposed to being used for elicitation only?”

I considered Gleeson’s (2012) polytextual thematic analysis for visual data. Though it tries to understand the images in relation to other texts in the same culture or area, it appears to be a way of analysing images rather than as part of a mixed textual/visual data set, which is what I was originally hoping to use.

I went back to considering the process of CI. The different types of knowing build upon each other (Heron, 1998), which suggested to me that rather than analyse the visuals themselves, viewing them alongside the text-based results may in itself add a richness for the viewer that may support knowing. At an analysis level, I tried to incorporate the different expressed knowing (Heron, 1998) of the inquiries by looking at the presentational data whilst doing my RTA on the textual data (see Appendix 14). However, as interpretation continues in the interaction of the reader and text, I also had to consider how to communicate presentational knowing within the written thesis. For this, I have drawn on the approach of Gaulter and Green (2015), who use drawings illustratively in their article. This way the reader can see the accompanying visuals while reading the text and so hopefully also experience some additional “knowing” from the presentational data. Including the visuals can also be part of providing transparency in how myself and my co-researchers arrived at our interpretations (Yardley, 2015).

2.8 Writing about the co-researchers

I also wondered about communicating the experience of hearing the voices in the room versus how this is translated into text form. I reflected on this in my diary:

Diary entry 11:

*“I am remembering how passionate the young people were in expressing and sharing their letters – does this come across in prose form?
I am wondering about how we “hear” the voices of these children best – particularly when sharing research – and with them as co-researchers.”*

I did include paralinguistic features in my transcripts, but even when viewed alongside other presentational data this does not seem to give the strength of passion from the delivery. It is difficult to capture this in a thesis. However, perhaps capturing this is irrelevant. It seems more important that the YP were able to authentically voice their opinions to powerful adults in their school, as can be seen in their letters and how their presentation was received by their headteacher and their SAs.

Reflection box: Perhaps the point of CI is the voice that the co-researchers had. When Sara presented her letter to us in session 5, it was so powerful, so emotive that it moved me to tears. Even the memory of it has done this when describing it in supervision. When Sara voiced her letter to the SLT it was not as emotive, but I reflected afterwards on what this session may have meant – these were 13–14-year-olds speaking to the *senior leadership team* - the power divide is huge. She had voiced her thoughts to these powerful people, including some negative impressions of the school. *Brave* does not do this justice. I remember wondering about what their letters “should” contain and whether they were too much about actions. However, these YP can be seen as taking up a sense of agency and efficacy in sharing their findings in the way they wanted – rather than including what I might have thought about.

I additionally reflected on how to term the YP co-researchers in my writing:

Diary entry 12:
“What do they call themselves? They identified themselves as “kids” most of time when they spoke, so what does “young people” mean to them?”

I had begun my writing using “young people”. However, I became aware that this could be contested. The U.N. (United Nations, n.d.) note that though there is no universal agreement on youth, they define this age for statistical

purposes as between 15 and 24 years, whilst also noting the overlap in the definition of children from Article 1 of the United Nations Convention on the Rights of the Child as up to 18 years old. A more descriptive definition is given by the General Medical Council (n.d.), who state:

“We use the term ‘children’ to refer to younger children who do not have the maturity and understanding to make important decisions for themselves.

We use the term ‘young people’ to refer to older or more experienced children who are more likely to be able to make these decisions for themselves.”

This troubled me because of the potential implications of how the agency and positioning of my YP co-researchers may be read. While I want them to be understood as decision makers, they are, by the UN definition, children.

I also wanted to match the YP and SA terms; if the staff are *supportive adults* this is about a role, and therefore I felt that the YP should have a term related to role too, such as *student*. Following Allen and Wiles’ (2016) call for participants to choose pseudonyms, I reflected that the most ethical approach would be to ask my co-researchers. They chose *young people* and so this is how I have described them.

3.0 Contribution to knowledge, practice and dissemination

3.1 Contribution to knowledge and practice

The bespoke linked CI approach has potential as a useful method for research and as intervention, adding to knowledge of how to work with YP and SA in schools to support eco-anxiety. I have outlined the implications for using this linked CI in Part 2. Here I want to explore the impact of the link teacher and inquiry endings.

The link teacher's role developed significantly as a result of being present during the YP sessions. This was initially to ensure transparency in otherwise being the lone adult with the group and from an awareness that I did not want the YP group to be closed off completely from the school system. The teacher's initial role was simply to be present in the space, but not engaged in the group.

I was unsure initially of the impact of this person being present; was this unfair on the YP, or limiting their experience of emotional safety in the group with a school representative present? This turned out to be unfounded as they later shared impressions of the group as a place of safety, however, this early questioning can be seen in my rich picture portrayal from the first YP session:



Figure 18, YP1: Mr Snow, the link teacher, portrayed as a watchful presence from behind his laptop

However, this had changed by session 3, as can be seen in my post-session reflection:

Post-session reflection, YP session 3:

What are my assumptions and constructs?

I had not been sure of the role of the sitting in teacher – but I realised that the teacher present actually enabled more action from the group in accessing the form tutors to get peers' opinions. Access to the system is important.

Mr Snow began to input more into the group as he got increasingly interested, and possibly as a result of our informal conversations after each session, where he offered really insightful and helpful reflections. These were really valuable to me, giving me another perspective on what had happened, and helping me to develop my thoughts with someone who had also experienced the session. The importance of what he offered to the group became especially apparent when the YP needed information and support from within the system to enable some of the action they wanted to take. He was able to provide this and to problem solve with them with expert knowledge of the school, which I could not have given. This suggests to me that in running this model of linked CI inquiries in

the future one needs two people as co-facilitators for the YP inquiry; one from the system and one from outside bringing the psychological input and knowledge of the process. Whether or not it is important for the outsider to have more input in the initial sessions remains unclear; it may set the participatory scene as a different space to the hierarchical school system more readily. This is something to explore in future practice.

The second practice-based issue I want to reflect on is the ending. I am aware that the YP and supportive staff are continuing with our work, with a joint meeting arranged in February to discuss and explore the new climate scheme of work.

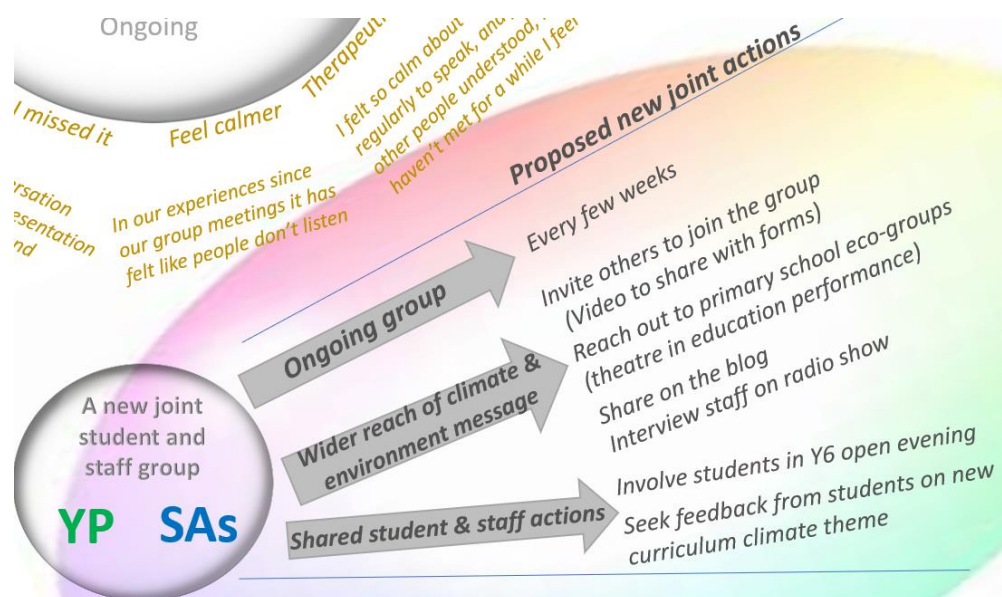


Figure 19: Plans made in SA4 for ongoing joint SA-YP work, shown in facilitator's visual reflection

I, however, left the inquiry after SA4 as I had a clear remit of the number of sessions agreed in my ethics application with the university. Of course, I accept that the work goes on without me and I am thrilled that it does continue. However, in hindsight, I think that I needed to pay more attention to the relaxing phase at the end of the inquiry, where tasks and activities are rounded off and goodbyes are said (Riley & Reason, 2015). This is an important part of the inquiry, in part because it is a chance to celebrate achievements (Riley & Reason, 2015), but also as an ending. As Salzberger-Wittenberg (2013) stresses, endings are important to mark because facilitators, like the teachers she describes, may be thought of as "holding the memory of the group" (p.71) or containing them, and there is a transition involved. Even though I am striving for more equal power dynamics, I think as facilitator and record keeper I may have taken on some memory keeping. At the end of the YP inquiry, I spoke in front of the SLT audience about the inquiry, the roles the YP had taken up as co-researchers and gave each co-researcher a seed card that they could plant. The event in itself was both dissemination and also celebration of their work in front of a significant audience from their system. However, the ending following the final SA presentation to YP was less clearly marked. One option to support this explored in supervision was the writing of letters to the inquiry groups, far more relational than the official debrief letters. I have not done this yet, and recognise that this would have been helpful after a shorter reflective period following the inquiry. However, we have agreed that in July 2022 I will return to the school and we can share our separate journeys since our inquiries, celebrate our achievements and plan further dissemination.

3.2 Dissemination

Dissemination with the group

Diary entry 13:

“in the final session the YP especially asked to read my thesis when written.”

Though some co-operative inquiries may write up their findings together, in others one person may do this in consultation with the rest (Riley & Reason, 2015). However, for the purposes of the doctorate I have also created my own interpretation of the inquiries, recorded and presented through this thesis, agreed as an outcome at the outset. Due to this tension, it is really important that I present this as “my account of [our] inquiry group” (Riley & Reason, 2015, p.190), rather than a co-constructed understanding. I intend to bring this to my co-researchers for comment, and their perspectives, whether they agree or disagree, should be included in further dissemination, within school, and at a wider level through conference presentations or in journal articles or blogs. This right to disagree was embedded in our inquiries; included in my opening script, and experienced in our practice, so is a familiar part of our work. This seems important to enable my co-researchers to challenge me, especially as it comes in the form of a doctoral thesis that may exert some additional weight, and from me being from the university, which may privilege my account (Lyons and Prior, 2021).

Anonymity in the context of local dissemination: an ethical issue

Turcotte-Tremblay and Mc Sween-Cadieux (2018) discuss the difficulties in managing confidentiality when disseminating locally when key local stakeholders may be more able to identify participants. This seems especially apt when considering that the school has environmental features that were central to the exploration and knowing (Heron, 1998) of the co-researchers (the polytunnel), and that there was a lot of sensitive content expressed by individuals, which was sometimes about third parties, including a teacher that all the co-researchers struggled with. Therefore, I have needed to strike a balance between giving the rich context that allows for readers to judge applicability to their own work (Braun & Clarke, 2022), but also to maintain confidentiality. All names of people and places were given pseudonyms. Staff names were chosen to be very impersonal, apart from their gender indicated by their title, using a weather theme inspired by a chosen pseudonym.

For dissemination, I intend to use some of the strategies suggested by Turcotte-Tremblay and Mc Sween-Cadieux (2018), including, most importantly, an open discussion with my co-researchers about the best way to do this, considering that they are the experts in their school system. This is something highlighted by Godden (2017), who writes about the importance of discussing how results will be used and reported. We may also target specific stakeholders to share results locally and consider how to share the more sensitive results in as general a way as possible.

4 Conclusion

This has been a process that has enriched me with relationships, understanding of an exploratory and participatory research process, and an intervention approach that I hope can add to knowledge and practice in this area. Looking back through this critical account I am drawn both to the power of the images and what this brings to our knowing as readers, and the reflexive power of a research diary. My co-researchers and the CI process has inspired me to use this as an approach in my work as a future EP, seeing myself more as working with those I meet than for them. On top of that I feel driven to reach out and share what we have done alongside my co-researchers, as a way of

supporting other potential young co-researchers and their potential supportive adults who can help them, as we all grapple with a changing world.

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Part 1

Appendix 1:

Search strategy for sections 1 and 2 (Part 1)

The literature included within sections 1 and 2 of the literature review comprises the researcher's wider reading on the broader subject area, including key journal articles and grey literature. Literature was identified through a process of snowballing from references in key articles. Reference lists and recommendations from professional groups (such as the Climate Psychology Alliance and the Climate Concerns and Educational Psychology Interest Group) and books related to eco-anxiety were consulted, as well as hand searches of grey literature on the climate emergency.

Search terms for the initial searches in APA Psycinfo, used for the narrative review (1.0-2.4):

Search in APA Psycinfo, 24th November 2020

The screenshot shows the Ovid search history interface. At the top, there is a navigation bar with 'Search' selected, and other options like 'Journals', 'Books', 'Multimedia', 'My Workspace', 'EBP Tools', and 'What's New'. The user is logged in as 'Wolters Kluwer'. Below the navigation bar, there is a 'Search History (10)' section. The history is displayed as a table with columns for '#', 'Searches', 'Results', 'Type', 'Actions', and 'Annotations'. The search terms and their results are as follows:

#	Searches	Results	Type	Actions	Annotations
1	"child voice".mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	38	Advanced	Display Results More	
2	climate change.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	3468	Advanced	Display Results More	
3	agency.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	39577	Advanced	Display Results More	
4	voice.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	29125	Advanced	Display Results More	
5	child*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	813824	Advanced	Display Results More	
6	"young people".mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	29519	Advanced	Display Results More	
7	1 or 3 or 4	68045	Advanced	Display Results More	
8	5 or 6	831483	Advanced	Display Results More	
9	7 and 8	13121	Advanced	Display Results More	
10	2 and 9	9	Advanced	Display Results More	

Below the table, there are buttons for 'Save', 'Remove', and 'Combine with: AND OR'. At the bottom, there are buttons for 'Save All', 'Edit', 'Create RSS', and 'View Saved'.

Search in APA Psycinfo, 14th April 2021

▼ Search History (55)						View Saved
#	▲ Searches	Results	Type	Actions	Annotations	
<input type="checkbox"/>	1 Solastalgia.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	16	Advanced	Display Results More ▼		
<input type="checkbox"/>	2 (anxiety adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	30	Advanced	Display Results More ▼		
<input type="checkbox"/>	3 (anxiety adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	576	Advanced	Display Results More ▼		
<input type="checkbox"/>	4 (anxiety adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	129	Advanced	Display Results More ▼		
<input type="checkbox"/>	5 (fear adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	71	Advanced	Display Results More ▼		
<input type="checkbox"/>	6 (fear adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	351	Advanced	Display Results More ▼		
<input type="checkbox"/>	7 (fear adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	81	Advanced	Display Results More ▼		
<input type="checkbox"/>	8 (worry adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	8	Advanced	Display Results More ▼		
<input type="checkbox"/>	9 (worry adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	21	Advanced	Display Results More ▼		
<input type="checkbox"/>	10 (worry adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	21	Advanced	Display Results More ▼		
<input type="checkbox"/>	11 (grief adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	4	Advanced	Display Results More ▼		
<input type="checkbox"/>	12 (grief adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	18	Advanced	Display Results More ▼		
<input type="checkbox"/>	13 (grief adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	21	Advanced	Display Results More ▼		
<input type="checkbox"/>	14 (trauma adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	16	Advanced	Display Results More ▼		
<input type="checkbox"/>	15 (trauma adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	159	Advanced	Display Results More ▼		
<input type="checkbox"/>	16 (trauma adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	55	Advanced	Display Results More ▼		
<input type="checkbox"/>	17 (distress adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	10	Advanced	Display Results More ▼		
<input type="checkbox"/>	18 (distress adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	97	Advanced	Display Results More ▼		
<input type="checkbox"/>	19 (distress adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	204	Advanced	Display Results More ▼		
<input type="checkbox"/>	20 (dread adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	1	Advanced	Display Results More ▼		
<input type="checkbox"/>	21 (dread adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	0	Advanced	Save More ▼		
<input type="checkbox"/>	22 (uncertainty adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	42	Advanced	Display Results More ▼		
<input type="checkbox"/>	23 (uncertainty adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	580	Advanced	Display Results More ▼		
<input type="checkbox"/>	24 (dread adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	0	Advanced	Save More ▼		
<input type="checkbox"/>	25 (uncertainty adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	282	Advanced	Display Results More ▼		
<input type="checkbox"/>	26 (emotion adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	13	Advanced	Display Results More ▼		

<input type="checkbox"/>	26	(emotion adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	13	Advanced	Display Results	More ▾
<input type="checkbox"/>	27	(emotion adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	86	Advanced	Display Results	More ▾
<input type="checkbox"/>	28	(emotion adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	43	Advanced	Display Results	More ▾
<input type="checkbox"/>	29	(feeling adj2 climate).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	9	Advanced	Display Results	More ▾
<input type="checkbox"/>	30	(feeling adj2 environment*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	49	Advanced	Display Results	More ▾
<input type="checkbox"/>	31	(feeling adj2 eco*).mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	22	Advanced	Display Results	More ▾
<input type="checkbox"/>	32	teen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	24240	Advanced	Display Results	More ▾
<input type="checkbox"/>	33	adolescent*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	455251	Advanced	Display Results	More ▾
<input type="checkbox"/>	34	youth.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	103599	Advanced	Display Results	More ▾
<input type="checkbox"/>	35	year 9.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	245	Advanced	Display Results	More ▾
<input type="checkbox"/>	36	KS3.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	16	Advanced	Display Results	More ▾
<input type="checkbox"/>	37	KS4.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	9	Advanced	Display Results	More ▾
<input type="checkbox"/>	38	13 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	7546	Advanced	Display Results	More ▾
<input type="checkbox"/>	39	14 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	8533	Advanced	Display Results	More ▾
<input type="checkbox"/>	40	15 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	15197	Advanced	Display Results	More ▾
<input type="checkbox"/>	41	16 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	9915	Advanced	Display Results	More ▾
<input type="checkbox"/>	42	17 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	11530	Advanced	Display Results	More ▾
<input type="checkbox"/>	43	18 year*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	19505	Advanced	Display Results	More ▾
<input type="checkbox"/>	44	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31	2923	Advanced	Display Results	More ▾
<input type="checkbox"/>	45	32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42 or 43	539880	Advanced	Display Results	More ▾
<input type="checkbox"/>	46	44 and 45	348	Advanced	Display Results	More ▾
<input type="checkbox"/>	47	coping.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	92200	Advanced	Display Results	More ▾
<input type="checkbox"/>	48	cope.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	30159	Advanced	Display Results	More ▾
<input type="checkbox"/>	49	coping strategies.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	20630	Advanced	Display Results	More ▾
<input type="checkbox"/>	50	coping behaviour.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	273	Advanced	Display Results	More ▾
<input type="checkbox"/>	51	live with.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	3630	Advanced	Display Results	More ▾
<input type="checkbox"/>	52	manag*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	358562	Advanced	Display Results	More ▾
<input type="checkbox"/>	53	47 or 48 or 49 or 50 or 51 or 52	455021	Advanced	Display Results	More ▾
<input type="checkbox"/>	54	44 and 45 and 53	48	Advanced	Display Results	More ▾
<input type="checkbox"/>	55	from 54 keen 4 14	2	Advanced	Display Results	More ▾

Appendix 2 – The search strategy for the systematic search (section 3.0 of the literature review)
Eco-anxiety in education: how should we support children and young people?

Table A.1: Initial database search (9th July 2021)

Database	Total results	Exclude: pre-2012	Exclude: duplicates
<i>APA Psycinfo</i>	152	126	108
<i>Scopus</i>	398	346	343
<i>Web of Science</i>	322	298	174
<i>ERIC</i>	111	85	50
<i>ASSIA</i>	43	34	26
<i>British Education Index</i>	40	39	19
Total	1066	928	720

Additional duplicates found during initial screening	Additional pre-2012 articles found	Total articles to screen by title and abstract:
48	1	671

Table A.2: search strings

<i>APA Psycinfo</i>	
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View Saved

▼ Search History (51)

<input type="checkbox"/>	# ▲	Searches	Results	Type	Actions	Annotations
<input type="checkbox"/>	1	exp Distress/	24470	Advanced	Display Results More ▼	
<input type="checkbox"/>	2	exp Anxiety/	78534	Advanced	Display Results More ▼	
<input type="checkbox"/>	3	exp Stress/	123175	Advanced	Display Results More ▼	
<input type="checkbox"/>	4	threat.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	39399	Advanced	Display Results More ▼	
<input type="checkbox"/>	5	anxiet*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	257770	Advanced	Display Results More ▼	
<input type="checkbox"/>	6	anxious.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	22912	Advanced	Display Results More ▼	
<input type="checkbox"/>	7	distress*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	84270	Advanced	Display Results More ▼	
<input type="checkbox"/>	8	stress*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	326114	Advanced	Display Results More ▼	
<input type="checkbox"/>	9	exp Grief/	13336	Advanced	Display Results More ▼	
<input type="checkbox"/>	10	grief.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	20012	Advanced	Display Results More ▼	
<input type="checkbox"/>	11	worri*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	19101	Advanced	Display Results More ▼	
<input type="checkbox"/>	12	dread*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	2027	Advanced	Display Results More ▼	
<input type="checkbox"/>	13	hopeless*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	9112	Advanced	Display Results More ▼	
<input type="checkbox"/>	14	helpless*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	9600	Advanced	Display Results More ▼	
<input type="checkbox"/>	15	solastalgia.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	17	Advanced	Display Results More ▼	
<input type="checkbox"/>	16	coping.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	93888	Advanced	Display Results More ▼	
<input type="checkbox"/>	17	cope.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	30802	Advanced	Display Results More ▼	
<input type="checkbox"/>	18	loss.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	121630	Advanced	Display Results More ▼	
<input type="checkbox"/>	19	hope*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	69085	Advanced	Display Results More ▼	
<input type="checkbox"/>	20	positive.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	411274	Advanced	Display Results More ▼	
<input type="checkbox"/>	21	negative.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	317279	Advanced	Display Results More ▼	
<input type="checkbox"/>	22	calm.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	3004	Advanced	Display Results More ▼	
<input type="checkbox"/>	23	wellbeing.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	16497	Advanced	Display Results More ▼	
<input type="checkbox"/>	24	well being.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	101761	Advanced	Display Results More ▼	
<input type="checkbox"/>	25	young* person.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	1505	Advanced	Display Results More ▼	
<input type="checkbox"/>	26	young* people.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	32500	Advanced	Display Results More ▼	

Contract

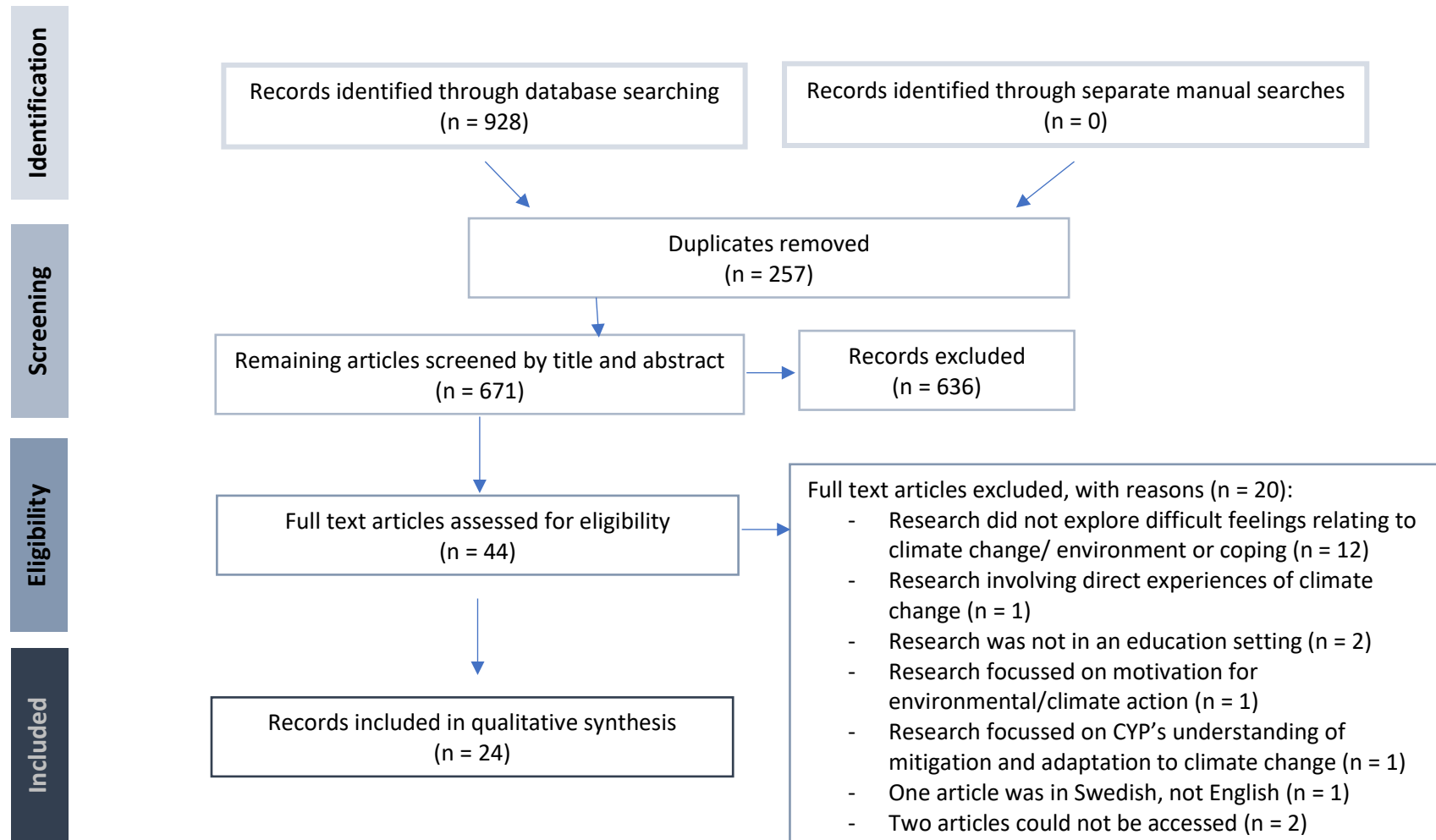
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	<input type="checkbox"/>	27	child*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	838043	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	28	teen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	24611	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	29	preteen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	346	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	30	pre teen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	191	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	31	adolescen*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	487681	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	32	youth*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	116294	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	33	student*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	681439	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	34	exp Climate Change/	2620	Advanced	Display Results	More ▾	
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	<input type="checkbox"/>	36	climate crises.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	7	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	37	climate crisis.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	57	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	38	climate emergenc*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	19	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	39	global warming.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	840	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	40	environment* crisis.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	147	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	41	environment* crises.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	84	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	42	solastalgia.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	17	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	43	school.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	431343	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	44	educat*.mp. [mp=title, abstract, heading word, table of contents, key concepts, original title, tests & measures, mesh]	685961	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	45	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24	1305459	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	46	25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33	1646511	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	47	34 or 35 or 36 or 37 or 38 or 39 or 40 or 41 or 42	4594	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	48	43 or 44	907636	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	49	45 and 46 and 47 and 48	152	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	50	ojala maria.au.	10	Advanced	Display Results	More ▾	
	<input type="checkbox"/>	51	49 and 50	4	Advanced	Display Results	More ▾	
Scopus	(((TITLE-ABS-KEY (distress*)) OR (TITLE-ABS-KEY (anxiet*)) OR (TITLE-ABS-KEY (anxious)) OR (TITLE-ABS-KEY (threat*)) OR (TITLE-ABS-KEY (grief)) OR (TITLE-ABS-KEY (worry*)) OR (TITLE-ABS-KEY (dread*)) OR (TITLE-ABS-KEY (hope*)) OR (TITLE-ABS-KEY (helpless*)) OR (TITLE-ABS-KEY (solastalgia)) OR (TITLE-ABS-KEY (coping)) OR (TITLE-ABS-KEY (cope)) OR (TITLE-ABS-KEY (loss)) OR (TITLE-ABS-KEY (positive)) OR (TITLE-ABS-KEY (negative)) OR (TITLE-ABS-KEY (calm)) OR (TITLE-ABS-KEY (wellbeing)) OR (TITLE-ABS-KEY ("well being"))) AND ((TITLE-ABS-KEY ("young* person")) OR (TITLE-ABS-KEY ("young* people")) OR (TITLE-ABS-KEY (child*)) OR (TITLE-ABS-KEY (teen*)) OR (TITLE-ABS-KEY (preteen)) OR (TITLE-ABS-KEY ("pre teen")) OR (TITLE-ABS-KEY (adolescen*)) OR (TITLE-ABS-KEY (youth*)) OR (TITLE-ABS-KEY (pupil))) AND (TITLE-ABS-KEY ("climate change*")) OR (TITLE-ABS-KEY ("climate crises")) OR (TITLE-ABS-KEY ("climate crisis")) OR (TITLE-ABS-KEY ("climate emergenc*")) OR (TITLE-ABS-KEY ("environment* crisis")) OR (TITLE-ABS-KEY ("environment* crises"))) AND (TITLE-ABS-KEY (school)) OR (TITLE-ABS-KEY (educat*))))							
Web of Science	TS=(distress* OR anxiet* OR anxious OR threat* OR distress* OR stress* OR grief OR worry* OR dread* OR hope* OR helpless* OR solastalgia OR coping OR cope OR loss OR positive OR negative OR calm OR wellbeing OR "well being") AND TS=("young* person" OR "young* people" OR child* OR teen* OR preteen* OR "pree teen*" OR adolescen* OR youth* OR pupil*) AND TS=("climate change*" OR "climate crises" OR "climate crisis" OR "climate emergenc*" OR "global warming" OR "environment* crisis" OR "environment* crises" OR solastalgia) AND TS=("school*" OR "educat*")							

ERIC	(distress* OR anxiet* OR anxious OR threat* OR distress* OR stress* OR grief OR worr* OR dread* OR hope* OR helpless* OR solastalgia OR coping OR cope OR loss OR positive OR negative OR calm OR wellbeing OR "well being") AND ("young* person" OR "young* people" OR child* OR teen* OR preteen* OR "pree teen*" OR adolescen* OR youth* OR pupil*) AND ("climate change*" OR "climate crises" OR "climate crisis" OR "climate emergenc*" OR "global warming" OR "environment* crisis" OR "environment* crises" OR solastalgia) AND ("school" OR "educat*")
ASSIA	noft(distress* OR anxiet* OR anxious OR threat* OR distress* OR stress* OR grief OR worr* OR dread* OR hope* OR helpless* OR solastalgia OR coping OR cope OR loss OR positive OR negative OR calm OR wellbeing OR "well being") AND noft("young* person" OR "young* people" OR child* OR teen* OR preteen* OR "pree teen*" OR adolescen* OR youth* OR pupil*) AND noft("climate change*" OR "climate crises" OR "climate crisis" OR "climate emergenc*" OR "global warming" OR "environment* crisis" OR "environment* crises" OR solastalgia) AND ("school" OR "educat*")
British Education Index	(distress* OR anxiet* OR anxious OR threat* OR distress* OR stress* OR grief OR worr* OR dread* OR hope* OR helpless* OR solastalgia OR coping OR cope OR loss OR positive OR negative OR calm OR wellbeing OR "well being") AND ("young* person" OR "young* people" OR child* OR teen* OR preteen* OR "pree teen*" OR adolescen* OR youth* OR pupil*) AND ("climate change*" OR "climate crises" OR "climate crisis" OR "climate emergenc*" OR "global warming" OR "environment* crisis" OR "environment* crises" OR solastalgia) AND ("school" OR "educat*")

Table A.3: Inclusion and exclusion criteria

Inclusion/ Exclusion criteria					
Inclusion: Children and young people	Inclusion: Eco-anxiety (difficult feelings related to climate change/ environmental crisis)	Inclusion: Coping	Inclusion: Conducted in or applied to education settings	Exclusion: Pre - 2012	Exclusion: direct experience of climate change

Figure A.1: The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) Flow diagram



Part 2

Appendix 3: Recruitment flowchart

Table A.5: The inquiry group recruitment process

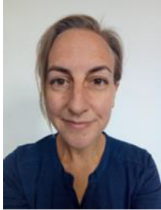
Ask permission to send out an email via EPs	<ul style="list-style-type: none"> Ask permission from PEP to ask link EPs to send out an information poster to headteachers. - <i>Monday 12th April 2021.</i>
Send out email with research poster	<ul style="list-style-type: none"> Ask link EPs to send out the research poster to their high schools Poster states to ask to get in contact within the next two weeks (by the 28th April) Any high schools I have worked at are excluded, as this relationship might put undue pressure on them to agree or to stay in when they would prefer to leave.
Send reminder email to link EPs/ reminder blurb for email	<ul style="list-style-type: none"> Send a reminder email to link EPs with the poster - <i>Wednesday 21st April 2021.</i> <i>A school got in contact with me through email.</i>
Talk with gatekeeper/ interested staff directly	<ul style="list-style-type: none"> Talk through the details with gatekeeper via Teams (better to have the face-to-face connection). Discussed timings and that students and staff may choose to reflect/complete actions outside the sessions Emphasised that this conversation was not agreement to take part, and just a chance to find out more to help the school make that decision. - <i>Tuesday 4th May 2021: Spoke with an assistant head and two members of the geography department who had expressed interest, via Teams. This acted as an information meeting for these staff. Official gatekeeper letter sent on via the assistant head to the headteacher.</i>
Information meeting with YP Permission forms	<ul style="list-style-type: none"> Arrange an information meeting with YP: This meeting took place on <i>19/05/21</i> via Teams Send out permission forms for YP via the school - <i>19/05/21</i> via a Teams group set up by the main link teacher.
Identify inquiry co-researchers (the YP)	<ul style="list-style-type: none"> Following the procedure, the first six young people to email me back their forms will be invited to join the group. Others will be told that the group is full at this time, but will be asked for permission to recontact them if a space becomes available (email addresses to be held in OneDrive in password protected document). <i>5 YP emailed their forms back and were invited to join the group.</i>
First student inquiry meeting	<ul style="list-style-type: none"> Delete the document of potential other YP participants on the day of the first meeting. <i>N/A. No other YP asked to join the group. Therefore, I was not holding this data.</i>



Information meeting for staff	<ul style="list-style-type: none">• Interested staff had already attended the initial meeting. A further meeting was offered, but not taken up as they had come to the first one.• Send out consent forms for staff. The group signed consent forms to attend the student co-researchers' presentation to staff on 13/07/21.
Identify inquiry members	<ul style="list-style-type: none">• Following the procedure, the first five staff members to email me back their forms will be invited to join the group, with one space reserved for the first leader. Others will be told that the group is full at this time, but will be asked for permission to recontact them if a space becomes available (email addresses to be held in OneDrive in password protected document).• Three members of staff, including one leader and the headteacher signed up to the study in July. The student group had specifically wanted to connect with their headteacher and invited her to their presentation. I followed this up with an email to explain the inquiry process and invite any questions as she had not been present at the initial information meeting.• Due to there being spaces in the group, the information sheet describing the study was again circulated through the school in September 2021. One additional member of staff expressed interest. I offered a meeting to answer any questions. This was not taken up. The member of staff emailed their form back and was invited to join the group.
First supportive adult meeting	<ul style="list-style-type: none">• Delete the document of potential other adult participants on the day of the first meeting.• <i>N/A. No other staff members asked to join the group. Therefore I was not holding this data</i>

Appendix 4: Research poster sent to schools

Would your school like to be part of a research study looking at helpful ways of responding to difficult feelings around climate change?



I am a trainee educational psychologist from Cardiff University, working with the Cardiff Educational Psychology Service. I am interested in exploring how to enable young people and school staff to constructively manage difficult feelings connected to human-induced climate change.

Many young people are expressing high levels of concern in response to the climate crisis, including feeling overwhelmed, fear, worry, anger, frustration, guilt, and grief. As climate change cannot be solved in the short term, it is important to develop skills to live with the associated anxieties and distress. Teachers and leaders have an important role in enabling support and change for young people in their schools. Therefore, I am keen to work with young people and supportive adults in school to explore constructive ways to manage these feelings.

Why might your school want to take part?

- The study incorporates important aspects of the four purposes from the curriculum for Wales:
 - The focus on climate change supports “*ethical, informed citizens of Wales and the world*”
 - The focus on young people’s wellbeing supports “*healthy, confident individuals*”
- The study is being conducted through a cooperative inquiry process, which is very empowering for participants.
- It would contribute to a whole school response to managing feelings relating to climate change.
- In taking part you would be contributing to developing understanding in this area, and also help to inform future support and practice for concerned young people and supportive adults.

What would happen?

I would run information meetings for staff and students and then facilitate two research groups (either online or in person).



If you would like to express interest or to find out more details please do not hesitate to get in touch with the researcher, Hannah Togneri, at: tognerihp@cardiff.ac.uk by **Wednesday 5th May**.

Appendix 5: Gatekeeper letter

School of Psychology,
Cardiff University,
Tower Building,
30 Park Place,
Cardiff,
CF10 3AT

Tuesday 4th May 2021

Dear X,

I am a trainee educational psychologist at Cardiff University, currently undertaking a research study to explore constructive ways of responding to anxieties around climate change. I am writing to enquire whether your students, yourself or any of your staff would be willing to take part in the study.

The study is being carried out as part of my educational psychology doctoral studies at Cardiff University, and it is part of the requirements for doctoral qualifications. As part of this I am keen to work with pupils around their worries about climate change and to think about what would help them to constructively manage these. I am also keen to work with teachers and leaders in order to think about how they might support their young people in this. It is hoped that the outcomes of the research will help to inform future support and practice for concerned young people and the adults who support them at school.

The research approach:

The research approach being used is a co-operative inquiry, a type of participatory action research. In this approach the researcher works with a group of interested individuals to explore and develop understanding of a particular area. In this case, we would be exploring helpful responses to manage anxieties around climate change. The researcher acts as a facilitator and the inquiry group are thought of as co-researchers, who would be involved in decision making about the ongoing actions of the inquiry. This has been chosen as a particularly empowering way of carrying out research.

What would it involve for interested pupils or staff?

The process would begin with informal information meetings provided by the researcher for pupils and staff to decide whether or not this research is something they would like to be involved in.

Pupils who would like to take part will be invited to participate in a small inquiry group of 3-6 young people, for 6 sessions during term time, lasting approximately 1 hour per session. They may also decide to follow up with chosen actions and reflections outside of this time. This will culminate in a creative reflective response to their findings to be shared with the staff inquiry group.

Following the pupil inquiry, staff who would like to take part will be invited to participate in a small inquiry group of 3-6 members, for 4 sessions during term time, lasting approximately 1 hour per session. They may also decide to follow up with chosen actions and reflections outside of this time. This will culminate in a reflective response to their findings to be shared back to the pupil inquiry group. I am looking for both teachers and leaders to take part in this group.

The inquiry sessions would be arranged at a time that is convenient for your school and the researcher.

The inquiry groups would ideally be conducted in person in school, but due to potential COVID-19 restrictions they may need to be conducted online using a secure platform such as Microsoft Teams.

What data is collected and what happens to it?

Inquiry sessions will be recorded on a password protected device and transcribed within two weeks of each session. All data from transcribed inquiry sessions will be stored on a password protected computer. The recordings will be deleted once transcribed and the names of the participating pupils and staff will not be shared. In addition, any names, locations or identifiable personal information shared within the sessions will be removed from the transcriptions. The anonymised information will be included in my research report as part of my research study and will be shared with the university with the potential of wider dissemination. Members of the inquiry groups would be invited to comment and to be involved in wider dissemination.

How can you express interest in taking part?

If you are interested in your school taking part, please contact me at tognerihp@cardiff.ac.uk to arrange an informal conversation about conducting this research in your school. Following the information meetings, I will email consent forms, which will allow pupils and members of staff to express interest in taking part in the research. Pupils will also be sent a consent form for their parents.

The study aims to recruit up to six co-researchers for each inquiry group. In the case of more than six pupils expressing interest, the first six to contact the researcher with consent forms will be invited to take part. At least one school leader is needed for the adult group. Therefore, one space will be reserved for a member of staff in a leadership role. The first five other staff to contact the researcher will be invited to take part. Others expressing interest after this point will be contacted by email to let them know that study is full at present, and ask for permission to re-contact them should a space become available before the start of the inquiries. I will be recruiting pupils until early June 2021, and staff until early September 2021.

I will be closely supervised throughout this process by Dr Victoria Biu, professional tutor on the Cardiff Doctorate in Educational Psychology programme. Her contact details can be found below. The contact details of Cardiff University's Research Ethics Committee can also be found at the end of this letter.

Please refer to the attached information sheets, which aim to answer any questions that you, your pupils or staff may have. However, if you require any further information, please do not hesitate to contact me.

Thank you for your support with this and I look forward to hearing from you.

With best wishes,

Hannah Togneri

Researcher:

Hannah Togneri,

Supervisor:

Dr Victoria Biu,

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.

Email: tognerihp@cardiff.ac.uk

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.

Email: biuv1@cardiff.ac.uk

Cardiff University's Research Ethics Committee:

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.

Tel: +44 (0)29 2087 0360

Email: psychethics@cardiff.ac.uk

Would you like to be part of a student research group looking at helpful ways of responding to difficult feelings around climate change?



My name is Hannah.

I am a trainee educational psychologist from Cardiff University.

If you are in Year 9 and are worried about climate change, you may want to take part in a voluntary creative project I am going to run in your school. The aim is to work with you to identify worries about climate change and explore useful and helpful ways of managing these in school.

What is it?

It will be a group of 3 to 6 students and myself that meets weekly to talk about climate change, how we feel about it and things we can do in school to help.

Each meeting will last for about an hour. The project will last for approximately 6 weeks.

Hopefully the group will meet in person in school, but due to COVID-19 it might meet online using Teams.

What would I need to do?

You would need to come to the group, take part in creative and reflective activities, and share your thoughts and ideas with the other students in the group and myself. You would need to make some decisions about what the group does and to try out ideas or do some thinking during the week. At the end of the project you would need to contribute to a group creative presentation of your findings that can be shared with a staff research group.

Why should I do this?

It is entirely voluntary, meaning that it is up to you to choose whether you want to take part or not. You can stop taking part at any time.

You might want to take part because this is a chance to:

- share your ideas on how we can respond to climate change in school
- work with other interested students
- take part in research as a co-researcher
- develop ideas and actions that may help others

What information will be used for research?

I will use information from:

- recordings of the group meetings
- group activities (like drawings, artwork and role play)
- the final group creative presentation

What will happen to the ideas I share as part of the group?

I will keep the meeting recordings on a password protected computer. I will type out what was said from the recordings within two weeks of each meeting taking place. Once I have typed out what was said, I will delete the recordings. I will check each typed-out record, as well as records from group activities and the final presentation, for names and identifying information. Names and identifying information will be changed or removed; this is anonymising the data. You can suggest your own different name for yourself to go into the research.

Can I stop taking part?

You can stop taking part at any time, but I can only take your information out of the study before I have anonymised the data. This means that you need to tell me within two weeks of a group meeting, if you do not want your information from that meeting to be part of the research.

Dissemination (sharing what we find out with others):

You will share your findings in a creative presentation of your choice with a staff research team. I will write a report for the university, and may share the findings with a wider group of people, for example through journal articles, presentations, webinars or information sheets. You will have the chance to help tell others about what we found out, if you choose.

What do I need to do if I'm interested?

I will be holding an information meeting to give more information about the project, and for you to ask questions. Details of this will follow.

After the information meeting consent forms will be sent out by email. If you want to take part fill out one for yourself, ask your parent or guardian to fill out the other and return directly to me by email. The first six students to send in their completed consent forms to me will be invited to take part in the group. If you are not in the first six, I will reply to let you know the study is full and to ask your permission to contact you if a place becomes available before the group starts. I will be looking for students for the group until the beginning of June 2021.

I look forward to meeting you and hearing your ideas!

If you have any questions in the meantime or would like more information, please contact:

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University,
Tower Building, 30 Park Place, Cardiff, CF10
3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University,
Tower Building, 30 Park Place, Cardiff, CF10
3AT.
Email: biuv1@cardiff.ac.uk

An exploration of constructive ways of managing eco-anxiety in schools with young people and their supportive adults

<i>Who is carrying out this study?</i>
My name is Hannah Togneri and I am carrying out this study as part of doctoral research in educational psychology at Cardiff University, where I am supervised by Dr Victoria Biu.
<i>What is the aim of the study?</i>
The aim of the study is to explore constructive ways of responding to anxieties around climate change with pupils and staff. Part one of the study involves working with young people to identify and explore their worries about climate change and explore together ways which may help them to constructively manage these anxieties. The second part of the study involves working with teachers and leaders in order to think about and explore how they might support the young people to do this.
<i>Why is the research important?</i>
Many young people are expressing high levels of concern in response to the climate crisis, including feeling overwhelmed, fear, worry, anger, frustration, guilt, and grief. Anxiety around climate change is a realistic worry, but there are more and less constructive ways to deal with these difficult feelings. To support this, there is an important role for teachers and leaders, who are in a position to enable support and change for young people in their schools. Therefore, working with young people and their supportive adults in school to find constructive ways to manage the feelings of eco-anxiety is an important area of research. It is hoped that the outcomes of the study will help to inform future support and practice for concerned young people and the adults who support them at school.
<i>Who can take part?</i>
I am looking for staff who are: <ul style="list-style-type: none"> • Teachers • Middle leaders • Senior leaders
<i>What will taking part involve?</i>
Taking part in the study is completely voluntary. It will involve being part of an inquiry group, with a researcher facilitator. As a member of the inquiry group, you will be considered a co-researcher to explore how to support the young people in your school to constructively manage climate anxieties. The group will meet 3-4 times, either weekly or fortnightly during term time. Each meeting will take approximately 1 hour. The group will explore ideas and thoughts together and decide on actions to take the inquiry forward. This means that you may decide to take on actions and reflections outside of the group meetings. At the end of the inquiry period, the group will prepare a response to share with the young people's inquiry group. The inquiry sessions can be arranged at a time that is convenient to the school and the inquiry group. Ideally the sessions will take place in school, in person. However, due to potential COVID-19 restrictions, sessions may take place online using a secure platform. You can withdraw from the study at any point in the inquiry process.
<i>What information will be collected and what will happen to it?</i>
<ul style="list-style-type: none"> • Data will be collected through inquiry activities, reflective responses and recordings of meetings. • Meetings will be recorded on a password protected device and transcribed within two weeks. Transcribed data will be stored on a password protected computer. The recordings will be deleted

once transcribed and after this point your information will be anonymised. Any names, locations or identifiable personal information shared within the meetings will be removed from the transcriptions.

- You can withdraw your information from the study up until the point the data is transcribed and anonymised, two weeks following each meeting.
- Other inquiry responses will be held confidentially until anonymised.
- The anonymised information will be retained, analysed and used in a research report, which will be shared with the university with the potential for wider dissemination.

How can I find out more information?

If you have any questions or would like more information, please contact:

Researcher:

Hannah Togneri,
School of Psychology, Cardiff
University, Tower Building, 30
Park Place, Cardiff, CF10 3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University, Tower Building, 30 Park
Place, Cardiff, CF10 3AT.
Email: biuv1@cardiff.ac.uk

What do I do next?

I will be holding an information meeting for interested staff to find out more about the process and ask questions. Details of this will follow.

Following the meeting, I will send out consent forms. If you decide that you would like to take part, please fill one in and return it directly by email to the researcher, Hannah Togneri, at: tognerihp@cardiff.ac.uk

Please note that the study aims to recruit up to six members of staff for the staff inquiry. It aims to include both main grade teachers and those in leadership positions. In the case of more than six members of staff expressing interest, the first five to contact the researcher will be invited to take part, with one space reserved for a school leader. If you express interest after this point, you will be contacted by email to let you know that study is full at present, and to ask you for permission to re-contact you should a space become available before the start of the staff inquiry. I will be recruiting staff until September 2021.

Appendix 7: Consent forms

Young Person's Consent Form <i>Please read the following sentences and choose your answer</i>	
I have read and understood the information given.	Yes / No
I understand that what I say, write or create as part of the student research group will be used as part of the research project described in the information sheet.	Yes / No
I understand that the researcher would like to run a student research group. This will be made of 3-6 young people and the researcher, meeting once a week in term time. The research group will meet for approximately 6 sessions during term time. Each research group meeting should last approximately 1 hour and will be recorded.	Yes / No
I understand that taking part in this study is my own choice and that I can stop taking part at any point.	Yes / No
I understand that recordings of the research group meetings will be transcribed (typed out into a script). This will happen within two weeks of each meeting. Once this has happened, my information will be anonymised. This means names and information that may be used to work out who I am will be changed or deleted. The recording of each meeting will be deleted.	Yes / No
I understand that electronic versions of handwritten or creative responses from group activities will be created. These will also be transcribed where necessary (typed out into a script) and anonymised (information that can be used to work out who I am will be changed or deleted). This will happen within two weeks of the group meeting they are shared in.	Yes / No
I understand that once my responses are transcribed (typed out into a script) and anonymised (names and other information changed or deleted), it will not be possible to remove what I have said, written or created from the research study. This will be 14 days after the group meeting the information was shared in.	Yes / No
I understand that the researcher will keep anonymised copies of: <ul style="list-style-type: none"> • the typed out script of the meetings, • written and creative responses from group activities, • the final group presentation. 	Yes / No
I understand that I can ask for the information I have given to be deleted or I can ask to see the information at any time up until the time the data has been anonymised (when names and other information has been changed or deleted).	Yes / No
I understand that I am free to talk about any worries I may have with Dr Victoria Biu, who is supervising the research (I can find her email address below).	Yes / No

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: biuv1@cardiff.ac.uk

Cardiff University's Research Ethics Committee:

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Tel: +44 (0)29 2087 0360
Email: psychethics@cardiff.ac.uk

Parent or Guardian Consent Form

Please read the following sentences and choose your answer

I have read and understood the information provided.	Yes / No
I understand that my child's responses in the student research group will be used as part of the research project described in the information sheet.	Yes / No
I understand that the researcher would like to run a student research group. This will be made of 3-6 young people and the researcher, meeting once a week in term time. The research group will meet for approximately 6 sessions during term time. Each research group meeting should last approximately 1 hour and will be recorded.	Yes / No
I understand that taking part in this study is voluntary and that my child can withdraw from the research group at any point.	Yes / No
I understand that data from the research group meetings will be transcribed within two weeks of each meeting. Once this has happened, my child's data will be anonymised, and the recording of each meeting will be deleted.	Yes / No
I understand that electronic versions of written or creative responses from group activities my child takes part in will be created and also be transcribed where necessary and anonymised within two weeks of the group meeting they are shared in.	Yes / No
I understand that once my child's responses are transcribed and anonymised (14 days after the group meeting), it will not be possible to remove their responses from the research study.	Yes / No
I understand that the researcher will keep anonymised copies of: <ul style="list-style-type: none"> • transcriptions of group meetings, • written and creative responses from group activities, • the final group presentation. 	Yes / No
I understand that I can ask for the information I have given to be deleted or I can ask to see the information at any time up until the time the data has been anonymised.	Yes / No
I understand that I am free to discuss concerns with Dr Victoria Biu, who is supervising the research (contact details shown below).	Yes / No

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: biuv1@cardiff.ac.uk

Cardiff University's Research Ethics Committee:

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Tel: +44 (0)29 2087 0360
Email: psychethics@cardiff.ac.uk

School Staff Consent Form

Please read the following statements and select your answers

I have read and understood the information provided.	Yes / No
I understand that my responses as part of the inquiry group will be used as part of the research project described in the information sheet.	Yes / No
I understand that the researcher would like to conduct an inquiry group of 3-6 people and the researcher, meeting weekly or fortnightly. Each inquiry group meeting should last approximately 1 hour and will be recorded. The inquiry will last approximately 3-4 sessions during term time.	Yes / No
I understand that my participation in this study is voluntary and that I can withdraw from the inquiry group at any point.	Yes / No
I understand that the data from the inquiry group meetings will be transcribed within two weeks of each meeting. Once this has happened the data will be anonymised, and the recording will be deleted.	Yes / No
I understand that once my data is transcribed and anonymised (14 days after the group meeting), it will not be possible to withdraw my responses.	Yes / No
I understand that electronic versions of handwritten or creative responses from group activities will be created. These will also be transcribed where necessary and anonymised. This will happen within two weeks of the group meeting they are shared in.	Yes / No
I understand that my responses will be held anonymously by the researcher after the data is transcribed.	Yes / No
I understand that I can ask for the information I have provided to be deleted or I can request access to my information at any time up until the time the data has been anonymised.	Yes / No
I understand that I am free to discuss any concerns with Dr Victoria Biu, who is supervising the research (contact details shown below).	Yes / No

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University, Tower
Building, 30 Park Place, Cardiff, CF10 3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University, Tower
Building, 30 Park Place, Cardiff, CF10 3AT.
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School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Tel: +44 (0)29 2087 0360
Email: psychethics@cardiff.ac.uk

Appendix 8: Stages of co-operative Inquiry and ways of knowing, and how this is mapped onto the inquiries of this study

Figure A.2: Stages of co-operative inquiry, based on Heron (1998)

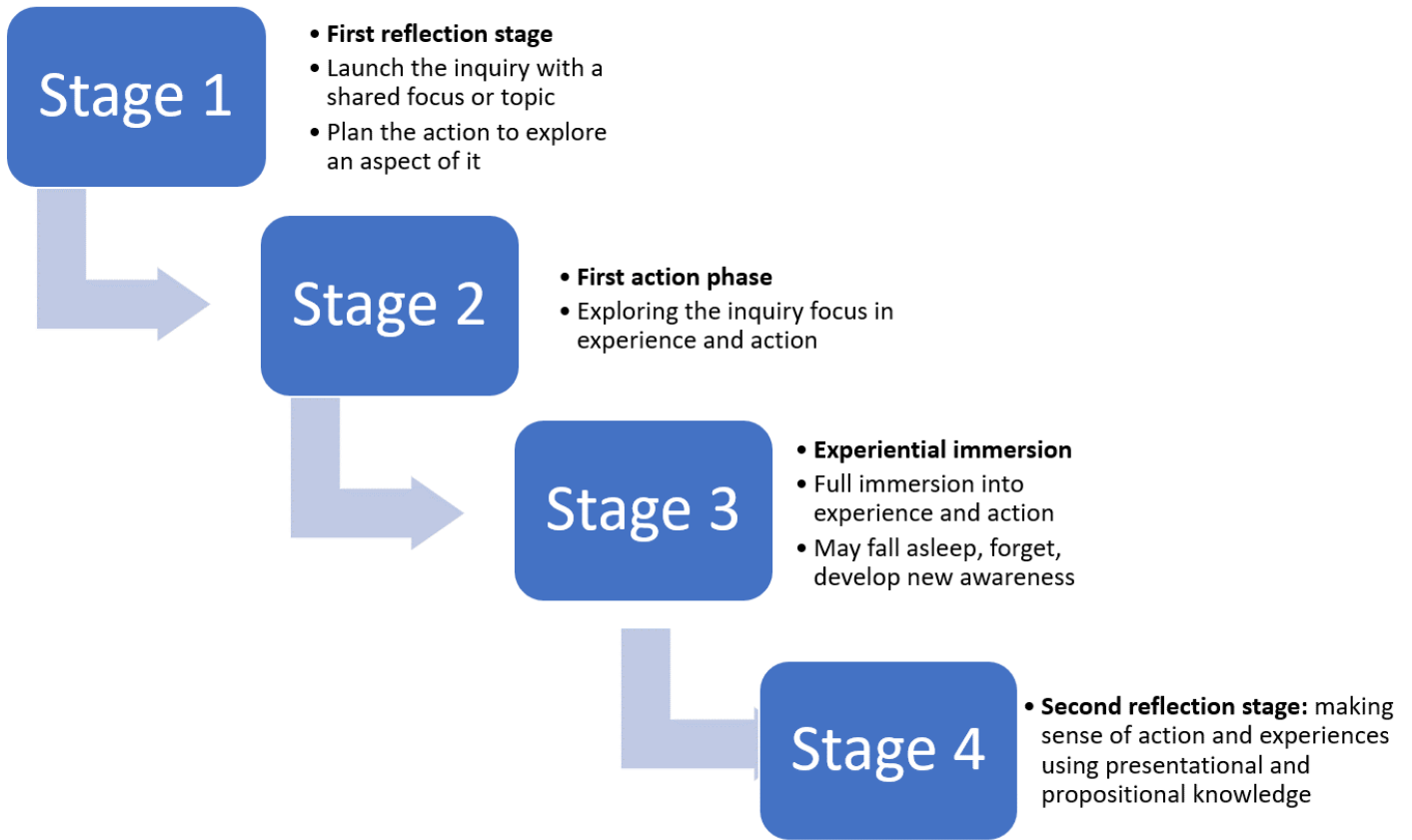
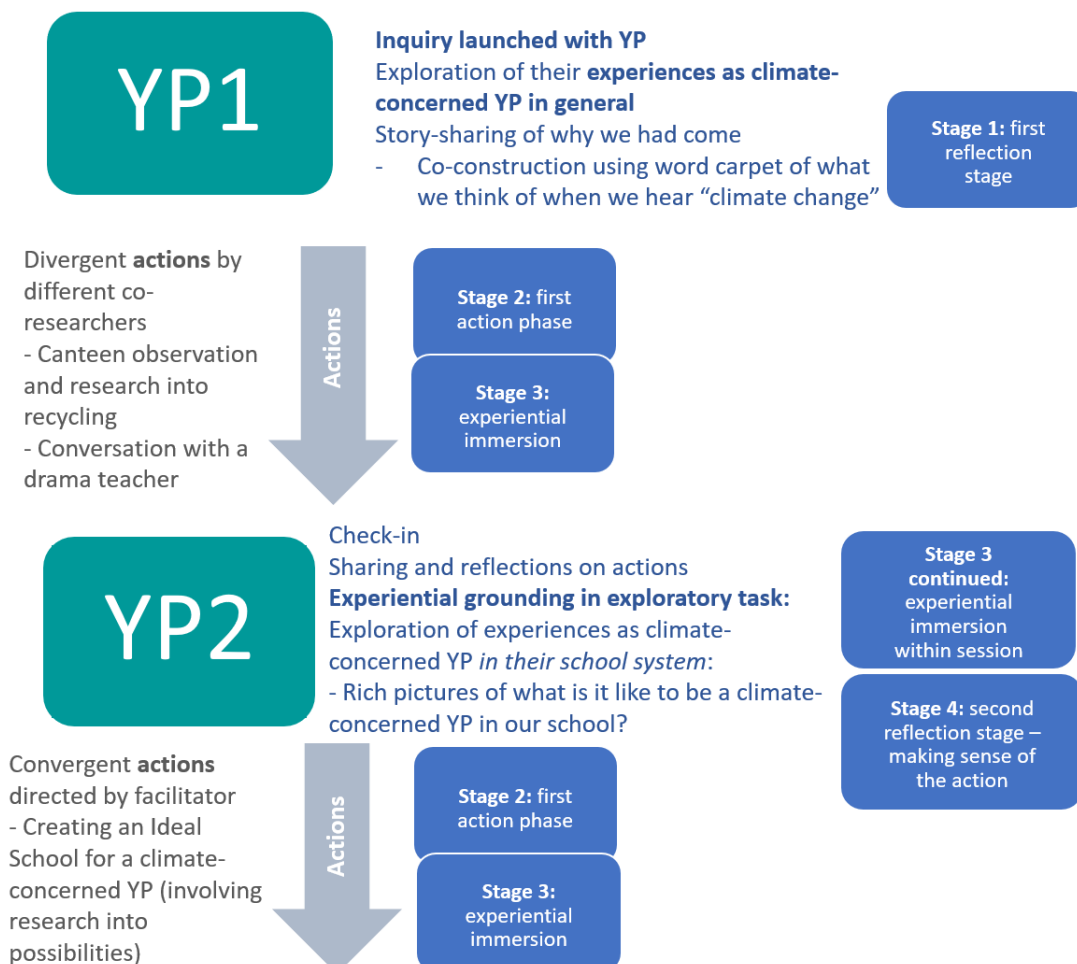


Figure A.3: Stages of co-operative inquiry applied to the YP inquiry



YP3

Check-in
Sharing and reflections on Ideal Schools and the research they have done on school-based solutions for this task.
New question emerges:
Do our peers care?

Stage 3 continued:
experiential immersion within session

Stage 4: second reflection stage – making sense of the action

Convergent actions directed by the group

- Writing questions for a questionnaire for peers
- Asking friends about questions



Stage 2: first action phase

Stage 3: experiential immersion

YP4

Check-in
Sharing and reflections on questions Group designed their questionnaire
Support from link teacher to access system to send out.
Experiential grounding in exploratory task: *us and them* in preparation for writing to headteacher.

Stage 3 continued:
experiential immersion within session

Stage 4: second reflection stage – making sense of the action

Convergent actions: Distribute questionnaire and monitor results



Stage 2: first action phase

Stage 3: experiential immersion

YP5

Check-in
Sharing and reflections on actions (experience of seeing the responses come in from the questionnaire)
Exploratory activity 1: Analysis of questionnaire and the meaning the group took from it
Experiential grounding in exploratory task:
activity 2: Role playing their presentation & exploring the experience of voicing their draft letters

Stage 3 continued:
experiential immersion within session

Stage 4: second reflection stage – making sense of the action

Convergent actions

- Preparation of materials for presentation, including refining letters to their headteacher
- Divergent in individual approach
- E.g. some co-researchers consulted their parents



Stage 2: first action phase

Stage 3: experiential immersion

Continued into the action within session

YP6 YP & SAs

Check-in
Action within session: presentation to headteacher and SLT
Post-presentation reflection:
How can you, your teachers, your friends support you with eco-anxiety?
What will you take away from this into the wider world?

Stage 2: first action phase

Stage 3: experiential immersion

Stage 4: second reflection stage – making sense of the action

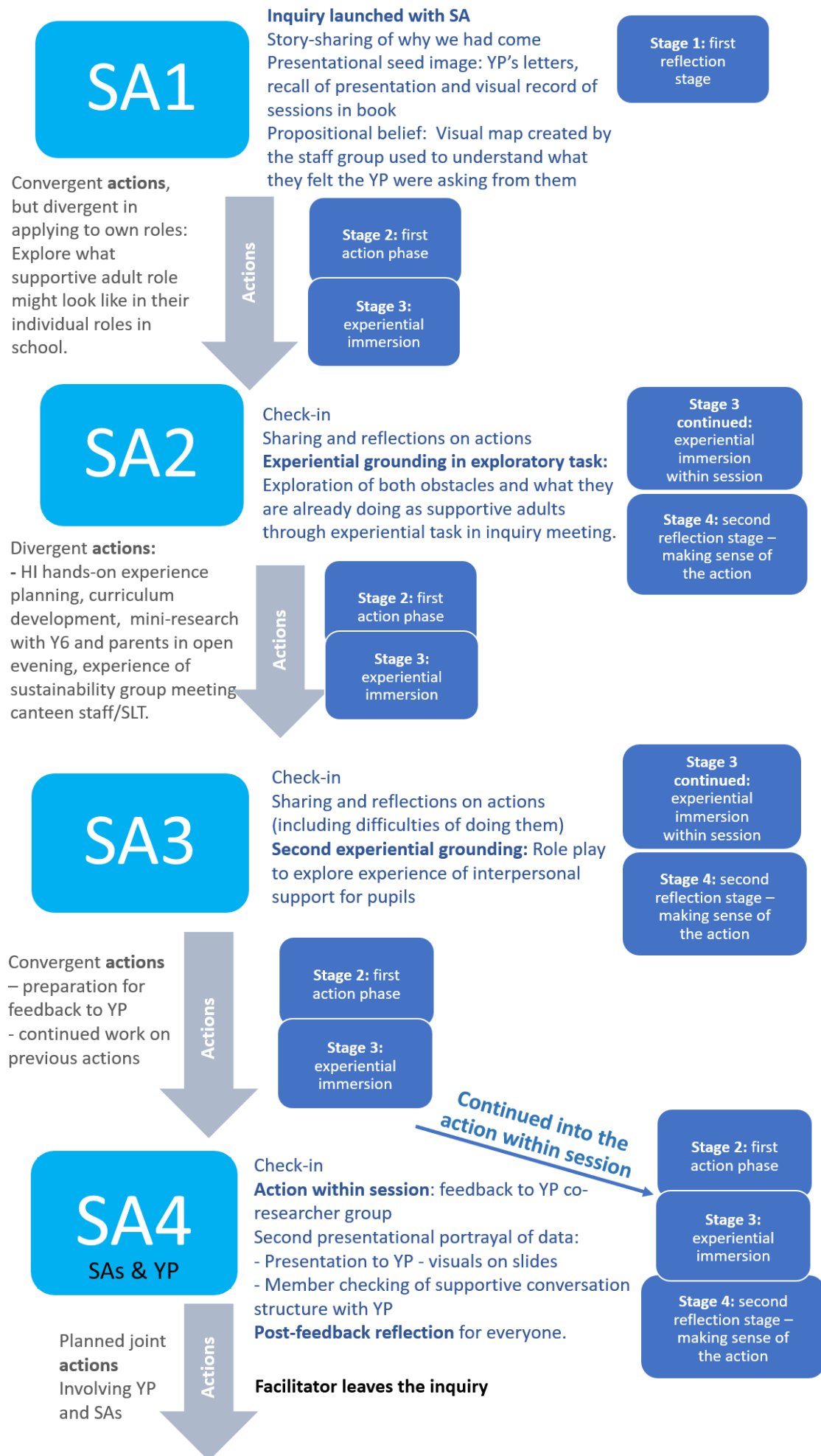
Divergent actions as the YP co-researchers took their experiences into the world



Stage 2: first action phase

Stage 3: experiential immersion

Figure A.4: Stages of co-operative inquiry applied to the SA inquiry

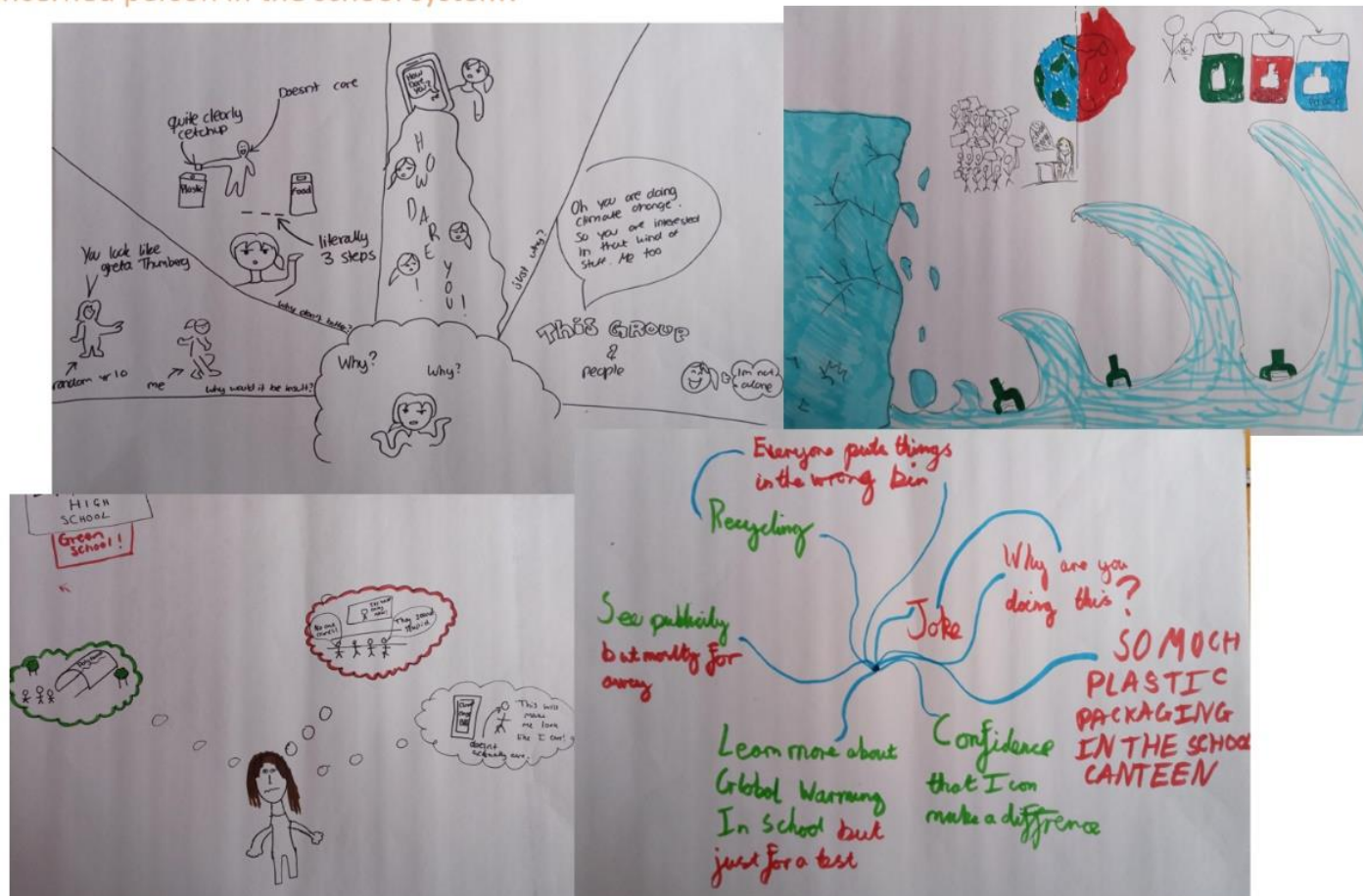


Different ways of knowing within the stages of inquiry

The inquiries followed the process of action and reflection cycles, working through the different stages as described by Heron (1998). Like Greenwood and Kelly (2020), different types of knowing were explored within sessions as well as across the inquiry. This included the separate young person and adult inquiries and, at a wider level, the full linked inquiry.

Figure A.5: An example of the process of moving between different forms of knowing within a student inquiry session

Presentational knowing: what is it like to be a climate concerned person in the school system?



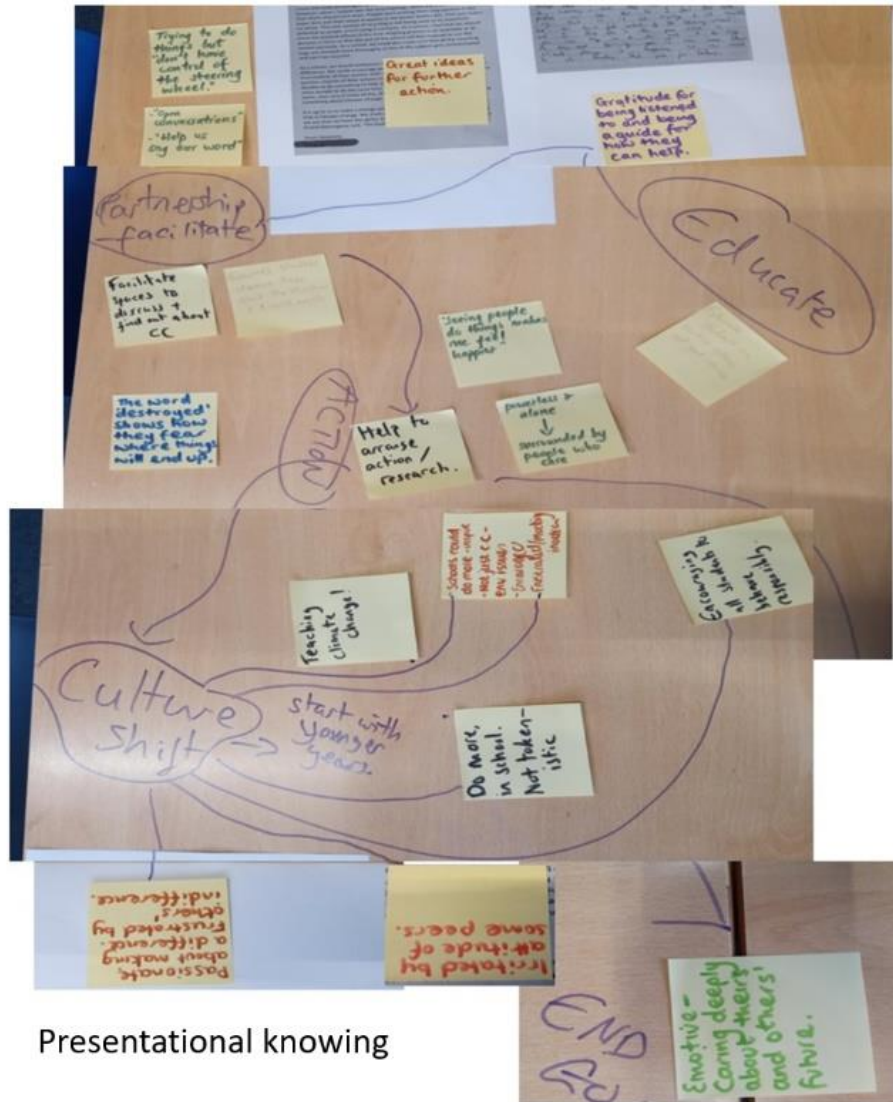
Propositional knowing

- Other people in school don't really care
- Peer reactions and friends' reactions are a problem – we don't understand why they joke about climate change/ don't show interest, don't really take the meaning away of what they learn in school.
- Meeting the others in the group made us feel not so alone
- The group is a space to share enjoyment of doing something good in the world.
- The group is a space to share feelings that you can't share with other people, including friends.

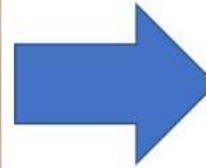


Ideal school

Figure A.6: An example of the process within a supportive adult inquiry session



Presentational knowing



Propositional knowing

We recognised that for the young people their worry is not just difficult feelings/ responses to climate change alone, but wider environmental issues (including biodiversity, plastic in the oceans).

4 interlinked areas:

Partnership/ facilitators: where the knowledge, ideas for action/change and voice of the young people was recognised, and a role for staff supporting this. This also included facilitating spaces for open conversations, which might involve an element of counselling and also of education - finding out about climate change (and environmental issues more broadly) and what they can do to help.

Educate: Staff as guides for how young people can help/ positive action

Action: A staff role to arrange group action and pupil/staff led research, recognising that pupils said that seeing others doing things made them feel happier and supporting them to move from feeling powerless and alone to being surrounded by people who care. It also recognises their fear for what will happen if people do not act.

Culture shift: At a whole school level this involved teaching about climate change, encouraging responsible behaviour in all students (recognising the frustration the young people felt at the actions and attitude of their peers), moving beyond tokenistic responses in school (use of the polytunnel was mentioned). The end goal being a culture of caring deeply about their own and others' futures.



Practical knowing

Look at their role and see where this may apply for them

How can I be a supportive adult in my role?



Appendix 9: Overview plan for YP and SA linked inquiries

Consistent with a co-operative inquiry, this plan was “held lightly” so that direction from participants could be followed (Riley & Reason, 2015, p. 193).

Format for each session (broadly following suggestions collated by Riley & Reason, 2015):

Check in

Story sharing: tell each other how they have got on with the inquiry this week.

Exploratory (energizing) activities to aid engagement and reflection.

Have we missed anything? Check with the group for any other reflections or observations.

Summary activity to allow participants to share a sense of where they are and the action they might want to explore over the next week.

Checklist to begin each session:

✓ Re-establish that they are co-researchers, with valued thoughts and ideas.

✓ Reminder of right to withdraw, and reaffirm consent.

*✓ Reminder of the group’s shared rules (established in session 1). *FOR YP’s inquiry group.*

Reminder: We have different opinions; this is ok and you are allowed to disagree with each other and with me.

Checklist to end each session:

✓ Give reminder to contact myself within the next two weeks if they want their information from this meeting to be removed from the study.

✓ Reminder of support options for concerns that may have come up in the session

Session outlines

Part 1: Inquiry with young people

Session 1:	<i>Specific opening checklist for session 1: ✓ Reiterate the process, and the position of the young people as co-researchers. ✓ Right to withdraw, reaffirm consent. ✓ Ground rules established by the group: consider how to show we value each other’s opinions, how to encourage each other to share our thoughts and how to disagree ✓ Reminder of the proposed research question for them to reflect on. ✓ Remind them to think about their pseudonyms for transcription. They need to tell me within the next week, so I can begin anonymising the data.</i>
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Check in: How do you feel at the start this research group? Choose a picture to represent the feeling (e.g. Blob Tree/ Ups and Downs cards) and invite to say why.

Optional story sharing: The story of why you wanted to take part. Facilitator to listen and reflect back themes/noticings, inviting responses, clarifications, contradictions, elaborations.

Exploratory activity:

What comes into your head when you hear “climate change”?

Word carpet activity: write down all the thoughts and feelings and ideas that are important to each individual on paper with markers (no rubbing out).

Scatter on the floor around the room.

Walk by yourself and read as you walk.

Reflect with partner:

Which parts were the most difficult to walk?

Which parts are the most important to you for us to think about/work on?

Co-analysis:

- group similar thoughts and feelings and ideas
- negotiate a new layout for a path putting the items in an order according to a criteria decided by the group, similar to diamond ranking (e.g. most to least worried about/ most important to less important).

Have we missed anything?

Summary activity:

- Where are they in their thinking?
- Actions they may want to explore this week
 - *Researcher suggestions in case of no ideas:
Possible noticing tasks:
 - Is there anything in school that makes them worried or helps with worry?
 - What helps you with worry in other circumstances?
 - Or, does anything make you think about climate change in school?
 - Are there times in school where you are more comfortable or less comfortable with the idea of climate change?

Specific end checklist for session 1:

✓ Give out contact details of researcher, research supervisor, ethics board and signposting information to Childline and school counselling services (within their school and online services run in conjunction).

	<p>✓ Give out reminder to contact myself within the next two weeks if they want their information from this meeting to be removed from the study.</p>
Session 2	<p>✓ <i>Opening Checklist</i></p> <p>Check in: How do you feel today? Scaling activity.</p> <p>Story sharing: Reflections on their noticing task/ or alternative task devised by the group last week. (Reflections on experiential knowing)</p> <p>Exploratory activity: Creating rich pictures of themselves as climate-concerned young people in school (presentational knowing). Alternative: Sculpt</p> <p>Co-analysis: Looking for similarities, differences and things they would like to know more about.</p> <p>Reflecting on this task (propositional knowing)</p> <p>Have we missed anything?</p> <p>Summary activity:</p> <ul style="list-style-type: none"> • Where are they in their thinking? • Actions they may want to explore this week: *Researcher suggestions might be around: <ul style="list-style-type: none"> • Thinking about/ using questions from drawing the ideal school (Williams & Hanke, 2007) in terms of helping our responses to climate change. • Gathering data through drawings/free writing/ visual webs (Trajber et al., 2019) to explore links between different areas • Further noticing of either things that help or things that do not, depending on whether more information is needed. <p>✓ <i>End Checklist</i></p>
Session 3 - 4	<p>✓ <i>Opening Checklist</i></p> <p>Follow the direction of the young people, cycling through reflection and action and balancing different ways of knowing.</p> <p>✓ <i>End Checklist</i></p>
Session 5-6 <i>*More time may be needed between sessions here to allow the creative</i>	<p>✓ <i>Opening Checklist</i></p> <ul style="list-style-type: none"> • Time given to letting things finish and tidying up the inquiry. • Consider a final creative response to the project to share with the staff inquiry group, and potentially, others that they identify. • Share research around why creative approaches can be usefully affective, making change more likely.

<p><i>presentational response to be developed</i></p>	<p><i>Useful questions to consider at this point:</i> What have we found out? What help could supportive adults usefully give us? What would be useful to share with the staff group? What would you like to say/share? <i>Chairwork (Pugh, 2017) may be useful as an exploratory tool here.</i> What presentational form suits individuals and how can we draw this together as a whole? (Exhibition/ film incorporating different responses/book?)</p> <p><i>✓ End Checklist</i></p>
<p>An opportunity for a formal ending (Salzberger-Wittenberg, 2013); presenting their work; saying farewell; final reflection on the process, including what will they take with them as action into the world (Riley & Reason, 2008)</p> <p>Formal debrief letter sent</p>	

Part 2: Inquiry with supportive adults

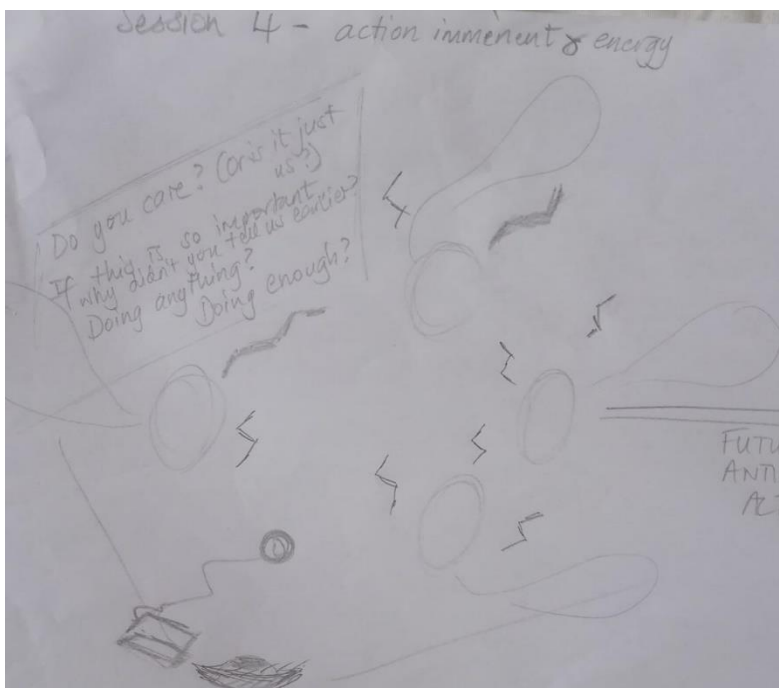
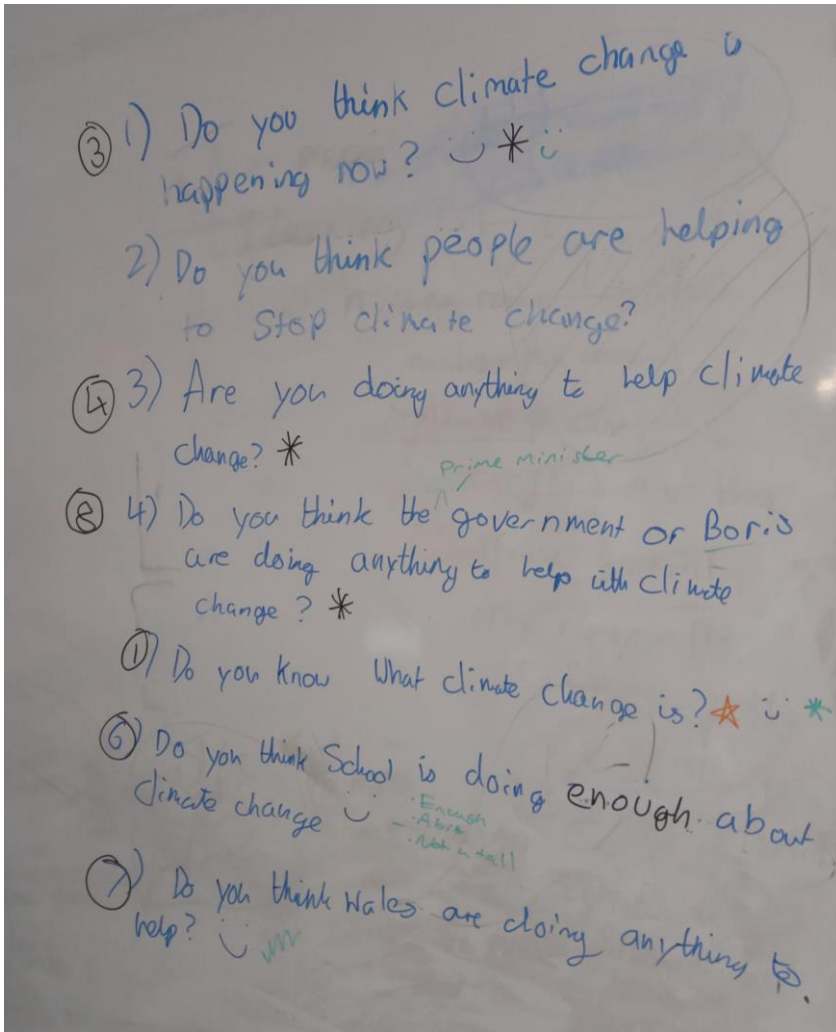
<p>Session 1:</p>	<p><i>Specific opening checklist for session 1:</i></p> <ul style="list-style-type: none"> <i>✓ Reiterate the process, and the position of the adults as co-researchers.</i> <i>✓ Acknowledge that this is a group of individuals with different perspectives and experiences, but with a shared goal.</i> <i>✓ Right to withdraw, reaffirm consent.</i> <i>✓ Reminder of the proposed research area for them to reflect on (supporting YP with constructive responses to climate change)</i> <i>✓ Remind them to think about their pseudonyms for transcription. They need to tell me within the next week, so I can begin anonymising the data.</i> <p><u>Check in:</u> How do you feel at the beginning of this process? (Ups and Downs cards)</p> <p><u>Optional story sharing:</u> The story of why you wanted to take part</p> <p><u>Exploratory activity 1:</u> Explore the YP's presentation. Free-writing responses.</p> <p>Co-analysis with sticky notes: what are you picking up as the key messages from the YP? How has it made you feel?</p> <p>What is important to you to think about/act on at this point? Any thoughts about a specific question this group should explore? (Propositional knowing)</p>
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	<p><u>Have we missed anything?</u></p> <p><u>Summary activity:</u></p> <ul style="list-style-type: none"> • Where are they in their thinking? • Actions they may want to explore this week <p>*Researcher suggestions in case of no ideas: Possible noticing tasks:</p> <ul style="list-style-type: none"> • Short reflections in a journal/diary over the next fortnight on their own feelings about climate change/ things they notice themselves doing in school or ways they respond to something... • Initiate conversations with other members of staff to find out opinions... <p><i>Specific end checklist for session 1:</i></p> <ul style="list-style-type: none"> ✓ Give out contact details of researcher, research supervisor, ethics board and signposting information to Education Support and Mind. ✓ Give out reminder to contact myself within the next two weeks if they want their information from this meeting to be removed from the study.
Session 2	<p>✓ <i>Opening Checklist</i></p> <p><u>Check in:</u> How do you feel today? Scaling activity.</p> <p><u>Story sharing:</u> Reflections on their noticing task/ or alternative task devised by the group last week.</p> <p><u>Exploratory activity:</u> Stimuli: <i>“Based on current projections, today’s adults may be the last generation with the capacity to take the urgent actions needed to provide a livable world for the world’s children and future generations. Lack of action will result in catastrophic impacts; even with urgent action, worse climate effects are now locked in. How has this changed what it means to be a responsible adult?” (Burke et al., 2018, p.6)</i> Reflection time.</p> <p><i>Variation on a reflective team:</i> What might it mean to be a responsible teacher in this light? Ask the question to half the group, the other half sit to the side where they can hear and listen to the talk. When they finish, the spotlight turns to the reflecting team, who reflect out loud on what they heard. Then invite further thoughts from the 1st group, and bring into a whole group discussion. What was it like doing that exercise? Did that exercise help our knowing? Are there any useful connections to our actions and</p>

	<p>reflections during the last week? What have we learnt? What questions do we have?</p> <p><u>Have we missed anything?</u></p> <p><u>Summary activity:</u></p> <ul style="list-style-type: none"> • Where are they in their thinking? • Actions they may want to explore this week: <p>*Researcher suggestions might be around:</p> <ul style="list-style-type: none"> • Initiate conversations with other staff about... what it means to be a responsible adult in relation to climate change. • Begin to construct visual webs (Trajber et al., 2019) to link ideas together across different areas • Trying something out • Further noticing of either things that help or things that do not, depending on whether more information is needed. <p>✓ <i>End Checklist</i></p>
<p>Session 3</p>	<p>✓ <i>Opening Checklist</i></p> <p>Follow the direction of the adult inquiry group, cycling through reflection and action and balancing different ways of knowing.</p> <p>✓ <i>End Checklist</i></p>
<p>Session 4</p> <p><i>*More time may be needed before the final session here to allow responses to be developed</i></p>	<p>✓ <i>Opening Checklist</i></p> <ul style="list-style-type: none"> • Time given to letting things finish and tidying up the inquiry. • Consider the final response to share with the YP inquiry group, and potentially, others that they identify. <p><i>Useful questions to consider at this point:</i></p> <p>What have we found out?</p> <p>What help could supportive adults give?</p> <p>What would be useful to share with the young people's group? What would you like to say/share? <i>Chairwork (Pugh, 2017) may be useful as an exploratory tool here.</i></p> <p>Is there anyone else it would be helpful to engage with for change?</p> <p>What presentational form suits individuals and how can we draw this together as a whole?</p> <p>✓ <i>End Checklist</i></p>
<p>An opportunity for a formal ending (Salzberger-Wittenberg, 2013); presenting their work; saying farewell; final reflection on the process – what will they take with them as action into the world (Riley & Reason, 2008)</p> <p>Formal debrief letter sent.</p>	

Appendix 10: The YP's questionnaire for their peers

- Designing the questionnaire (YP4) and an extract from facilitator's rich picture reflection



- The results (YP5)

Student climate change questionnaire

272 Responses 01:26 Average time to complete Active Status

1. Do you know what climate change is?

● Yes 263
● No 8



2. Did you learn about climate change before or after you came to High School?

● Before 178
● After 92



3. Do you think climate change is happening now?

● Yes 260
● No 10



4. Are you doing anything to help climate change?

● Yes 167
● No 103



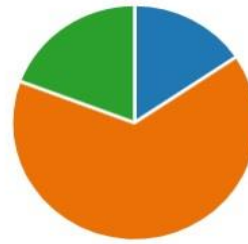
5. Do you think most people care about climate change?

● Yes 92
● No 179



6. Do you think our school is doing enough to tackle climate change?

● Yes, they're doing enough	42
● sort of, they are doing a little	176
● No	52



7. Do you think Wales are doing anything to help tackle climate change

● Yes	175
● No	94



8. Do you think that the UK government are doing anything to tackle climate change?

● Yes	144
● No	126



9. Would you think that your future will be affected by climate change?

● Yes	242
● No	26



Appendix 11: The YP's letters and presentation slides



Bobbie

Dear Mrs Hail,

I think that the school should do more to save more things from being destroyed. I think that we should recycle more and do daily litter picks around the school each week.

Hello fellow people,

I just want to say thank you for coming. First I would like to say that this has been so fun doing ^{to} this. I want to tell you that we have been doing a lot of talking and expressing our feelings. This has made me think about the things that we are doing for the climate. Firstly as you can see we are recycling paper and plastic bottles, which is great but I feel we could do more. Just a small little thing could have a huge impact on the earth. I have found out that through these past week that climate change is coming, and that we can see lots of pupils can see that too. I feel that lots of kids 11-16 are trying to do something but we don't have full control of the steering wheel. and I think this is when you come in you can help us & do more to help the environment. So if you I can see that climate change is happening so we need to do something. Thank you for listening.

Dear Mrs Hail,

Greta Thunberg said, 'Change is coming, whether you like it or not'. Climate Change is creeping slowly across every aspect of our lives. The past, the present and the future, they are all affected by this catastrophic global issue. Climate Change is a change in global or regional climate patterns, largely attributed to the increased levels of atmospheric carbon dioxide produced by the use of fossil fuels.

Previously, before joining this group, I felt as if hardly anyone really cared about Climate Change as it wasn't talked about and, if it was, the attitude towards it was one of derision. Some people say that they have found the solution to the climate crisis which is 'move to Mars'. To be honest, I don't feel that Mars is the answer because what are we going to do there? Ruin another planet? What will we do after that? I feel that the answer to preventing the climate crisis escalating is right in front of our faces and that is everyone should do something to prevent Climate Change from worsening.

Climate Change, when spoken about, often seems like there is no possible way that it can be stopped. However, seeing people do the little things to help prevent Climate Change makes me feel happier and inspired to do more of the same. Small things, like people being willing to walk the extra small distance to the bin rather than littering, or not using the wrong bins, really make a big difference. Using beeswax wrap instead of clingfilm makes environmental sense as that less waste is burnt at landfill sites.

Throughout the past few weeks, I have felt really encouraged to do more to prevent Climate Change. I have been surrounded by such amazing people, who all shared the same opinion that we need to do more about Climate Change and that the planet matters. I have learnt that I am not alone with my views and opinions and there are a lot more people than I previously realized that care about Climate Change and its issues. Through discussing ideas about how

we can prevent Climate Change, I have learnt more ways that we can make a difference.

I have felt really encouraged by the schools new recycling system this year. However, when I helped sort the recycling bags, there was a lot more sorting than there should have been. People were putting their crisp packets in the paper bins and their sweet wrappers in the plastic bottles bin. That just makes no sense. This new system of recycling is not being used to its maximum potential as people aren't using it correctly. As a school, I feel that we should show the positive effects of the new recycling process in an assembly or as pictures in form so that the rest of the school will feel inspired to use the system correctly. As a school, we could also make sure that all the recycling bags are checked more thoroughly so less of the rubbish gets contaminated and can't be recycled.

As a school, we should endeavour to encourage and inspire people to make a difference. We could encourage people to do better by informing them of the true realities of their actions with negative impacts or we could show them the positive impacts of their actions inspiring them to repeat them. If someone decides to do something to help combat Climate Change then inspire two other people to do the same then they inspire two more people to do the same, after only 6 times of this, there will be almost 200 inspired people doing something about Climate Change.

It is up to us to make a change and to slow the continuous downward spiral that is Climate Change. We must all act to ignite a force of action in everyone we see that we have the ability to impact. I end this letter with this, as author Ernest Hemingway said, 'The Earth is a fine place and worth fighting for.'

Yours Sincerely,

Daisy

Good afternoon everyone,

For many years the world has been harassed by our own doing. Our machines, our rubbish. And for years, society has not cared. Until now (publicly). Now people want to bring change to our environment, one metal straw and tote bag at a time.

Now, that is the world. What about South Wales High School?

Over the 2020-21 school year, S W High School has been improving the bin usage around the school grounds. The new bins have given people the chance to recycle, which is amazing. But after going through the mountains of bags that used to live in said bins, a few other people in the school community seems to think that a paper bin is an everything bin. Recycling cannot happen if paper has yogurt all over it. We have to educate people on how they bin their rubbish, or perfectly good paper will (which does not have to) contribute to the already overwhelming litter problem.

As my fellow researchers can tell you, some of the school community has a not too positive view on advocating for a better environment. Mocking, ignoring and saying 'there is no point'. There is a point. Our world has taken care of us, so we should take care of it.

One little thing can make a huge difference, and educating people on the dangers of climate change could change the course on how the environment ends up being.

So, what are we waiting for? Climate change waits for no man. Let's educate these young minds so that the world ends up a more environmentally friendly place

Thank you for your time

** Please note that the school name has been changed.*

Sara

Dear Miss Hail,

I hope this letter finds you well. I'm writing in regards to a recent study me and my fellow researchers have been doing for the last six weeks helping Miss Togneri with her own research on how climate change affects young peoples mental health and wellbeing. I believe our ideas will make you consider climate change from a different perspective

As the respectable head teacher of our school I believe that our futures must be close to you. Therefore you must understand the weight of climate change on my generations shoulders. And you do understand our struggle. In the past two years our school has made some really good improvements, for example we have started to recycle.

Certainly climate change is not a surprise to anyone. At least it shouldn't be. We have seen its effects for over 100 years. Still today as I'm speaking to you no major action has taken place. There are still people who deny the overwhelming evidence, but no matter how long they choose to ignore it no one can avoid the destruction. At least my generation can't. You or our parents, grandparents and many politicians on the other hand, will never live to see our situation worsen. To see when the apocalypse starts. But I am asking you to not ignore the science. To not ignore our future. My future.

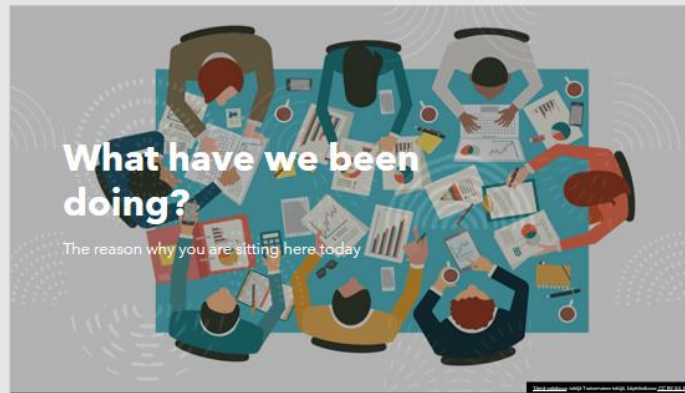
The last weeks have been really eye opening for me. Before meeting all these amazing people I felt powerless and alone with my views. Worries about climate change. That should not be the reality to anyone in our school. In my year. On a Thursday afternoon, around 6 weeks ago, I entered the geography room to find out I was not alone. Surrounded by all the great people who care. Everyone, not just people worried about our environment have the right to feel like they belong. I believe that is the schools duty to encourage people to stand up for their beliefs and to provide more information. People are scared of the unknown.

We can't change the past, but we can change the future. Educate more people. Spread more reliable information. Make sure everyone knows and more importantly understands what they can do to help. To make a change. It's the little everyday things we can all do. It's the little things that will eventually add up to make the biggest change. You can make a change for better future. Better tomorrow. So now I am asking, what will we do?

Sincerely,

Sara

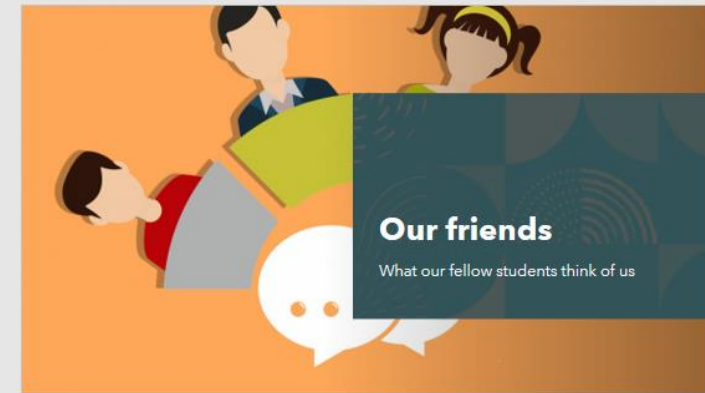
YP Presentation slides

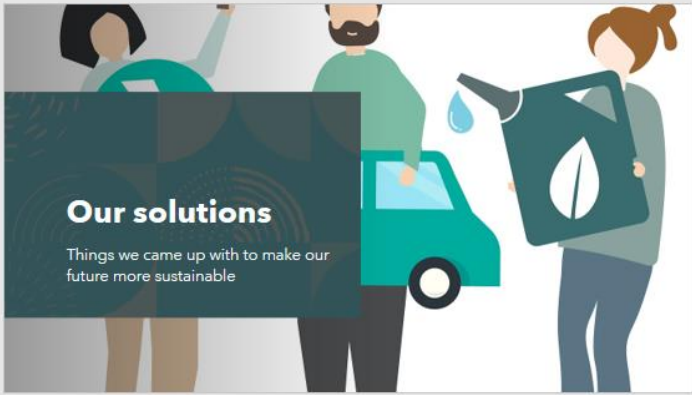


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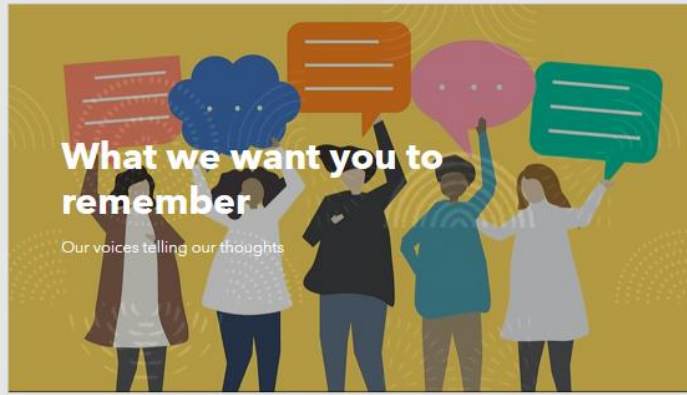




Our solutions

Things we came up with to make our future more sustainable

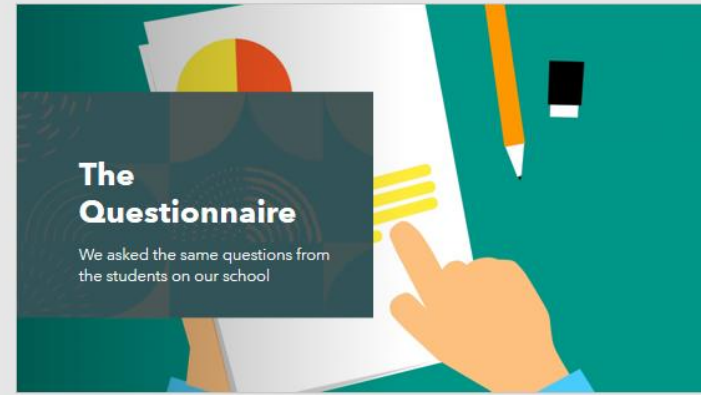
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What we want you to remember

Our voices telling our thoughts

8



The Questionnaire

We asked the same questions from the students on our school

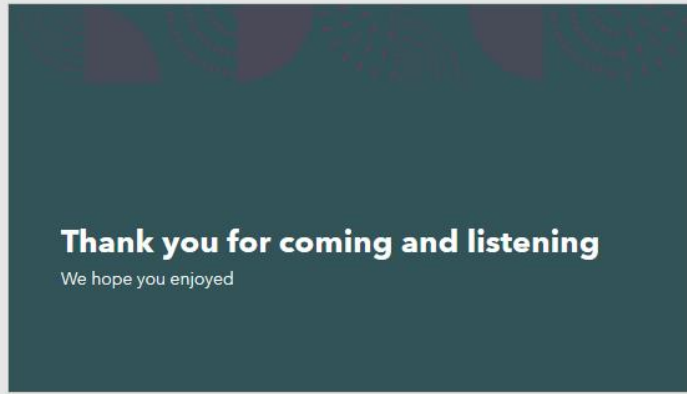
9



What we concluded

How they are not so different from us and how people have similar thoughts as we do

10



Thank you for coming and listening

We hope you enjoyed

11

Appendix 13: Debrief letters

YP version

An exploration of constructive ways of managing eco-anxiety in schools with young people and their supportive adults

Thank you for taking part as a valued co-researcher

The aim of this research was to work with pupils and staff to explore helpful ways of dealing with difficult feelings around climate change in school.

I hope that the experiences, actions, thoughts and views you shared with myself and the group will help us to develop future support and advice for other young people concerned about climate change and their teachers and school leaders.

What happens now?

Now the student research group has ended, I will keep the information you shared with myself and the group in a secure place, where only I will be able to look at it. I recorded our meetings and have transcribed these (made scripts of what was said) within two weeks of each meeting taking place. They have been anonymised (names and other information that may help others work out who you are have been changed or removed). May I remind you that if you want to take your data out of the research from meetings within the last two weeks, this can only be done up until I have transcribed and anonymised the meeting data. So, if you would like to take your data out from these last meetings then contact me by 15/7/21 for meeting 4, by 22/07/21 for meeting 5, and by 27/7/21 for meeting 6, which are within 14 days of the meetings.

I will keep your anonymised data, analyse it and use it in a research report. This will be shared with the university and perhaps with a wider group of people. If you are interested in being involved with sharing the findings in the future or have ideas about who you would like to share it with or how, please do get in touch.

A staff research group is going to follow up on the work you have done and will in turn share their findings with you at the end of their inquiry in the autumn.

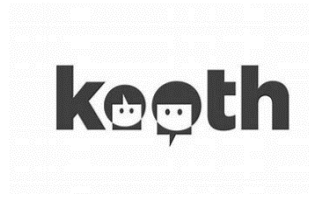
Questions and support:

If you can think of any questions you would like to ask, please do not hesitate to ask myself or my research supervisor, Dr Victoria Biu. Contact details can be found below. You can also find details of Cardiff University's Research Ethics Committee.

If the research group has brought up any worries, or you are feeling concerned about your own wellbeing or mental health, you may find it useful to talk to someone at:



Call on 0800 1111 or go to <https://www.childline.org.uk/>



Go to <https://www.kooth.com/> for online support, where you can message a counsellor or get information.

At school you can contact:

X, the head of wellbeing, by emailing: X@X.sch.uk

Or, you can email: wellbeing@X.sch.uk for support and advice.

You will have come to your own conclusions from the study, where different things are of more personal interest and hold more importance for different members of the group. However, if you would be interested in finding out more about the results that I put together, please do get in contact.

It has been a pleasure working with you!

With best wishes,

Hannah Togneri

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: tognerihp@cardiff.ac.uk

Supervisor:

Dr Victoria Biu,
School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Email: biuv1@cardiff.ac.uk

Cardiff University's Research Ethics Committee:

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
Tel: +44 (0)29 2087 0360
Email: psychethics@cardiff.ac.uk

SA version

An exploration of constructive ways of managing eco-anxiety in schools with young people and their supportive adults

Thank you for taking part as a valued co-researcher in this inquiry.

The aim of this research was to work with pupils and staff to explore constructive ways of responding to anxieties around climate change in school.

I hope that the experiences, actions, thoughts and views you shared with myself and the inquiry group within this research will help us to develop future practice and support for concerned young people and their teachers and school leaders.

What happens now?

Now the inquiry has ended, the information you shared will be held confidentially in a secure location, to which only the researcher will have access. Meeting recordings have been transcribed within two weeks of each meeting taking place, and then anonymised. May I remind you that if you want to withdraw your data from meetings within the last two weeks, this can only be done up until I have transcribed and anonymised the meeting data. So, if you would like to withdraw your data from today's meeting (10th November) then contact me by the *24th of November*, which is within 14 days of the meeting. The anonymised data will be retained, analysed and used in a research report, which will be shared with the university with the potential of wider dissemination. If you are interested in being involved with future dissemination of the findings, please do get in touch.

Questions and support:

If you can think of any questions you would like to ask, please do not hesitate to ask myself or my research supervisor, Dr Victoria Biu. Contact details can be found below. You can also find details of Cardiff University's Research Ethics Committee.

If the inquiry has brought up any worries, or you are feeling concerned about your own wellbeing or mental health, you may wish to contact:



<https://www.mind.org.uk/>



<https://www.educationsupport.org.uk/telephone-support-counselling-wales>

You will have come to your own conclusions from the study. However, if you would be interested in finding out more about the results that I put together, please do get in contact.

It has been a pleasure working with you!

With best wishes,

Hannah Togneri

Researcher:

Hannah Togneri,
School of Psychology, Cardiff University, Tower
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Supervisor:

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Email: biuv1@cardiff.ac.uk

Cardiff University's Research Ethics Committee:

School of Psychology, Cardiff University, Tower Building, 30 Park Place, Cardiff, CF10 3AT.
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Email: psychethics@cardiff.ac.uk

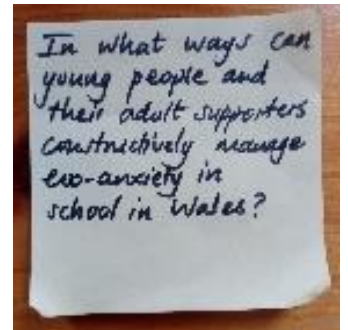
Appendix 14: The reflexive thematic analysis process (Braun & Clarke, 2022) and how I applied this in my analysis

Table A.6: The RTA process in this study

Data familiarisation

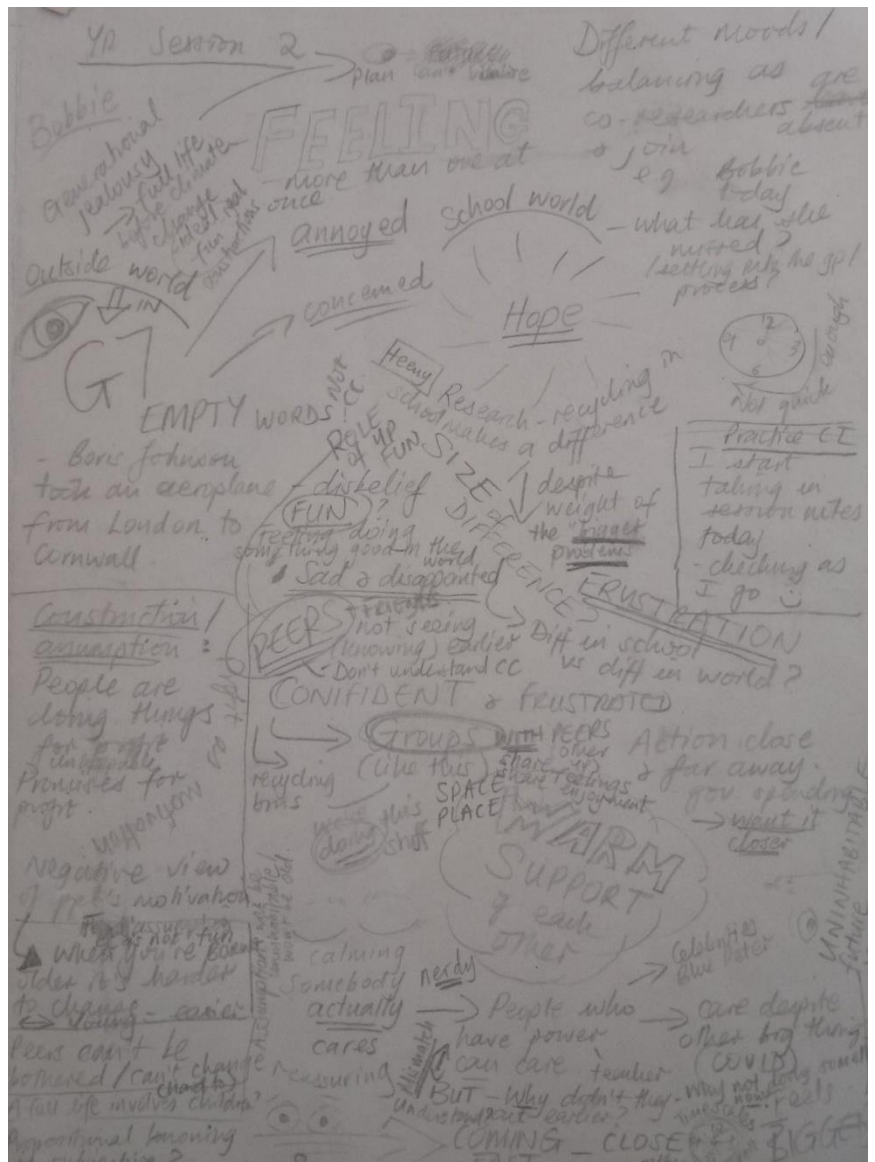
What did this look like?

- Reading and reviewing all the data (transcriptions, co-researchers' visual representations, my own reflective notes, rich pictures and visual models) in relation to the research question. Following advice from Terry (2021), I kept a post-it with my research question to hand to keep focused. (**The difficult feelings of eco-anxiety fed into answering the question of how they managed it. Therefore, during analysis it became clear that a second research question was needed, addressing what eco-anxiety was for these YP).*



- Making informal notes for each inquiry session on anything I observed that was particularly interesting and may be worth exploring in coding and theme development. This included asking myself Clarke, Braun & Hayfield's (2015, p.231) questions for familiarisation and making notes on these for each session.

Initial notes for each session:



Notes on the overall data set:

The overall data set

Feeling powerless and powerful. Agentic? Relative power and hierarchies.

Control/ lack of control

Making it manageable

- small bits, taking apart, time
- Supporting staff wellbeing
- The supportive adults are not feeling they can fully enable action (halfway) – intimidated by “culture shift” Too big. Questioning their impact and their role in this – is this for SLT?
- What they are already doing

Ripple thinking

Making a difference in school versus difference in the world?

Care and uncare

Role of YP? Expectations of YP? Identity?

Relationships? Adult-YP, YP-peer/friends - barriers

Finding my team/group/people? Like-minded - understand

Group support and encouragement - positivity

A journey of sharing/ building a togetherness? Identity? E.g. Rey sharing “as an environmentalist” in session 3

Reaching out of school to support in school:

- School and their experience of school is set in a wider global context, which they are very aware of (see Bobbie’s rich picture of her as a climate concerned YP in the school system – week 2 as illustration).
- Reaches out to interactions with parents, news (“ocean on fire”), social media, G7 summit, COP26, family (staff’s children), Insulate Britain and Extinction Rebellion
- Radical practice – becoming a UN climate change teacher, running for Welsh Youth Parliament, radio show that also is accessible out of the school
- Plans and wanting to connect with feeder primary school pupils

Building connections/engaging within the wider school system: ALN, the cleaners, SLT, recycling across the school – and the company that collects it and how they need it prepared in school, canteen staff

Coming back in from the global context: within their lives

Existential-based worry/fear, but about them themselves and their lives specifically, as well as broader humans and animals

Our words and our voice – helping us say our words

Being listened to and not – We can tell when you’re not listening

Fun

Seeing/ witnessing – the visible world

- Reflecting on myself in relation to the data, including my position as an outside researcher (not a member of the group in this school system), but also as someone who was previously a teacher and invested in the inquiry and my co-researchers having gone on this journey with them:

Situating myself in relation to these data

Awareness that I was part of this data collection. I am invested in these young people, in the staff and in the school's journey.

- A thought that came up for me when reading the transcripts/ looking at our visual data was "these are my girls". This was not really about ownership as such, but more about recognising a connection through revisiting our experiences and journey together.
- Reading and viewing again was very powerful and I was tearful. This is a powerful connection I am feeling in relation to the data – and what that data means to me as connection to the inquiry and to the people involved.
- The topic is something that bothers me too and I also have worries about the environment that feel awful at times. Staff descriptions of what they do at home/ with their children and those conversations resonated with me as something I experience/ am grappling with too.
- When re-reading the staff transcripts/ viewing their visual artefacts – I felt a sense of kinship as a former teacher. I was aware of what it can mean to need to find ways that work with teachers' workloads.

Awareness of my role and initial struggles with others' roles?

- Facilitator – this is how I have labelled myself in the transcripts. This perhaps also relates to a struggle with whether and how much I entered into the inquiry. Clearly, I influence the inquiry and bring my own experiences – why did I feel the need to distance by not putting my name in the transcript? (See notes from university session where I asked for supervision through the reverie group too for this struggle – me in the group and not in the group).
- Mr Snow's role – this developed over time, but became a useful reflective source following each session with increasing involvement in the sessions themselves – from more involvement with me to more involvement with the group. (E.g. See YP week 3 for when he / starts to facilitate access across the school system for the questionnaire.)

Data coding*What did this look like?*

- Systematically working through the written data (transcripts and any written data from group activities), labelling it with words or short phrases to describe ideas (surface meanings and interpretations) relevant to the research question. Like Terry (2021), I coded both for semantic and latent levels of meaning simultaneously.
- I worked with my data chronologically from the first student inquiry session to the final feedback session from the adult supporters, noting anything relevant to my research question and tagging it with a new or already existing code label. I typed onto word documents, with the written data in one column (transcripts and written data in visuals) and my coding in an adjacent column.
- I then worked backwards starting from YP4 and ending with YP5 following a different order. This was to “ensure rigour” (Braun & Clarke, 2022, p.70) in my coding, by disrupting “the ‘flow’ for the dataset” and giving a more even attention to data items encountered earlier in the analysis that may have had less depth (Braun & Clarke, 2022, p.71).
- At this stage I noticed that my coding was too fine-grained. So, I collected all my original fine-grained codes into a word document, colour coded to show which session they belonged to, and organised them into similar thematic areas. This allowed me to reduce the codes by assigning a new more macro level code to code groups, and to consider the robustness and authenticity of a code across the data by looking at the colour coding. Codes were also considered to have greater authenticity if they were present in sessions 6 and 10, as these were sessions where the co-researchers reflected back over their experience of the inquiry, and so were given more weight.
- Reflection: Though this seems linear, I actually went back and fore as I created new codes, going back over previous data items, like Terry (2021).

Examples of the process:

Colour codes for each session
YP1
YP2
YP3
YP4
YP5
YP6
SA1
SA2
SA3
SA4

Collecting together similar fine-grained codes

- Confrontation with difficult ideas in the group
- Confrontation with difficult ideas in the group: shocking
- The importance of sharing news/ bringing news to the group
- Holding blame
- Exploring difficult ideas as a group
- Bringing news to the group
- Holding our own responsibility: damage to the planet
- Struggle with being part of the problem
- Experiencing difficult information/news as a group
- A need to talk about difficult news
- Group as an opportunity to talk about news
- Group as an opportunity to talk about different things
- Value of being able to explore wider environmental observations in group talk

Wishing for the group space to talk about COP26

Desire to talk about current environmental news/ events

A lot to say on COP26 (young people)

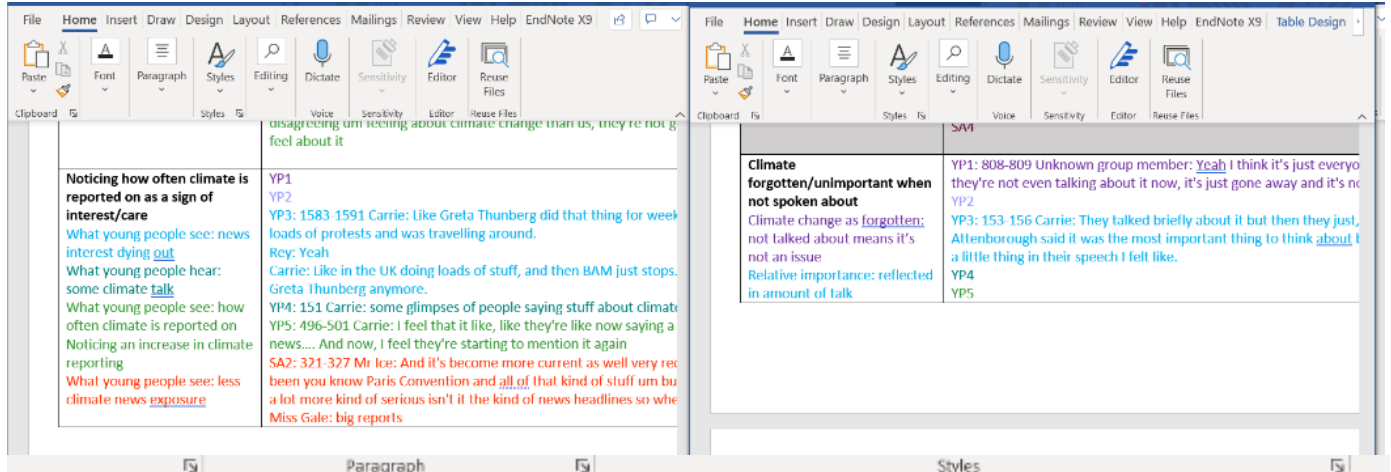
Data extracts were collected and compared to the code name:

<p>Exploring difficult ideas in the student group</p> <p>Confrontation with difficult ideas in the group</p> <p>Confrontation with difficult ideas in the group: shocking</p> <p>Holding blame</p> <p>Exploring difficult ideas as a group</p> <p>Holding our own responsibility: damage to the planet</p> <p>Struggle with being part of the problem</p> <p>Experiencing difficult information/news as a group</p>	<p>YP1: 467-469 <u>Rey</u> So what happens when like the smallest thing loses like, goes extinct? What happens? Like it rebounds on everything else. <u>So</u> seeing that kind of like this like thing. That's not very that doesn't sound good.</p> <p>YP1: 486-491 <u>Daisy</u> I think a lot of all this is quite shocking because we think we think we have all the solutions to the problems but we really don't. Thinking of moving to another planet would be fine, but after we wreck that <u>one</u> we're going to have to find somewhere else to go. <u>So</u> we think we can just move to another planet, but then if we trash loads of planets how's that <u>gonna</u> work with the rest of it?</p> <p>YP2</p> <p>YP3: 1366-1369 <u>Bobbie</u> if this carries on like the it's like the young, the next generation is going to be really, I think it's going to be the most effected, because it's happening now. And it's kind of our fault that it's carrying on, basically?</p> <p>YP3: 1426-1428 <u>Carrie</u> we've still like carried on using some stuff, so like it's hap- it's mostly how from the past, like way back in the past as well as from now in the present, because we keep doing it</p>
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Checking against data extracts allowed assessment of the strength of the code across the data (whether present in key sessions, or over a number of sessions):

<p>Feeling that I can make a difference/ do something</p> <p>Believing I can make a difference</p> <p>Self-efficacy: "I can"</p> <p>Making-a-difference: personal choices</p> <p>Feeling they can make a difference</p> <p>The importance of feeling able to change things</p> <p>Belief in their power to change opinion of staff: self-efficacy</p> <p>Ripples of inspiration: Feeling she can make a difference</p> <p><i>Is this how you talk about it?</i></p> <p>How we talk about climate: feeling like you are making a difference</p> <p>Feeling like there is positive change and I am part of it</p> <p>Feels weak</p>	<p>YP1</p> <p>YP2: 1298 Daisy:</p>  <p>YP3: 31-34 Rey: I draw like the flowers and stuff like that, because I think it like preserves something so good even if it is in a boring ((pause)) because, like, instead of taking it out, we kind of like kills it, if you know what I mean?</p> <p>YP4: 95-100 Daisy: me and Rey and two other kids in year nine have been invited along with some other people from the years to help sort out all the recycling. <u>Cos</u> we had the massive container with all the recycling from all the years. <u>So</u> we're going to go on next Wednesday to go sort it all out. <u>So</u> then the recycling people can take it, so more of it will be recyclable</p> <p>YP5: 2084-2086 Rey: but it just felt like ((pause)) me like having some sort of cos for years I've um for years um I've had no control over it. But then now it seems like now we're older we can do something about it</p> <p>YP5: 2146-2150 Sara: Dear Miss Hail... I believe our ideas will make you consider climate change from a different perspective.</p> <p>YP6:</p> <p>SA1</p> <p>SA2</p> <p>SA3: 1302-1306 Ms Gale: she worded it in such a way that immediately made you feel like you were doing something about it already by having paper straws and, you know, you kind of, I mean I know you don't decide on who McDonald's has paper straws, but that way to make you think oh well yeah there is positive change happening and I'm part of that</p>
<p>The importance of role models to know I can make a difference</p> <p>Seeing positive role models impacts on children's efficacy</p> <p>The power of role models</p>	<p>YP1</p> <p>YP2: 611-612 Bobbie: shows young children that even though they may be young like they can <u>actually do</u> something.</p> <p>YP3: 685-689 Rey: PE teachers can tell the students, "<u>oh</u>, this helps with climate, this helps with stopping fuel gases emissions", and some people that usually are the perpetrators, they are often like are the sportsy people. Like they do more football and <u>stuff</u> and they would listen to the teacher, those teachers because they find them like</p>

Comparing and combing codes where they shared similar ideas:



<p>Climate forgotten/unimportant when not spoken about</p> <p>SAME AS HOW MUCH CLIMATE IS REPORTED ON/ TALKED ABOUT</p>	<p>YP1: 808-809 Unknown group member: <u>Yeah</u> I think it's just everyone in general, because they're not even talking about it now, it's just gone away and it's no longer an issue.</p> <p>YP2</p> <p>YP3: 153-156 Carrie: They talked briefly about it but then they just, like David Attenborough said it was the most important thing to think <u>about</u> but they just had it as a little thing in their speech I felt like.</p> <p>YP4</p> <p>YP5</p>
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09:26

Coding reflections

- Noticed that my code names are not "pithy".

09:26

Coding reflections

- I'm seeing things during coding that I did not pick up during my familiarisation – can see the value of looking and looking again, and feel that I am doing something different this time, not just taking ideas from familiarisation

09:24

Coding reflections

- The difficulty in being interested in enabling environmental behaviours in the school, but this not really being relevant to my research question

09:23

Coding reflections

- Enjoying re-reading and remembering the experience of being in the group – YP 6 reaction to invitation to disagree

6 Jan

Coding reflections

- I am grappling with how poetic I may be in my coding! Sometimes it feels from the young people's language that a more poetic code is reflective, but I hope I am not obscuring my interpretation and moving too far from the text-based meaning

6 Jan

Coding reflections

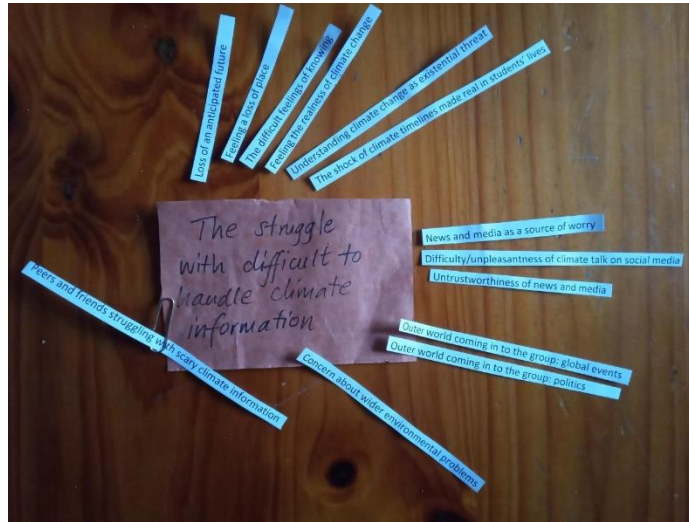
-As someone who shared many of the concerns of the group, they seem very normal concerns for me – I am aware then that this may read very differently to someone else. It may feel more extreme, or more like catastrophic thinking.

Initial theme generation

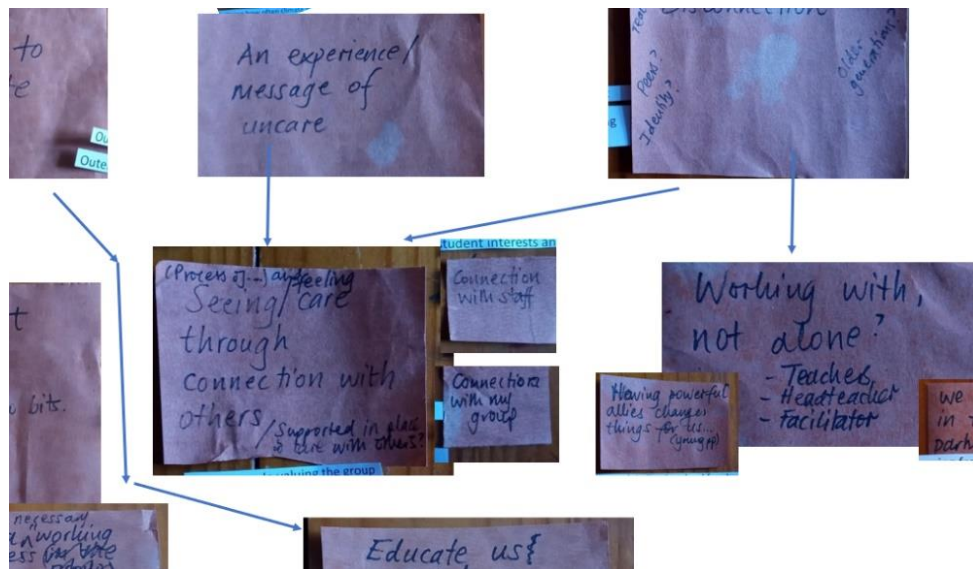
What did this look like?

- Creating clusters of codes that relate to particular ideas or concepts by looking for repeated ideas in the list of codes.

An initial code cluster with a proto-name:



- Checking whether these initial themes were relevant to the research question, are evident across multiple data items, and whether it has a central organising concept. As part of this I went back to the colour-coded extracts I had created in step 2 to check across the data items, and used supervision to reflect on whether there was one central organising concept; this initial code cluster was subsequently split up into two separate ideas, with different central organising concepts.

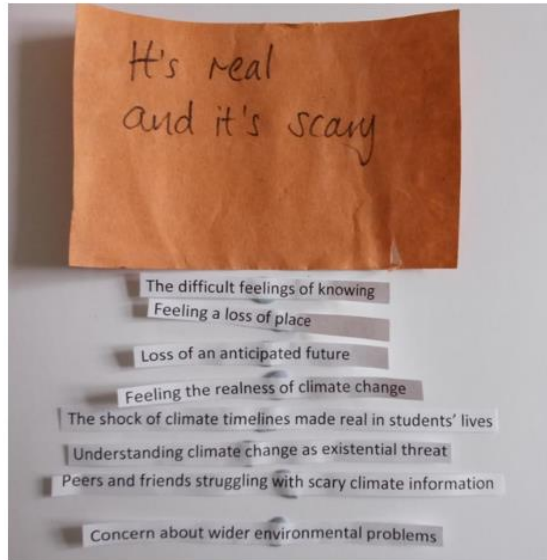


Developing and reviewing themes

What did this look like?

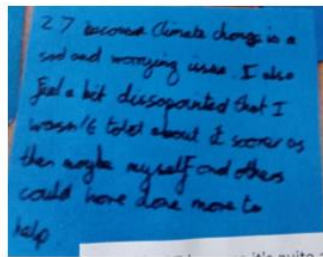
- Checking initial themes back against the data to see if they capture the content and meanings in the data and across the whole data set.

Stage 4: are there enough meaningful data to evidence this theme? (Braun & Clarke, 2022, p.99).



The difficult feelings of knowing

YP1: 263-269 Rey: I was like really like worried about that... it just really like scared me
 YP1: 1189 Sara: just a bomb when you understand stuff
 YP2: 319-325 Daisy:



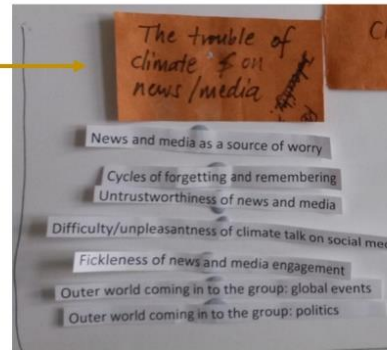
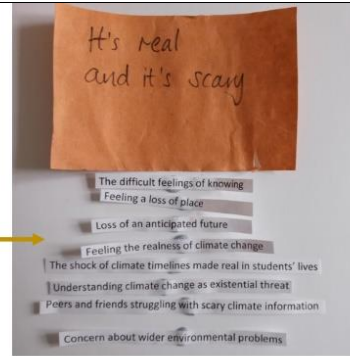
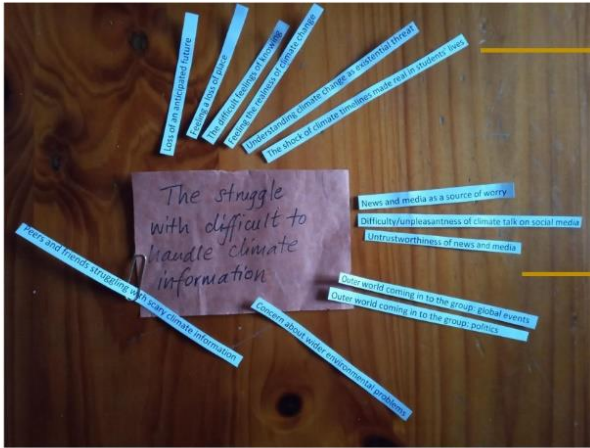
YP5: 840-842 Rey: I still feel really massive emotions about it like anger stress, but then it also feels like, I don't know, like, I don't know I don't know what feeling I have with it, as in like one main emotion

- This resulted in discarding, combining, refining, and splitting themes.

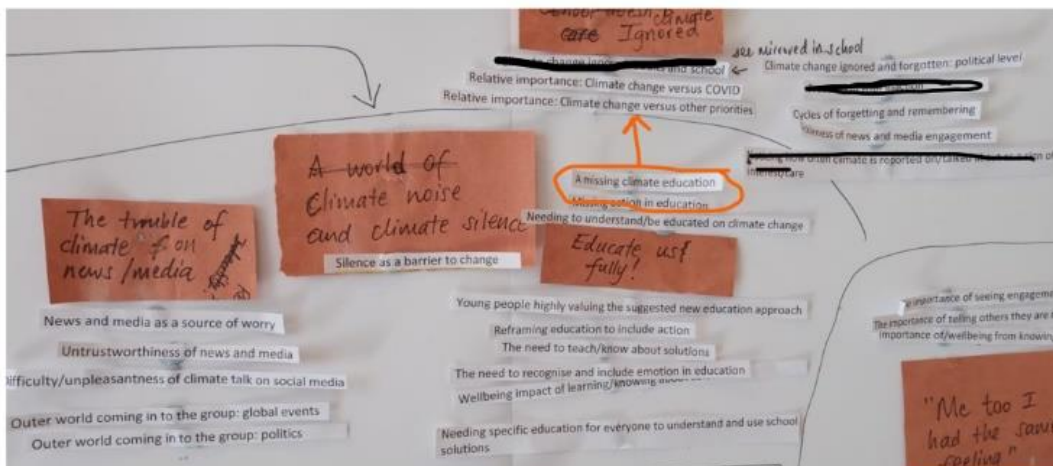
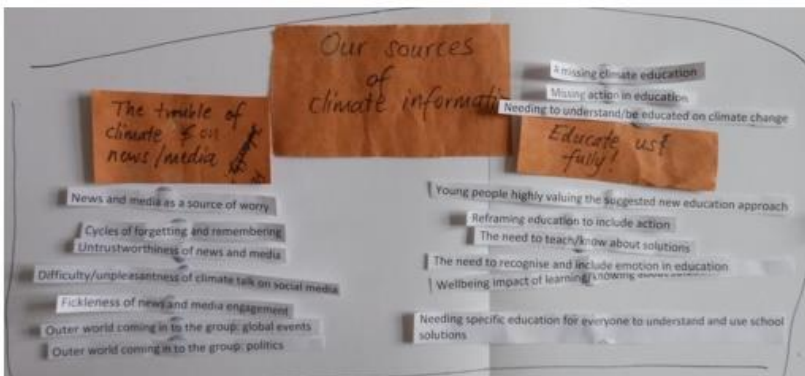
This can be seen in the development of "The struggle of difficult to handle climate information" to "Our sources of climate information" to "Climate noise and climate silence":

Stage 4: developing and reviewing themes

Example of splitting up a theme



A new theme was created "Our sources of climate information", which eventually became "climate noise and climate silence":



Refining, defining and naming themes

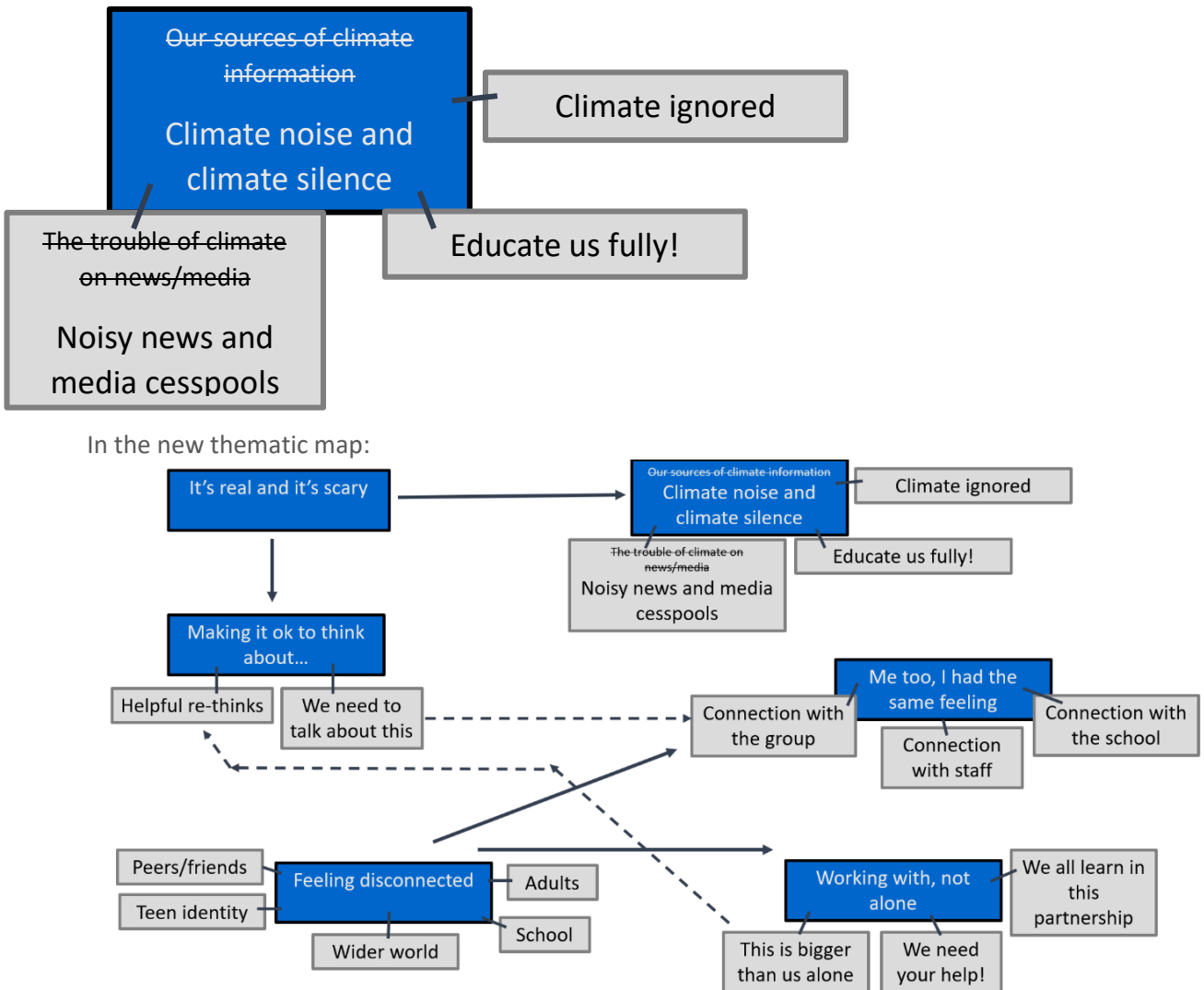
What did this look like?

Developing a detailed analysis of the data in each theme by:

- Selecting good data extracts (“clear, compelling and vivid illustrations”, Braun & Clarke, 2021a, p.141) from across the whole data set.
- Writing short definitions of each theme:

This theme encompasses the sense of lack of talk about climate change at school, where there is limited education and other priorities are often deemed more important. Conversely, the young people also experience a world of talk about climate change through news and social media, which can be unpleasant and worrying, but they also mistrust. Despite this it is their source of political and global climate/ environmental information, which they look at to see whether the world seems to be interested or caring. What they see is a fickle political and media world that goes through cycles of remembering and forgetting. What the young people want, and ask their supportive adults for, is full education on climate change, which crucially includes solutions. The supportive adults in turn explore and recognise the importance of education that also supports emotion and action, and specific education across the school to support schoolwide solutions.

- Finalising the names of the themes/ subthemes:



Writing up the thematic analysis

What did this look like?

- Writing the results section using a combined illustrative and analytic approach (using data to both illustrate and as an enmeshed part of the analysis).

It involved further reflection, and emphasised for me the non-linearity of the approach, where the writing brought me back to re-question the names of themes and how the parts of the analysis (themes) fitted with the whole story I was developing.

Noisy? news and media cesspools

I used the comment function in word to add in questions for myself:

Rey's thoughts offer a picture of vulnerability of human life, and an awareness that climate change is happening now. This realness of climate change became a frequent theme of discussion in the early sessions and was a theme they developed themselves during an exploratory activity in session one (Figure X).

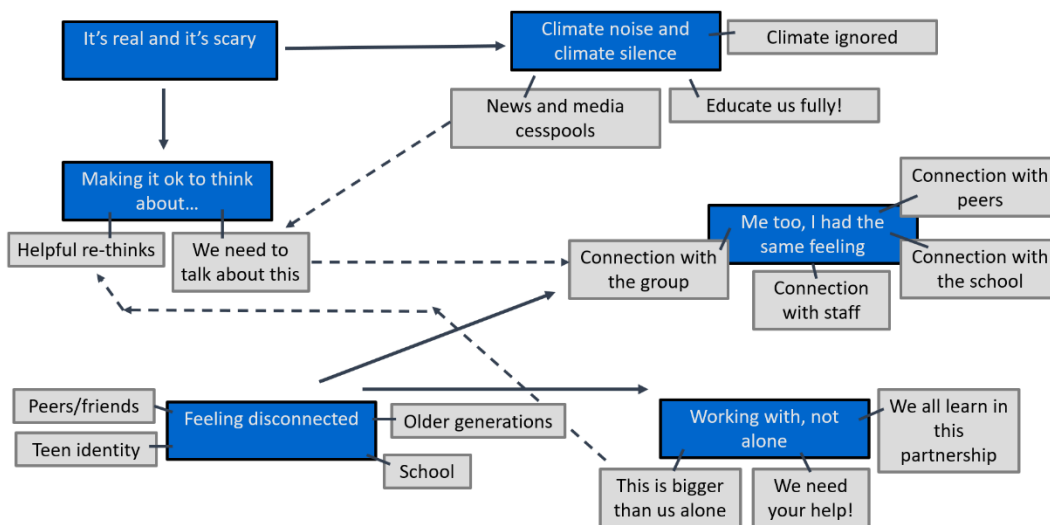
The implications from the threat of climate change for the co-researchers were that there would be real changes in their lives. They worried that what would be real for them and **real for their future children** may involve the loss of special spaces in the world



Hannah Togneri 2 hours ago
Wondering if this loss part would fit better with the disconnection with older generations – some related parts of the extracts (**but not all**) are to do with comparison to other generations' experiences.

[Reply](#) [Resolve](#)

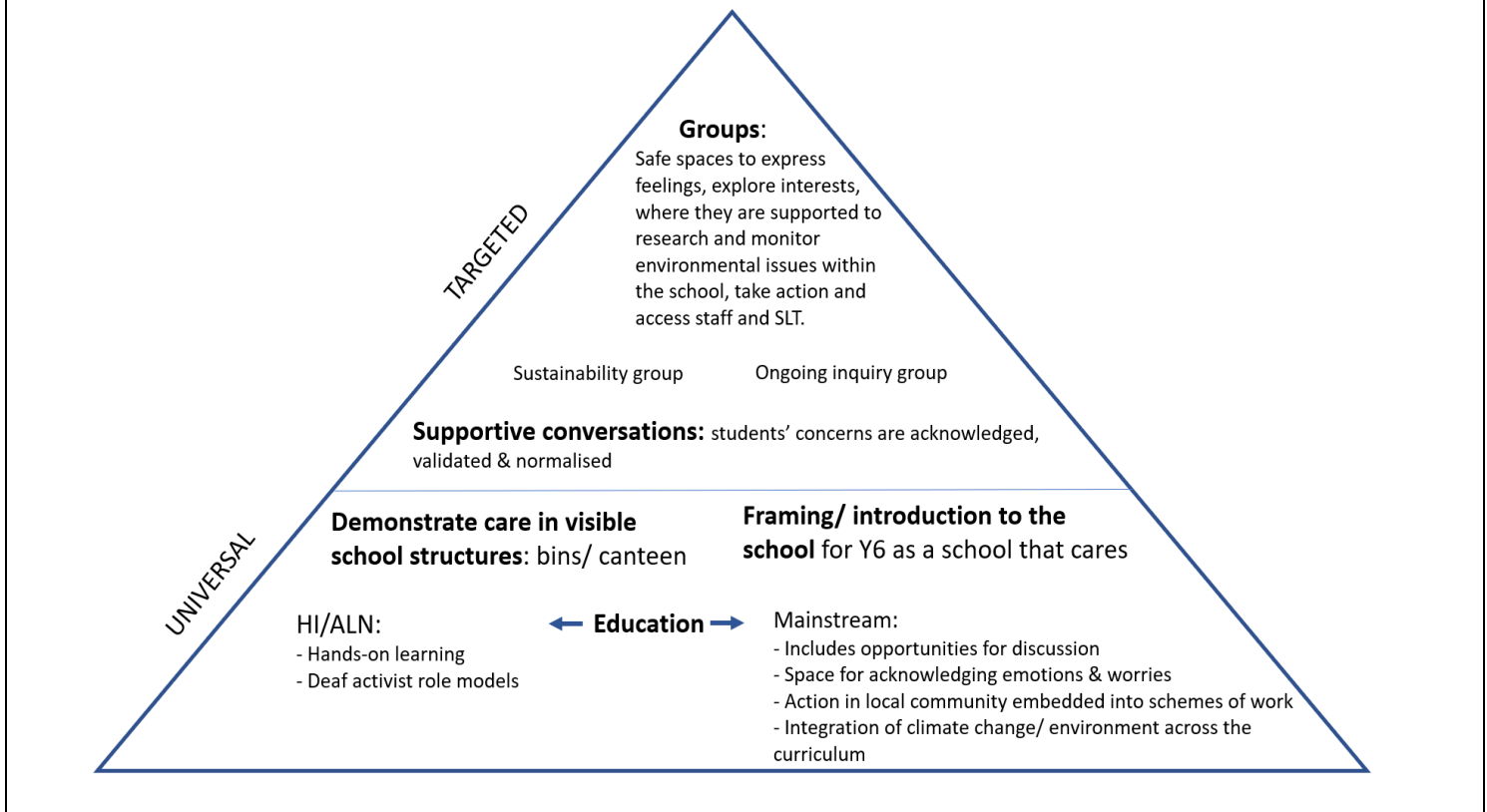
The thematic map was returned to and adjusted again:



- Finally, this section involved writing the discussion to contextualise the analysis within the literature, considering continuities and discontinuities.

Appendix 15: Presentational knowing from SA3

Figure A.7: Presentational knowing showing the whole-school approach for the high school following SA session 3. This reframed the supportive adult role to thinking about how action within their roles could contribute to supporting YP with eco-anxiety and a whole school culture change



Appendix 16: Resources for EPs on using the linked CI approach

- Table A.7: Key learnings
- Table A.8: Aide memoire for linked CI
- Table A.9: Reflections on how Kotter's model of organisational change may support the linked CI process.

Table A.7: Key learnings

Key learnings on the facilitation of the linked CI process and how it might be adapted for use by EPs in schools following experiences in this study.

“as in every aspect of the method, there are no rules, only exploratory choices”
(Heron, 1998, p.80)

The young person inquiry process

- Partnership with a link teacher:

This partnership developed over the course of the inquiry, but was invaluable for the young people and TEP in their system knowledge and access, and for post-session reflection. This informal reflection was a chance to gain another perspective and meaning. Rey identified different knowledge that was needed to support the YP; knowledge of how to react to the YP and knowledge of environment. For this CI process, the EP needs to work collaboratively in the school, where many teachers have specialisms involving environmental knowledge. In this case, the link teacher was a geography specialist. Rey's distinct roles could be fulfilled by the EP and link teacher together; the EP can bring knowledge of psychology, and the link teacher can bring knowledge of environment.

Therefore, in future linked co-operative inquiries:

- Establish role of the liaison teacher from the start as a shared partner/ facilitator.
- The EP/TEP takes the initial lead to establish a new space for working together with the young people that is distanced from normal school procedure and hierarchies, especially in the initial session.
- Include a dedicated post-meeting reflection between facilitator and link teacher.
- Explore how the role of in session note taker may be split between the two facilitators.
- Both facilitators need to join in activities to model them and to help punctuate the group as a partnership space of co-researchers.
- Introduce the idea of what action is in CI with more examples in session 1 to help to understand what “action” means in the context of CI.
- Spend time going over the process of recording in session 1. When there is live transcription, such as the otter app, the YP can be shown this directly.
- Taking in-session notes encouraged the facilitator to check meaning as they went along. This is not something the YP felt able to do, and is therefore possibly a facilitator role, but possibly one that could be shared with the link teacher.
- Take time to introduce other adults to the concepts of CI before they can enter into the YP sessions. In particular introduce concept of co-researchers and participatory, equal positioning.

The supportive adult inquiry process:

- Supporting the teachers into practical action by giving more time between sessions. Teachers found doing actions between sessions hard due to their time restrictions; “we don't have time to go to the loo”. This meant that nurture within the CI is really important for the staff to manage their stress, but this needs to be balanced with encouraging manageable action. One way is to **leave longer intervals between the third and fourth meetings** (in the first two they are

learning the process and need some initial momentum). The staff in this inquiry also planned actions that were to take place in the following term, which would have been useful to reflect on. The facilitator can follow up with short check in emails in between the sessions to support momentum.

- Facilitators can also be mindful that staff **building on what they were already doing** is useful too.
- The facilitator may need to create initial presentational summaries of the meetings, as presentational knowing did not seem to be something the adults were as comfortable with.

Setting up the co-researcher group:

- Co-researchers should only join the group if they attend the first session. Otherwise, they miss a grounding in the group and grounding in the CI process.
- There is an advantage in having different parts of the school system represented in the group; they learn from each other and about practice in other parts of the school.

Reflections on ways of knowing:

- Different types of knowing are cycled through within each session as well as an overarching set of phases over the course of the inquiry.
- Types of knowing are not always linear like the CI model, but one moves in and out of different ones in different orders, sometimes with them merging together too (see YP session 3).
- Propositional knowing is subjective; the facilitator may have different propositional knowing to the co-researchers. This means time to explore ideas in depth is important to understand others' perspectives, as is including the acceptance of different perspectives and agreement that we can disagree with each other (added to the opening script).

Nurture and fun:

- Using check-ins with a variety of approaches, such as paint palette strips, was fun for the adult group and gave a chance to relax into the more difficult talk.
- Nurture is important, such as giving time to the YP to make their phone calls (see Session YP 5), and to check in with staff who needed to leave early. Reminding staff that this was ok and just to go when they needed was appreciated by the member of staff. The facilitator was in an authority position and "permission" seemed important.
- The sharing of food with the adult group (biscuits and cake) became part of our routine. It was also a gentle start to the session, also helping to relax the group.

Table A.8: Linked CI aide memoire for EPs

This draws on CI approaches described in Riley & Reason (2015) of check-in, story sharing, energising activities and planning actions, that have been adapted for the linked inquiries and from the experience of facilitation.

- | | |
|------------------|---|
| Process overview | <ol style="list-style-type: none"> 1. Initial information meetings for YP and SAs 2. YP inquiry (6 sessions) <ul style="list-style-type: none"> 6th session: Presentation to SAs 3. SA inquiry (4 sessions) <ul style="list-style-type: none"> 4th session: Feedback to YP |
|------------------|---|

Pre-session meetings (one for YP and one for staff):	
The facilitator invites all those who are interested in the inquiry to attend a meeting (separately for YP and for staff). This is a chance for the facilitator to describe what co-operative inquiry is and what it would look like in the school. Interested YP/ staff can ask questions.	
1 st session	<p>Set up the space: Check the layout of the room. If it is in a classroom, rearrange it to set the scene for collaboration and a distinct CI space. This might involve a circle of chairs in one part of the room, and tables pushed together for a collaborative large table space to stand around in another.</p>
	<p>Gathering time (while everyone arrives): Facilitator welcomes the YP/SAs to the space. Direct them to look at the cards for the check-in (this gives them something to do, while waiting for everyone). <i>Nurture:</i></p> <ul style="list-style-type: none"> • Sharing of food, such as cake or biscuits, while everyone gathers to create a relaxed atmosphere. • Make sure everyone knows they can attend to their needs (phone calls home, visiting the bathroom etc.)
	<p>Opening script: Facilitator opens the meeting with the script.</p> <p>✓ <i>Reiterate the process, and the position of the YP/SA as co-researchers.</i></p> <p>✓ <i>Review the types of knowing in CI and the permission for us to be creative.</i></p> <p>✓ <i>Right to withdraw, reaffirm consent: a voluntary group.</i></p> <p>✓ <i>For YP - Ground rules established by the group: "We all have different experiences and will have different opinions. So we need to think about how we can show we value each other's opinions, encourage each other to share our thoughts and how to disagree. You can disagree with me. I encourage you too, in fact, because I may have interpreted something in a different way, so it will really help me if you let me know. Obviously, I'd prefer it if you say it in a kind way. So, you might say – actually Hannah I was thinking more about... We can disagree with each other too, it's fine to share a different opinion because we're bound to have different things we worry about, different ideas. We can say things like, "for me it's about..."</i></p> <p>✓ <i>For SA: "We all have different experiences and will have different opinions. It can also feel like a big responsibility to be a supportive adult and to try and help the young people in the YP inquiry group. We are in a group, and it can be helpful to remind ourselves that it is a shared responsibility."</i></p> <p>✓ <i>Reminder of the proposed research question for them to reflect on (for instance: how can we manage eco-anxiety? This question is likely to change as the group becomes interested and aware of particular issues/ sources of support for them).</i></p> <p>The facilitator introduces themselves and the link teacher. They explain that the link teacher is a co-facilitator and has an important role in supporting YP to act within their school.</p>

<p>Everyone then introduces themselves, and is invited to share their image for the check-in (optional to say why):</p> <p>Check in: Choose a card* to represent how you feel at the start this research journey.</p> <p>I found that co-researchers talked about how they felt about climate change here, and this was fine, and combined with the next task.</p> <p>(*You need a set of images that represent a variety of feelings – I found Ups and Downs very useful for this first task for both the YP and adults).</p>	
<p>Optional story sharing:</p> <p>The story of why they wanted to take part. Facilitator to listen and reflect back themes/noticings, inviting responses, clarifications, contradictions, elaborations. Facilitator shares their story too.</p>	
<p>Exploratory activity:</p> <p><i>Suggested session 1 activities</i></p> <p>Week 1 YP: Word carpet – “what comes into your head when you hear ‘climate change’? Include all the thoughts and feelings and ideas that are important to you.” YP make individual notes, with each idea on a new piece of paper/card (scrap paper!). Scatter on the floor around the room. All the co-researchers walk by themselves and read as they walk.</p> <p>Reflect with partner:</p> <p>Which parts were the most difficult to walk? - Stand there.</p> <p>Which parts are the most important to you for us to think about/work on? - Stand there.</p> <p>What did you notice about what was written? Any patterns/links between the ideas? (e.g. groups of worries/ objects/ solutions, is there more of one area than another?)</p> <p>Co-analysis options:</p> <ul style="list-style-type: none"> • group similar thoughts and feelings and ideas, and then add labels • negotiate a new layout for a path putting the items in an order according to a criteria decided by the group, similar to diamond ranking (e.g. most to least worried about/ most important to less important/ most able to do something about to least able to). 	
<p>Week 1 SA: Visual mapping task - Explore the YP’s presentation and use free-writing/ drawing responses. (Presentational knowing) What are you drawn to? Is there an impact on yourself? How has it made you feel? What are you picking up as the key messages from the YP? There may be other sources of information you also draw on from your experiences with the group so far. Note down key ideas and spread them all out. Create a visual map of these ideas and responses, organising them and looking for links.</p> <p>Reflect and discuss: What is important to you to think about/act on at this point? Any thoughts about a specific question this group should explore? (This may simply be, “how can we help?”)</p>	
<p>Summary (& planning action)</p> <p>Where are they in their thinking?</p> <p>Discuss actions they may want to explore this week (these can be convergent or divergent)</p> <p><i>Researcher suggestions in case of no ideas:</i></p>	
<p>YP</p> <p>Possible starting actions:</p> <ul style="list-style-type: none"> • Are there times/places in school where you are more comfortable or less comfortable with the idea of climate change? Spend some time there and observe what happens in that place and your reactions. 	<p>SA</p> <p>Possible starting actions:</p> <ul style="list-style-type: none"> • Short reflections in a journal/diary over the next fortnight on their own feelings about climate change/ things they notice themselves doing in school or ways they respond to something. • Initiate conversations with other members of staff to find out opinions.

	<ul style="list-style-type: none"> • What are other students worried about in relation to climate change and the environment? How could you find out? • Ask safe peers/adults – what do they feel about climate change? What do they do when they feel scared? • Gathering data through drawings/free writing/ visual webs (Trajber et al., 2019) to explore links between different areas • Further noticing of either things that help or things that do not, depending on whether more information is needed. 	
	<p>Give out information on sources of support, for example: YP - Childline and school counselling services SA - Education Support and Mind</p>	
	<p>Post-session reflection between facilitator and link teacher What was it like to be in the group today? (Experiential knowing) CI quality criteria may be useful as questions for reflection here, especially reflecting on our assumptions, and any assumptions or consensus thinking in the group, and how this can be gently challenged with a Devil’s Advocate question.</p>	
	<p><i>Before the next session</i> Facilitator creates visual summary (presentational knowing)</p>	
<p style="writing-mode: vertical-rl; transform: rotate(180deg);"> Subsequent sessions (YP: sessions 2-5) (SA: sessions 2-3) </p>	<p>Set up the space</p>	
	<p>Gathering time: Check if everyone agrees with presentational knowing from last session. This, and any addition notes, sketches or thoughts from the group about the last session can be stuck into a sketchbook for a record. Invite the group to share the snacks and attend to needs.</p>	
	<p>Opening script ✓ <i>Reiterate the process, and the position of the YP/SA as co-researchers.</i> ✓ <i>Review the types of knowing in CI and the permission for us to be creative.</i> ✓ <i>Right to withdraw, reaffirm consent: a voluntary group.</i> ✓ <i>YP: Reminder of ground rules and the permission to disagree with each other and with the facilitator and link teacher.</i> ✓ <i>SA: Reminder that we can disagree, and that we share the responsibility of being supportive adults, this is not held by one of us alone.</i> ✓ <i>Reminder of the current research question we are thinking about.</i></p>	
	<p>Check in: <i>How are you feeling today? / How have you felt this week?/ What feelings are you bringing today?</i> Options include: paint palette strips, Bear Feeling Cards, scaling (on paper or by co-researchers positioning themselves on a line in the room), postcards of art works</p>	
	<p>Optional story sharing: The group are invited to share experiences/reflections/results/outcomes of their actions since our last session. What was it like doing this action? How did it feel? What does that tell us?</p>	
	<p>Exploratory activity: Ideas for activities YPs</p>	
	<p><i>Rich pictures</i> of the co-researchers as environmentally-concerned YP within their school.</p>	<p><i>An ideal school</i> for an environmentally-caring YP.</p>

	<p>Ask for a time when it was difficult with their peers or with adult reactions/responses to climate change. Use a “<i>Breaking the oppression</i>” technique from Boal (1995;2008), trying out the scene 3 times; as it happened, trying to bring about a desired result, swapping protagonists/ antagonists.</p> <p>Reflect at the end: What have you noticed? What can you take away/ understand from that? Most adults/peers are... Some adults/peers...</p> <p>Pair conversations using sentence starters:</p> <ul style="list-style-type: none"> - We get the feelings of..... In connection with climate change and environmental change. - We feel the phrase/word.... best describes how we feel. - We get these feelings in particular when.... - When we feel this and are in these situations, we want... - We have more positive feelings about it when..... - So far we have noticed that helps us because... <p>Feed back to the group and ask them to look for common themes.</p>	<p>Who would they share these with? Role play the conversation, swapping roles.</p> <p><i>Imagining a conversation with your headteacher</i> What do you want to say to your headteacher? How do you feel, what has helped, and what makes it worse? <i>Role play conversations.</i> Reflect on the experience: What was it like as you, as your headteacher? What does this tell us?</p> <p>Writing letters about their experiences and voicing them to the group.</p> <p><i>Us and them:</i> Who might be an us and who might be a them? Use example of Greta Thunberg speaking to coal miners. This is useful in preparing to present to the supportive adult group.</p>
<p>SAs</p>		
	<p><i>Chair obstacles</i></p> <ul style="list-style-type: none"> - Put their ideas/representations of what their role might look like as a supportive adult at one end of the room. - Everyone takes some thinking time to identify what they think the barriers are for them in taking up that supportive adult role – post-its - Standing all at one side of the room, put out a chair in the space for each obstacle/ barrier that they can think of. (Model an example) 	<p><i>Ranking task</i></p> <ol style="list-style-type: none"> 1. Rank where your concern about climate change is compared to other concerns and priorities. 2. Rank where your feelings of efficacy are – as a supportive adult who can bring about change for the young people.

	<p>Experiential knowing reflection – what is this like? Take a moment to look at the space. What does it remind them of? What does it feel like? What are your body sensations? Your thoughts?</p> <p><i>Creating paths</i></p> <ul style="list-style-type: none"> - There may be things that you are already doing that will help to be a supportive adult to these young people in terms of their environmental anxieties. - For every thing you can think of that you are doing put down a green card and make a space between chairs that you can walk through. <p>Experiential knowing reflection – what is this like? Take a moment to look at the space. What does it remind them of? What does it feel like? What are your body sensations? Your thoughts?</p>	<p><i>Role playing conversations with worried students</i></p> <p>What do you do if a pupil comes to you and tells you how worried they are? Role play – using a Boal (theatre of the oppressed) approach with other members of the group as supporters who can be turned to for advice.</p> <ul style="list-style-type: none"> - One group member takes on role of teen – using a card with some starters for concerns (can share some of the extracts from Hickman’s interviews if needed). - Another group member takes on role of member of staff. <p>2. Give or ask the group member “teen” to choose a card, which describes how they feel. e.g. “It really scares me – what’s going to happen? If it’s this bad, why won’t adults, politicians do anything? Sometimes I can’t sleep I get so worried.”</p> <p>3. Ask: how does it make you feel to be asked that? Progress with the role play. Stop and start – reflecting on what it feels like and calling on supporters regularly.</p> <p>4. Swap over with the other two group members taking on roles in character and the others becoming the supporters.</p> <p>Facilitator watches and acts as scribe for the strategies the group use – writing these up on the whiteboard.</p>
Summary (& planning action)		
Post-session reflection between facilitator and link teacher		
<i>Before the next session</i>		
Facilitator creates visual summary (presentational knowing). As the group become more comfortable with this, they can be asked to take on this task.		
Final sessions (YP session 6) (SA session 4)	<p>These are presentation and feedback sessions from one inquiry group to the other group.</p> <p>The YP and SA groups will decide how they want to present their findings (a good idea to remind YP of this in session 4, and use some of session 5 for exploring how they want to do this). However, the facilitator should include a check-in before the presentation, and a reflection afterwards on what it was like to do it.</p>	

YP 6: The young people (YP) share their findings with the supportive adult (SA) group. (This will form the basis of the first exploratory task in SA session 1).

Final reflection activity for the YP group:

- To help manage difficult feelings around climate change:
 - 3 things I could do are...
 - 3 things my teachers could do are...
 - 3 things my friends could do are...
 - Who else might do something that would help?

What will you take with you from this into the world? (As a final reflection on the process, including what will they take with them as action into the world (Riley & Reason, 2015)).

SA 4: the SAs share their findings with the YP group.

Final reflection **for everyone:**

- Take a moment before we respond to the words of the presentation. What was that like for you? Thought, feelings, sensations in the body. Using a round – everyone to use a word/phrase to reflect to the group.

Opportunity to expand on why – reflect on how they experienced any particular moments?

Ask the YP to share parts that felt most important to them, or that they felt would make the biggest difference for YP concerned about the environment.

- Where next? Invite everyone to break down what they want to do by:

The end of the week

The end of term

The end of the academic year

Are you noticing any changes for yourselves from being part of the group in the outside world?

This could be things you do, or things you notice or ways of thinking.

Table A.9: Reflections on using Kotter’s model of organisational change

CI: a method for organisational change

EPs also have a role supporting organisational change in schools (Fallon et al., 2010). The use of established models, providing a framework for this change, is useful. For example, Kotter’s (2012) model of organisational change can be used to make sense of the process used in this CI. In some ways the linked inquiry process can be seen as mirroring aspects of Kotter’s (2012) model. Although Kotter was not explicitly used during the CI, it could be a useful reflective tool that could help senior leaders to understand the process within their school. It may be a useful model, then, for EPs to consider alongside CI.

Table A.9	Kotter’s model	The linked co-operative inquiries of this study
	Establishing a sense of urgency	<ul style="list-style-type: none"> • A sense of urgency in responding to climate and environmental concerns was created by both groups and the facilitator.
	Creating a guiding coalition	<ul style="list-style-type: none"> • A guiding coalition was put together composed of both students and staff, who had the necessary power to enact the change.
	Developing a vision and strategy	<ul style="list-style-type: none"> • A vision of change for the school was created by the YP. This vision was communicated to staff and added to as they researched how this could be put into practice.
	Communicating the change vision	<ul style="list-style-type: none"> • Communicating a school vision by the headteacher to the YP was also an important moment of punctuation, which enabled the YP to re-think their construction of the school.
	Enable action by removing barriers	<ul style="list-style-type: none"> • Barriers including typical power hierarchies of students and staff needed to be addressed, as well as negative constructions of environmental interest and climate action, and issues of time and workload for staff.
	Generating short-term wins	<ul style="list-style-type: none"> • The supportive adults in particular needed to generate short term wins, for their own motivation and sense of efficacy to be able to tackle such a big problem.
	<i>Kotter (2012)</i>	

Appendix 17

Table A.10:

<i>Eco-anxiety for young people in a Welsh school context and corresponding strategies</i> <i>Aspects of their eco-anxiety</i>	<i>Strategies from the linked inquiries</i>
<ul style="list-style-type: none"> - The realness of climate change, which will impact these young people's future in a more profound way than for adults. - An existential threat. - Experience of loss and anticipated loss, including re-appraisal of expected life experiences. - Wider environmental concerns. 	<ul style="list-style-type: none"> • Create safe spaces to explore and voice their concerns, for instance in a group for young people who care about the environment. Check-ins need to be part of the group meeting structure. Groups run by an EP alongside a member of staff can be particularly helpful, bringing dual knowledge of the psychology of containment within group spaces with knowledge of the environment. This is not about finding immediate solutions, but about giving space to the feelings, knowing and experiences, and then supporting the group to explore coping strategies. • Group support needs to be regular and ongoing to account for the need for ongoing processing and grappling with knowing about climate and environmental crises.
<ul style="list-style-type: none"> - Feelings of limited power and efficacy within school. - Feelings of being the only ones doing the work (the difficulty of being cast as the agents of change). 	<ul style="list-style-type: none"> • Create connections with school staff, who can become supportive adults for these young people. They can help practically with access to the system and work in partnership as powerful allies to create change in school <i>together</i>. • Create spaces which invite a different way of relating with staff, to increase a sense of efficacy and power for the young people, and connection with adults. • Staff and EPs can use the devil's advocate question to challenge young people's consensus thinking that their ideas are not really possible or that they cannot enact change.
<p>A lack of education on climate change, leading young people to feel:</p> <ul style="list-style-type: none"> - let down by school, - that school does not care, - not knowing how they as students can respond to such a huge global problem. 	<ul style="list-style-type: none"> • Provide opportunities for young people to learn about solutions to know that they can do something. • Learning about school-based solutions is particularly helpful as something that may already be in place and can be worked towards. Seeing school-solutions can lead to feelings of school-efficacy that means change is possible. • Opportunities to visualise a potential positive future, such as sharing visions for an ideal school for environmentally caring young people, is helpful.
<ul style="list-style-type: none"> - Not feeling heard by adults in school 	<ul style="list-style-type: none"> • Create opportunities for young people to be heard, such as meetings with senior leadership, where the normal power dynamics needs to be suspended so that the majority of the speech can be from the young people. • Educate staff on the importance of listening and to differentiate this from a typical hierarchical role.

- Feeling alone in being environmentally-caring.
 - Acknowledge the realness of climate change and that (non-abstract) others are also worried (*other students in school, myself, other members of staff*).
 - Create opportunities for connections with others within school to support young people within a network of others who also care:
 - Create safe group spaces with likeminded peers, to support young people to feel belonging. These groups need to meet regularly for ongoing support rather than one-off instances. The group can be a place of fun to connect with likeminded people and take joy in environmental action together.
 - Create connection with likeminded supportive adults to support young people to feel that there are adults who also care.
 - Support young people to find out whether other young people in school care (for example, sending out a questionnaire).
 - Speaking with senior leadership to find out about their interest in the environment is helpful, as well as ensuring that environmental actions at a school level are shared with the pupils as a matter of course.
- The difficulty of news and media as sources of worrying news stories, public dismissal of environmental concerns and overwhelm through following likeminded people who care.
 - Offer space within groups for young people to bring news stories.
 - Directly discuss the difficulties of responses on social media, as well as the challenges of overwhelm from an overload of environmental news. This may be a useful topic to directly explore coping strategies for as part of a group inquiry.

Appendix 18: Coded transcript example, followed by post-session reflection

YP's inquiry Session 5 – present: Carrie, Rey, Daisy and Sara. Bobbie absent.

Session lasted approx. 1 hour 10 minutes.

Line number	Transcript	Coding Notes
1.	Rey? 0:00	
2.	((inaudible))	
3.		
4.	<u>Carrie 0:00</u>	
5.	The number of people in this questionnaire who don't know what climate change is.	
6.		
7.		
8.	<u>Mr. Snow (teacher sitting in) 0:09</u>	
9.	I was so surprised, like positively surprised.	Common staff-student feeling
10.		
11.	<u>Facilitator 0:11</u>	
12.	Glad I started recording now because you're talking about lots of relevant stuff. ((laughing))	
13.		
14.		
15.	<u>Rey 0:15</u>	Happiness from peer engagement
16.	((in overlap)) I'm happy with the, I'm happy with the	
17.		
18.	<u>Carrie 0:19</u>	
19.	Yeah. ((laughing))	
20.		
21.	<u>Facilitator 0:19</u>	
22.	((in overlap)) Yeah.	
23.		
24.	<u>Carrie 0:20</u>	
25.	((in overlap)) It's very surprising.	
26.		
27.	<u>Sara 0:21</u>	
28.	((in overlap)) It's very good like, how ten people.	
29.		
30.	<u>Carrie 0:24</u>	
31.	Do you think climate change is happening now, <u>yes</u> or no? Only ten people don't think climate change is not	
32.		
33.		
34.	<u>Sara 0:30</u>	Outer world coming in: Donald Trump
35.	((in overlap)) Perhaps like Donald Trump	
36.		
37.	<u>Unknown Speaker 0:34</u>	
38.	((Group laughter))	
39.		
40.	<u>Carrie 0:34</u>	
41.	((in overlap)) It's also it's kind of cool to see how um on the do you think school is doing enough that some people <u>actually think</u> they're not, they're not doing anything	Interest and enthusiasm
42.		
43.		
44.		
45.	<u>Rey 0:44</u>	
46.	I thought saw that only like fifty-two people think that and yeah	
47.		
48.	<u>Carrie 0:51</u>	
49.	More people think no than yes	
50.		
51.	<u>Rey 0:53</u>	
52.	<u>Yeah</u> that's concerning. I wrote that down	
53.		
54.	<u>Mr. Snow (teacher sitting in) 0:54</u>	
55.	Yeah, number 5.	
56.		
57.	<u>Facilitator 0:55</u>	
58.	((in overlap)) Ah	
59.		
60.	<u>Rey 0:58</u>	
61.	I wrote that down.	
62.		
63.	<u>Facilitator 1:00</u>	
64.	Right well because clearly you just we <u>wanna</u> dive into this	
65.		
66.	<u>Carrie 1:02</u>	
67.	((in overlap)) yeah	
68.		
69.	<u>Facilitator 1:03</u>	
70.	So I'll quickly just say my little thing that I have to say, which you know now off by heart, but I'm going to say anyway because I have to. So, co-researchers.	
71.		
72.		
73.		
74.	Group <u>together 1:07</u>	
75.	Um hm	
76.		
77.	<u>Facilitator 1:11</u>	
78.	Yeah. I'm got my interests and stuff but hopefully you're finding some stuff out particularly gone into like a new phase of finding	
79.		
80.		
81.	Group <u>together 1:18</u>	
82.	((in overlap)) ((laughing))	
83.		
84.	<u>Facilitator 1:18</u>	
85.	stuff out about everybody else now which is <u>really interesting</u>	
86.		
87.	Rey? 1:22	
88.	Yeah	

<p>89.</p> <p>90. Facilitator 1:22</p> <p>91. You're allowed to withdraw, so you're allowed to stop taking part at any</p> <p>92. time, just let me know. Okay. Um, and that you're allowed to disagree with</p> <p>93. me, you're allowed to disagree with each other. We've that's fine we've</p> <p>94. experienced that and it's not been a problem at all. Um I am going to, oh</p> <p>95. you know what I am going to make you do this bit because, I know you</p> <p>96. want to do that but I'm going to just check in with you first. So this is why I</p> <p>97. went to the paint shop earlier on because I kind of like the colours and</p> <p>98. looking at paint, but also because gonna you use this for a little check in</p> <p>99. today.</p> <p>100.</p> <p>101. Rey 1:56</p> <p>102. That's cool.</p> <p>103.</p> <p>104. Facilitator 1:57</p> <p>105. So um if you want to choose a whichever one you fancy you can have</p> <p>106. Earthborn, you can have Farrow and Ball which</p> <p>107.</p> <p>108. Mr Snow (teacher sitting in) 2:03</p> <p>109. ((in overlap)) I like the names of the paints</p> <p>110.</p> <p>111. Facilitator 2:04</p> <p>112. What do you fancy? I know! Choose a colour palette, and see where what</p> <p>113. you think you might be.</p> <p>114.</p> <p>115. Rey 2:11</p> <p>116. Can I take one second to go to call my mum?</p> <p>117.</p> <p>118. Facilitator 2:13</p> <p>119. Of course you can, yeah absolutely come join us in a minute.</p> <p>120.</p> <p>121. Daisy 2:16</p> <p>122. ((in overlap)) I'm going to get a drink of water</p> <p>123.</p> <p>124. Facilitator 2:17</p> <p>125. Yeah go and do that, that's all important stuff and we can all, admire paint</p> <p>126.</p> <p>127. Group together 2:21</p> <p>128. ((Group laughter))</p> <p>129.</p> <p>130. Carrie ? 2:21</p> <p>131. ((in overlap)) I picked one and yeah</p> <p>132.</p> <p>133. Facilitator 2:22</p> <p>134. decide what I'm going to paint my</p> <p>135.</p> <p>136. Mr Snow (teacher sitting in) 2:25</p>		<p>137. You can you can paint your walls drab.</p> <p>138.</p> <p>139. Facilitator 2:28</p> <p>140. Can you? What ones that? Is that Farrow?</p> <p>141.</p> <p>142. Mr Snow (teacher sitting in) 2:31</p> <p>143. It's like a</p> <p>144.</p> <p>145. Facilitator 2:32</p> <p>146. ((in overlap)) Oh drab is one of the gre- the kinda</p> <p>147.</p> <p>148. Sara 2:33</p> <p>149. ((in overlap)) paint your walls a yellowish colour. Not bright yellow but like</p> <p>150. yellow</p> <p>151.</p> <p>152. Mr Snow (teacher sitting in) 2:39</p> <p>153. Wooded walk.</p> <p>154.</p> <p>155. Facilitator 2:41</p> <p>156. Pigeon I just don't know if I want to have a wall that's pigeon</p> <p>157.</p> <p>158. Group together 2:46</p> <p>159. ((Group laughter))</p> <p>160.</p> <p>161. Carrie 2:46</p> <p>162. You can paint your wall elephant breath</p> <p>163.</p> <p>164. Facilitator 2:50</p> <p>165. Can you? ((laughing))</p> <p>166.</p> <p>167. Sara 2:53</p> <p>168. Or sponge cake that looks like</p> <p>169.</p> <p>170. Facilitator 2:55</p> <p>171. Sponge cake is that what it's called?</p> <p>172.</p> <p>173. Sara 2:57</p> <p>174. It looks dirty like a dirty white</p> <p>175.</p> <p>176. Carrie 3:00</p> <p>177. You can put hay on your wall.</p> <p>178.</p> <p>179. Sara 3:03</p> <p>180. Sponge cake coloured toilet</p> <p>181.</p> <p>182. Mr Snow (teacher sitting in) 3:07</p> <p>183. We did a round in a quiz in lockdown, one of those zoom quizzes, it was</p> <p>184. real paint colour or made up paint colour.</p>	
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<p>185.</p> <p>186. Facilitator 3:12</p> <p>187. Ah could be anything couldn't it, I mean it's brilliant. I think I'd like that as a</p> <p>188. job. Paint colour name, be quite good. ((pause)) Yeah, we'll hang on for the</p> <p>189. others, but if there is a, you know, if you think, where you, where might</p> <p>190. you be on this your own spectrum of colour today and how you feeling</p> <p>191. about things</p> <p>192.</p> <p>193. Carrie 3:34</p> <p>194. What are the colours represent?</p> <p>195.</p> <p>196. Facilitator 3:42</p> <p>197. Whatever you want. What do you want that yeah you could you couldn't</p> <p>198. you</p> <p>199.</p> <p>200. Carrie 3:47</p> <p>201. You do it like that ((gesture))</p> <p>202.</p> <p>203. Facilitator 3:48</p> <p>204. You could do it that way you could go down, you might just choose like like</p> <p>205. a, you know, you could go ((gesture))</p> <p>206.</p> <p>207. Carrie 3:52</p> <p>208. ((in overlap)) a row</p> <p>209.</p> <p>210. Facilitator 3:53</p> <p>211. down a column or along.</p> <p>212.</p> <p>213. Carrie 3:55</p> <p>214. ((in overlap)) Or how bright it is or something</p> <p>215.</p> <p>216. Facilitator 3:56</p> <p>217. Yeah, exactly. So I think that's why it's</p> <p>218.</p> <p>219. Carrie 3:59</p> <p>220. the brightest is the positivist and the darkest is the negative</p> <p>221.</p> <p>222. Facilitator 4:02</p> <p>223. Yeah.</p> <p>224.</p> <p>225. Sara 3:59</p> <p>226. So on summer I went to this art gallery that had this Finnish painter who</p> <p>227. basically went to old houses and just spent time with the people there, and</p> <p>228. then she painted like the house with the colours that she felt like the</p> <p>229. people were</p> <p>230.</p> <p>231. Facilitator 4:22</p> <p>232.</p>			<p>233. That's interesting. Huh what colour might you get you can see the colour</p> <p>234. and think "oh no that's not that's not me" ((laughs))</p> <p>235.</p> <p>236. Carrie 4:29</p> <p>237. Yeah what if like you were a really joyful person and then they coloured it</p> <p>238. black.</p> <p>239.</p> <p>240. Group together 4:34</p> <p>241. ((Group laughter))</p> <p>242.</p> <p>243. Facilitator 4:22</p> <p>244. Yeah. Yeah, didn't have a good ((inaudible)) with that there we go.</p> <p>245.</p> <p>246. Unknown Speaker 4:22</p> <p>247. ((long pause))</p> <p>248.</p> <p>249. Carrie 4:22</p> <p>250. Yeah, I mean me and Daisy only have three days left because of the Duke of</p> <p>251. Edinburgh</p> <p>252.</p> <p>253. Sara 5:02</p> <p>254. Oh lucky</p> <p>255.</p> <p>256. Carrie 5:04</p> <p>257. We have three days of walking. Actually we actually have two and a half</p> <p>258. days</p> <p>259.</p> <p>260. Sara 5:08</p> <p>261. That's nice because you can be outside not in a Spanish classroom.</p> <p>262.</p> <p>263. Facilitator 5:14</p> <p>264. Ah, ah yeah. ((pause)) You have to do long, it's a long walk, though is it?</p> <p>265.</p> <p>266. Carrie 5:22</p> <p>267. Yes</p> <p>268.</p> <p>269. Facilitator 5:23</p> <p>270. You walk each day you go- go-</p> <p>271.</p> <p>272. Carrie 5:25</p> <p>273. So on the first day they're showing us the route and on the second day</p> <p>274. we're doing it by ourselves in groups.</p> <p>275.</p> <p>276. Facilitator 5:31</p> <p>277. Ah really?</p> <p>278.</p> <p>279. Carrie 5:32</p> <p>280.</p>	<p>Enjoyment in group</p>
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281.	And then on the final day I think we're just finishing off the walk because		329.	<u>Facilitator 6:34</u>	
282.	we're going up to Cefn Onn, and then walking along the ridge all the way to		330.	<u>No</u> it's fine, don't worry it's important to go and sort these things out so	
283.	<u>Caerphilly mountain.</u>		331.	don't worry at all. Yeah, we're choosing.	
284.			332.		
285.	<u>Facilitator 5:41</u>		333.	<u>Carrie 6:42</u>	
286.	Oh wow.		334.	((in overlap)) What colour pad?	
287.			335.		
288.	<u>Carrie 5:41</u>		336.	<u>Rey 6:43</u>	
289.	And then we're <u>gonna</u> be walking back down.		337.	What counts what counts as like the emotion?	
290.			338.		
291.	<u>Facilitator 5:44</u>		339.	<u>Facilitator 6:46</u>	
292.	Yeah.		340.	<u>Well</u> what	
293.			341.		
294.	<u>Rey 5:46</u>		342.	<u>Carrie 6:47</u>	
295.	Yeah.		343.	((in overlap)) You can decide	
296.			344.		
297.	<u>Facilitator 5:48</u>		345.	<u>Facilitator 6:48</u>	
298.	That sounds good		346.	Yeah. Up to you. What do you want yeah you can decide, I was thinking it	
299.			347.	was <u>gonna</u> be, <u>you</u>	
300.	<u>Carrie 5:49</u>		348.		
301.	But it should take like six hours, which sounds long but it's a full school day.		349.	<u>Carrie 6:53</u>	
302.			350.	Bright to dark	
303.	<u>Facilitator 5:56</u>		351.		
304.	Yeah, full school day.		352.	<u>Facilitator 6:55</u>	
305.			353.	Bright and dark, she was thinking.	
306.	<u>Carrie 5:57</u>		354.		
307.	<u>And</u> , we're leaving at nine and estimated to get back roughly at three till		355.	<u>Carrie 6:57</u>	
308.	five but hopefully it will be three. ((laughs))		356.	Darker colours are negative and lighter colours are positive	
309.			357.		
310.	<u>Facilitator 6:06</u>		358.	<u>Rey 6:59</u>	
311.	Yeah.		359.	That makes sense	
312.			360.		
313.	<u>Carrie 6:07</u>		361.	<u>Facilitator 7:03</u>	
314.	And then um on Friday we're doing it nine till nine till nine till one.		362.	<u>So</u> what do you reckon? Where do you think you might be today?	
315.			363.		
316.	<u>Facilitator 6:17</u>		364.	<u>Rey 7:08</u>	
317.	Ah okay so it's nice a shorter one yeah and that's the end of it but. Yeah.		365.	That one.	
318.			366.		
319.	<u>Carrie 6:25</u>		367.	<u>Facilitator 7:09</u>	
320.	The thing is we get to go with groups of our friends <u>sorta</u> like walking and		368.	You're that one. <u>Oh</u> you're stiff key blue	
321.	talking ((laughs))		369.		
322.			370.	Group <u>together 7:12</u>	
323.	<u>Facilitator 6:30</u>		371.	((Group laughter))	
324.	<u>Oh</u> that's quite nice. Yeah.		372.		
325.			373.	<u>Facilitator 7:14</u>	
326.	<u>Rey 6:33</u>		374.	number 281	
327.	Hi sorry we were		375.		
328.			376.	Rey? 7:15	

<p>377. I love that. 378. 379. Facilitator 7:17 380. Yeah, why that why that one? 381. 382. Rey 7:19 383. Because 384. 385. Daisy 7:19 386. ((inaudible)) ((it matches your uniform)) 387. 388. Rey 7:24 389. I think because of that the heat, like, this is a bit of last week like the 390. massive heat waves and like the massive temperature changes and that 391. massive um gas leak. 392. 393. Mr. Snow (teacher sitting in) 7:35 394. Oh yeah. 395. 396. Rey 7:35 397. The gas leak, that's really 398. 399. Facilitator 7:37 400. Oh. 401. 402. Mr. Snow (teacher sitting in) 7:37 403. Did you see that? 404. 405. Facilitator 7:38 406. No. 407. 408. Mr. Snow (teacher sitting in) 7:39 409. The sea was on fire. 410. 411. Unknown Speaker 7:39 412. ((in overlap)) 413. 414. Facilitator 7:41 415. Oh my goodness I need to actually go and. Oh goodness 416. 417. Rey 7:43 418. Yeah, literally, it was on I mean it had like, yeah, so 419. 420. Carrie 7:46 421. How was it on fire? 422. 423. Rey 7:48 424. Cos there was a gas leak. So it was so it's</p>	<p>News as a source of worry Global events as a source of worry</p> <p>Teacher-student shared understanding and feeling</p> <p>Common staff-student interest</p> <p>News as a source of worry: the sea was on fire</p>	<p>425. 426. Carrie 7:53 427. Was there like fire coming out? 428. 429. Rey 7:54 430. Yeah, it was like a massive pool of it. I'll find a, I'll find something about it 431. 432. Facilitator 7:55 433. ((in overlap)) Wow 434. 435. Rey 7:58 436. but it was, I was watching it on the news and I was like ((pause)) "great". 437. very like sarcastically obviously but like this, we- it's just like, even I'm trying 438. to be keeping a positive mindset about all this but that really put a dent in it 439. because it's, it may gave me like a realisation that it's not our fault that the 440. like as people, media and like companies are like "you" as in society, 441. "should do this" when it's really the compan- like the big billion dollar 442. companies that are causing all this things as a gas leaks as in like carbon 443. emissions, because we can have carbon emissions in our cars, but it's not 444. on the scale as a machine like massive, massive power plants and things like 445. that. We have no control over that. So why are they telling us what to do 446. when we, when they're the ones doing the massive damage? So yeah that's 447. me like why I'm a bit negative because it's like they're talking down to us 448. when they're the ones that're being very hypocritical like come from a big 449. billion dollar companies or you know like people who care. That's my two 450. thing I'll go and find that thing about it 451. 452. Facilitator 9:14 453. Yeah go. What do ya reckon Sara have you got a? 454. 455. Sara 9:18 456. I got this glo- gloaming. 457. 458. Facilitator 9:21 459. Oh, what's it called? 460. 461. Sara 9:24 462. Gloaming 463. 464. Facilitator 9:24 465. Gloaming that's interesting 466. 467. Sara 9:24 468. It's a fancy word for grey I think 469. 470. Facilitator 9:27 471. Oh yeah gloaming I'd never. Yes, I what is that? Yeah yeah, why, why have 472. you gone for gloaming?</p>	<p>Huge impact of news on feelings</p> <p>Feeling small: compared to billion-dollar companies</p> <p>Feeling a lack of control viewing this wider company/ global sphere</p>
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<p>473.</p> <p>474. Sara 9:32</p> <p>475. Cos like you can now see the effects worsening like like ^{like} Rey said, but then</p> <p>476. I'm als-, like that's more like black, and then white is like more hope. Like I</p> <p>477. was really excited about these results.</p> <p>478.</p> <p>479. Facilitator 9:48</p> <p>480. ((in overlap)) The questionnaire</p> <p>481.</p> <p>482. Sara 9:50</p> <p>483. So many people <u>actually spent</u> time doing that. So grey is like the middle.</p> <p>484.</p> <p>485. Facilitator 9:55</p> <p>486. Yeah. What do ya ^{ya} reckon?</p> <p>487.</p> <p>488. Carrie 9:59</p> <p>489. I chose eating room red</p> <p>490.</p> <p>491. Facilitator 10:02</p> <p>492. ((laughs))</p> <p>493.</p> <p>494. Rey? 10:06</p> <p>495. What was that?</p> <p>496.</p> <p>497. Carrie 10:06</p> <p>498. Eating room red because it's because I feel that it like, like they're like now</p> <p>499. saying a little bit more in the news. I mean like first like mentioning it, when</p> <p>500. like even at like near the end of the start of COVID and in COVID time they</p> <p>501. weren't mentioning it at all until so I know it's <u>COVID</u> but I meant like by</p> <p>502. that I mean, like, just before COVID happened. And now, I feel they're</p> <p>503. starting to mention it again but at the same time still bad stuff is happening</p> <p>504. because like the heat wave in Canada and stuff and the thing that like Rey</p> <p>505. said, as well. <u>So</u> I still feel we're still close near to the bottom but moving up</p> <p>506. gradually</p> <p>507.</p> <p>508. Facilitator 10:57</p> <p>509. Okay yeah at least we've got kind of gradual <u>some kind of upward</u> feeling</p> <p>510. but it's fairly low.</p> <p>511.</p> <p>512. Carrie 11:03</p> <p>513. Yep</p> <p>514.</p> <p>515. Facilitator 11:05</p> <p>516. So <u>far</u> they've kind of all I think touched on, almost the impact of the news</p> <p>517. in different ways. I think, so interesting. What about you, Daisy, have you</p> <p>518. got this you haven't had as long to choose</p> <p>519.</p> <p>520. Daisy 11:17</p>	<p>What young people see: getting worse (global news)</p> <p>Excitement from peer engagement</p> <p>What young people see: how often climate is reported on</p> <p>Noticing an increase in climate reporting</p> <p>Holding oscillating feelings due to good and bad stuff happening in the world</p>	<p>521. It's a bit bizarre</p> <p>522.</p> <p>523. Facilitator 11:18</p> <p>524. Yeah go for it</p> <p>525.</p> <p>526. Daisy 11:19</p> <p>527. But for me it's like yellow.</p> <p>528.</p> <p>529. Facilitator 11:20</p> <p>530. Yeah</p> <p>531.</p> <p>532. Daisy 11:21</p> <p>533. Not not like a happy yellow.</p> <p>534.</p> <p>535. Facilitator 11:23</p> <p>536. Yeah</p> <p>537.</p> <p>538. Daisy 11:23</p> <p>539. Like, it just feels so warm recently it's not really supposed to be this warm</p> <p>540. in this country, it's like the UK is generally known for being quite cold, and</p> <p>541. we were on the field in sports day and we're all like "oh my gosh this is so</p> <p>542. warm" like dying of heat. I was just there like</p> <p>543.</p> <p>544. Facilitator 11:39</p> <p>545. yeah</p> <p>546.</p> <p>547. Daisy 11:40</p> <p>548. you can really tell at points like that the earth is <u>definitely warming</u> up.</p> <p>549. That's why I picked yellow because it just reminded me of that and</p> <p>550.</p> <p>551. Facilitator 11:48</p> <p>552. Yeah, yeah.</p> <p>553.</p> <p>554. Daisy 11:49</p> <p>555. ((slightly tearful?)) So warm today.</p> <p>556.</p> <p>557. Carrie 11:50</p> <p>558. It shows how like we can have cloudy days and the clouds can hold like</p> <p>559. cover the heat because as soon as the clouds move away like yesterday and</p> <p>560. today, it suddenly goes hot. Like yesterday in the <u>morning</u> it was raining</p> <p>561. down pouring it down and it was cold like I was cold and then when I was</p> <p>562. walking home I was sweltering hot and I was like playing netball outside</p> <p>563. and I wore keep my cycling shorts cos it was so hot</p> <p>564.</p> <p>565. Rey 12:17</p> <p>566. When Daisy and I were going through rubbish</p> <p>567.</p> <p>568. Facilitator 12:21</p>	<p>What young people see: experiences of weather in their own lives</p> <p>Strength of expression: dying of heat</p> <p>Climate change made real: warming up / <u>the</u> realness of climate change</p> <p>What young people see: experiences of weather in their own lives</p>
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<p>665. 666. <u>Facilitator 14:14</u> 667. Wow. <u>Oh</u> my goodness. <u>So</u> I guess this bubbles up so it's bubbled up from 668. what the pipeline or something is underneath and then it could risen 669. 670. <u>Rey 14:26</u> 671. Yeah 672. 673. <u>Mr. Snow (teacher sitting in) 14:27</u> 674. That's a <u>close up</u> yeah right there it does look like the CGI from a disaster 675. movie doesn't it 676. 677. <u>Rey 14:32</u> 678. I was watching 679. 680. <u>Mr. Snow (teacher sitting in) 14:31</u> 681. ((in overlap)) People are saying if this isn't a <u>wake up</u> call to the fossil fuel 682. industry I don't know what is like, yeah 683. 684. <u>Facilitator 14:33</u> 685. <u>So</u> what is 686. 687. <u>Mr. Snow (teacher sitting in) 14:34</u> 688. ((in overlap)) It's quite scary isn't it 689. 690. <u>Facilitator 14:37</u> 691. ((in overlap)) what is it like looking at that? I mean 692. 693. <u>Rey 14:46</u> 694. <u>Definitely concerning</u> 695. 696. <u>Daisy 14:49</u> 697. <u>Yeah</u> it's scary cos you think the water would put out fire, and you can see 698. the fire on water 699. 700. Unknown group <u>member 14:54</u> 701. ((inaudible)) 702. 703. <u>Rey 14:54</u> 704. Wow 705. 706. <u>Carrie 14:54</u> 707. Like gas pipes used to leak, but not doing <u>big gigantic</u> fire. It shows it's 708. getting weaker. 709. 710. <u>Rey 15:02</u> 711. And we're in Mexico <u>Mexico</u> is kinda like have a lot of different, like, 712. different habitats for different animals and the sea is one of them. And</p>		<p>Shared group experience: students- teacher</p> <p>Commonality: teacher sharing feelings with students</p> <p>News as concerning</p> <p>News as scary</p> <p>Wider environmental issues: habitats Valuing nature Care for nature</p>	<p>713. 714. having that <u>be</u> in an environ- like that, it can ruin the environment and ruin 715. everything to do with the world basically. So not very good. 716. <u>Facilitator 15:25</u> 717. This um news, it's <u>err</u> we talked about I remember talking about news in 718. our second session because Daisy brought in two kind of some graphs, 719. didn't you as well 720. 721. <u>Daisy 15:38</u> 722. ((in overlap)) Yeah 723. 724. <u>Facilitator 15:38</u> 725. too at that point. But I mean news, is news, a problem or is it also, because 726. also, Carrie just talked about news being it being good in a way things being 727. in the news 728. 729. <u>Rey 15:56</u> 730. It can be maybe kind of like a good thing and a bad thing because a good 731. thing because it holds these companies accountable in a public way. <u>So</u> 732. then it has other people like crowding onto them being like, you got to do 733. this or x y and like, as in businesses all they want is money. That's kind of 734. what a business is. <u>So</u> if people if people take away their money from them 735. they have nothing there. <u>So</u> they want people to keep working with them, 736. keep giving them their money, they <u>gotta</u> do they <u>gotta</u> keep them happy, 737. so if they're doing something like this no one's <u>gonna</u> work with them, no 738. one's <u>gonna</u> use their product, like use their like what they're doing. <u>So</u> 739. they, so it's giving them, it's giving make them a have to be have to speak 740. out on it and have to do something about it, or else they're <u>gonna</u> lose 741. money, and then the business will make nothing for that. So, but then on 742. the other hand, it can kind of cause into the <u>tru-</u> like trend circle again, I 743. think we talked about it before, but like, as in like people forget about it 744. and then go back it's just a trend so. It just depends on how they hand- how 745. the people who are being held accountable handle it because if they don't 746. do anything about it then 747. 748. <u>Carrie 17:16</u> 749. <u>Yeah</u> I think it's a lot the same to what Rey thinks, I think it can be good and 750. bad, it can be good because it's like making people aware of it so then it 751. makes people do it like helping and stuff but then at same time it's bad 752. because they're just advertising it, they're not actually doing anything to 753. help it. <u>So</u> they're sort of just half just advertising it and then it won't help 754. anything it just shows it and stuff and it just says that Greta Thunberg and 755. David Attenborough are trying to tell them about it but then, but they don't 756. say that anybody's doing anything to help it 757. 758. <u>Sara 17:55</u> 759. I think like information gives power and then if normal people have the 760. power to do their own choices like because they know what they know so</p>	<p>Strength of expression: "ruin everything"</p> <p>News as good and bad Value news as a means of holding companies to account News as a means for people to apply pressure those in power</p> <p>News makes companies take responsibility</p> <p>News as slippery: setting trends of forgetting and remembering</p> <p>News as good and bad Value news for raising people's awareness</p> <p>Importance of being informed through news</p>
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<p>761. their choices really cause ((and belief)) and like like I dunno what what my 762. point is ((laughs)) 763. 764. Group together 18:13 765. ((Group laughter)) 766. 767. Mr. Snow (teacher sitting in) 18:15 768. Information is power yeah 769. 770. Facilitator 18:18 771. What's the impact then on you I wonder. You're seeing all these news news 772. things. What happens to you when you um 773. 774. Rev 18:27 775. I feel like I can't escape it. ((pause)) So 776. 777. Facilitator 18:30 778. yeah 779. 780. Rev 18:31 781. if it's everywhere, which is a good thing because it needs to be talked about 782. but then. Because, I mean if it was back like thirty forty years ago when 783. there wasn't any social media there wasn't any thing like that there was just 784. the papers and the television news, you could turn the TV off, and then 785. forget about it? 786. 787. Facilitator 18:54 788. Ah 789. 790. Rev 18:54 791. It leaves us alone but then, because of these like phones, you have Twitter 792. you have Instagram you have every single social media thing and the news. 793. 794. Facilitator 19:04 795. Yeah 796. 797. Rev 19:05 798. Do you want to? 799. 800. Facilitator 19:06 801. Yeah I just suddenly thought we were kind of all hanging around, I thought 802. I'd try and create a circle ish, while we're doing. Yeah, so slightly weird 803. circle it doesn't quite work does it 804. 805. It's like an oval isn't it 806. 807. ((in overlap)) Yeah an oval. Sorry go on. 808.</p>	<p>News as inescapable</p> <p>News as inescapable: spreading the word</p> <p>A desire to (sometimes) forget</p> <p>News as inescapable: smartphones</p>		<p>809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 841. 842. 843. 844. 845. 846. 847. 848. 849. 850. 851. 852. 853. 854. 855. 856.</p>	<p>Mr. Snow (teacher sitting in) 19:23 So I was just gonna say obviously you talk about echo chambers. Have you heard of that phrase? Rev 19:28 Yes Mr. Snow (teacher sitting in) 19:27 Where obviously I follow certain people on Twitter and things like that. You follow like minded people so they kind of just say the same things about saying things like that so I just feel I get overloaded sometimes Rev 19:28 ((in overlap)) Yeah I agree Mr. Snow (teacher sitting in) 19:41 with the same things and it almost desensitises you almost to it doesn't it, you feel numb almost really Rev 19:50 ((in overlap)) Yes Mr. Snow (teacher sitting in) 19:50 "oh it's just another shocking thing" Rev 19:50 ((in overlap)) Yes Mr. Snow (teacher sitting in) 19:50 you know ((park that)) Rev 19:58 And it's kind of like climate change, because I've heard about it so many times, I still feel really massive emotions about it like anger stress, but then it also feels like, I don't know, like, I don't know I don't know what feeling I have with it, as in like one main emotion because some people have a one main emotion on like certain things so like I dunno but it's like really weird, like, as in like with Twitter, as sir said, it's um if you follow the same people will have the same things so it doesn't give you any different chances of thinking a different way, which I think needs to be changed or else you're going to have like no change in thought so it's so so say if someone say if someone j- has like the nega- disagreeing um feeling about climate change than us, they're not going to see how we feel about it and um have the same thought process the entire time they think about it because they're like, "oh, climate change is stupid", and then they look on their Twitter feed and see "climate change is stupid" the entire time and like yeah that's my two pence on it.</p>	<p>Overwhelm of media echo-chambers Teacher sharing feelings and experiences with group</p> <p>Teacher sharing feelings Desensitisation and numbness to news</p> <p>Desensitisation and numbness to news</p> <p>Helpful distancing of climate news</p> <p>What young people hear: intense frequency of climate information</p> <p>The anger and stress of knowing Multitude of changeable intense feelings</p> <p>Echo-chambers as closing off thinking</p>
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<p>857. Carrie 21:52</p> <p>858. It annoys me sometimes as well like news reporters or radio people the</p> <p>859. news part say stuff oh like say stuff what's happening and they can say</p> <p>860. "does this show that climate change is happening?" and you say "yeah, it is</p> <p>861. happening so d- don't just report about it do something about it" it just</p> <p>862. annoys me a bit sometimes when they like so they just advertise about</p> <p>863. saying, "Oh, do, do you think climate change is <u>happ</u>- do you think climate</p> <p>864. change is happening now?" And we've just got fact proof that it <u>is</u></p> <p>865. happening, but we're just still not doing anything about it</p> <p>866.</p> <p>867. Rey 22:28</p> <p>868. They want engagements really. They want people to see what they're</p> <p>869. saying cos um social media it's based on talking it's based on likes and</p> <p>870. shares and everything so if people talk about it on <u>their</u> post, they're <u>gonna</u></p> <p>871. get more engagement, they're going to have more people see it more</p> <p>872. followers, which is you know what happens. So when I see a post about it</p> <p>873. and they're like telling the same facts over and over and like saying "oh,</p> <p>874. climate change bad do X, Y and Z", which is good they should be saying</p> <p>875. these things, but then says "Do you think it is?" like as Carrie said and then</p> <p>876. they <u>happ</u>- I look through the comments and there was like a cesspool</p> <p>877. ((laughs)) about climate change about like you know, does it really to be</p> <p>878. you know said because ((inaudible)) it basically insists that climate change</p> <p>879. is stupid why do people talk about it. And um as stupid as in why do people</p> <p>880. talk about and like and then you know they post the same thing over and</p> <p>881. over again because they know people want to talk about it, that if they say</p> <p>882. something that'll make it stop, their engagement will stop, they will stop</p> <p>883. becoming quote unquote known famous, they will have like they will just</p> <p>884. be not known so they don't want that so they just say, yeah, as in with like</p> <p>885. news they want people to tune in and see horrible stuff and cos you know</p> <p>886. gets people to look at, I don't know, but yes just <u>just stu</u>- social media can</p> <p>887. be a good and a bad thing in any sort of situation and with debatable topics</p> <p>888. that can end up being very <u>very</u> not good.</p> <p>889.</p> <p>890. Facilitator 24:08</p> <p>891. Yeah <u>yeah</u></p> <p>892.</p> <p>893. Daisy 24:10</p> <p>894. One thing about like really big companies like the news like big co- jr- oil</p> <p>895. companies and all that they're big enough, they have enough money that if</p> <p>896. people just stopped going to them for, like, even if it's just for a time</p> <p>897. they're <u>they're</u> fine, they can just get away with all the people having</p> <p>898. negative stuff about them because they can just get away with it because</p> <p>899. they're big enough to carry on. <u>So</u> it all just it all just if they're not going to</p> <p>900. do anything and they just they're like, "Yeah, this doesn't affect me. We'll</p> <p>901. just keep going, business as usual" like as if nothing happened, everyone</p> <p>902. else will start going "oh nothing's really happening" and they'll then all the</p> <p>903. <u>negativity</u> will stop and then their sales will go back up again and they'll all</p> <p>904. be fine.</p>	<p>Distrust of news</p> <p>Fickle engagement: self-promotion on social media posts</p> <p>What young people see: social media comment <u>cesspools</u></p> <p>Fickle engagement on social media</p> <p>The trouble with news: horrible news content creates interest</p> <p>The difficulty of climate talk on social media</p> <p>Seeing <u>uncare</u>: companies</p> <p>Seeing <u>uncare</u>: companies</p> <p>Seeing <u>uncare</u>: companies</p>	<p>905.</p> <p>906. Facilitator 24:53</p> <p>907. Yeah, there's a lot to do yes companies, big companies commit- <u>yeah</u> we're</p> <p>908. thinking about quite a lot aren't we. I'm <u>gonna</u> move us just because of</p> <p>909. time but you're obviously an interesting discussion. <u>Yeah</u> because you <u>you</u></p> <p>910. straightaway wanted to talk about this, didn't you and I made you stop for a</p> <p>911. minute so we're <u>gonna</u> come back to it. What <u>what</u> struck you about it?</p> <p>912.</p> <p>913. Rey 25:16</p> <p>914. The amount of people who did it in general really cos I think we all feel that</p> <p>915. people in our school didn't really care about it, I'm not speaking for</p> <p>916. <u>everyone</u> but you know, but seeing two hundred and seventy five</p> <p>917. responses despite what they they consist of is really good because it shows</p> <p>918. that people want to talk about what they feel about <u>about</u> climate change.</p> <p>919. So even if it's not like physically in person having a t- chatting about it even</p> <p>920. a little form like this can like change things. So yeah.</p> <p>921.</p> <p>922. Sara 25:51</p> <p>923. I think this one the number five "do you think most people care about</p> <p>924. climate change?" It's um like most people said no because they didn't know</p> <p>925. other people's answers, so they probably had the same sort of stuff we did</p> <p>926. the last time. Like I had my doubts on this, I didn't think it was <u>gonna</u> go this</p> <p>927. well, then many people like when watching this many people <u>actually do</u></p> <p>928. care.</p> <p>929.</p> <p>930. Carrie 26:22</p> <p>931. <u>Yeah</u> like um I feel it's <u>it's</u> weird strange to think that number eight, "do you</p> <p>932. think the government are doing anything?" it's like nearly fifty <u>fifty</u>.</p> <p>933.</p> <p>934. Facilitator 26:33</p> <p>935. ((in overlap)) Yeah</p> <p>936.</p> <p>937. Carrie 26:34</p> <p>938. It's showing that some people have an opinion of what the UK government</p> <p>939. are doing so like either ((laughs)) so it's sort of like it's not like a full yes take</p> <p>940. over or a full no take over it's like even though yes is more it's still roughly</p> <p>941. <u>fifty fifty</u> people think that the UK Government are helping ((inaudible))</p> <p>942.</p> <p>943. Facilitator 26:53</p> <p>944. ((in overlap)) Yeah</p> <p>945.</p> <p>946. Carrie 26:54</p> <p>947. Which is surprising</p> <p>948.</p> <p>949. Facilitator 26:55</p> <p>950. Yeah. What about you Daisy? Is anything that you've um <u>kinda</u> picking out</p> <p>951. and thinking?</p> <p>952.</p>	<p>Feeling peers did not care</p> <p>The importance of knowing peers want to talk about climate</p> <p>Efficacy through questionnaire: we can create change</p> <p>Questionnaire <u>opening up</u> conversation on climate with peers</p> <p>The importance of feeling that peers care</p>
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<p>953. Daisy 26:59</p> <p>954. No because when you talk about climate change most people don't think</p> <p>955. about how it affects their future. They just go "oh some of this stuff isn't</p> <p>956. going to be here" you know "holes in the ozone layer" but then if you look</p> <p>957. at question nine you see that it looks like the majority of the people</p> <p>958. thought that climate change was going to affect their future. The- yes they</p> <p>959. may have had to stop then there and just think for a minute because they</p> <p>960. hadn't really considered it affecting the future before. Like, before we had</p> <p>961. the whole conversation about it I hadn't specifically considered how it</p> <p>962. would affect my future per se because we're generally ((wanting in))</p> <p>963. climate change to look at the wider world, and just everything like drought</p> <p>964. and more drought more rainfall in some places and they forget that it could</p> <p>965. affect them personally.</p> <p>966.</p> <p>967. Facilitator 27:46</p> <p>968. ((in overlap)) Yeah</p> <p>969.</p> <p>970. Daisy 27:46</p> <p>971. So, there's a- see yeah, it's interesting to see that a lot of people actually do</p> <p>972. now consider the yeah ((inaudible)) effects on their future.</p> <p>973.</p> <p>974. Carrie 27:56</p> <p>975. I think it's surprising as well how there is actually some people who don't</p> <p>976. think that climate change is happening now</p> <p>977.</p> <p>978. Rey 28:02</p> <p>979. Eight. Which is eight too many.</p> <p>980.</p> <p>981. Carrie 28:05</p> <p>982. And like "do you think climate change is happening now?" number three.</p> <p>983. "No" ten people think that climate change is not happening now and that's</p> <p>984. actually kind of that's like kind of big, like you think only one or two but like</p> <p>985. a whole ten people.</p> <p>986.</p> <p>987. Daisy 28:20</p> <p>988. I think it'll probably be the eight people that don't know what climate</p> <p>989. change is maybe.</p> <p>990.</p> <p>991. Group together 28:24</p> <p>992. Yeah. ((Group laughter))</p> <p>993.</p> <p>994. Rey? 28:24</p> <p>995. And then two other people</p> <p>996.</p> <p>997. Facilitator 28:27</p> <p>998. Yeah, that's interesting, isn't it. Yeah. What about your one, um, because</p> <p>999. you talked a lot about um wanting to, you know, kind of a question that's</p> <p>1000. come up a bit, has been "Why didn't you get told about this sooner?" "Why</p>	<p>The importance of knowing peers recognise climate change</p> <p>Feeling connection with their peers</p> <p>Group leading to new understandings: impact on own future</p> <p>The importance of knowing peers recognise climate change</p>	<p>L001. didn't you get told about climate change sooner and what what do they</p> <p>L002. learn in primary school and how does it". So just the number two I was</p> <p>L003. looking at then "did you learn about climate change before or after you</p> <p>L004. came here?"</p> <p>L005.</p> <p>L006. Rey 28:56</p> <p>L007. It was good that there was a lot of people that knew about it before</p> <p>L008. because it kinda like at least they like had like some idea of what it was but</p> <p>L009. then there's ninety-three so</p> <p>L010.</p> <p>L011. Carrie 29:06</p> <p>L012. Yeah, when I answered that I put "no". Well I put after because I knew what</p> <p>L013. I heard the word climate change but I didn't know what it was so like, like,</p> <p>L014. it was like, like, in primary we watched Newsround in our class because we</p> <p>L015. were primary school, but like we like, I've heard the word heard the word</p> <p>L016. of climate change on the news and stuff but then I didn't actually know</p> <p>L017. what it wa- meant and what it was, but then when I came to primary I</p> <p>L018. learnt more about it and stuff like that so.</p> <p>L019.</p> <p>L020. Facilitator 29:36</p> <p>L021. Yeah, yeah, when you came here? Yeah</p> <p>L022.</p> <p>L023. Carrie 29:38</p> <p>L024. Yeah like in year seven in science like I didn't I didn't know the term fossil</p> <p>L025. fuels and then I learnt about fossil fuels and like I knew everything about</p> <p>L026. climate change.</p> <p>L027.</p> <p>L028. Facilitator 29:49</p> <p>L029. So, if we were gonna then ((inaudible)) do it anyway. If we were gonna just</p> <p>L030. use a kind of some sentence starters to fini- to kind of think about this, I've</p> <p>L031. got this one, from from your questionnaire, so now "other pupils in our</p> <p>L032. school?" How do you finish that sentence? From this what do ya reckon?</p> <p>L033.</p> <p>L034. Unknown group member 30:12</p> <p>L035. Other pupils in our school</p> <p>L036.</p> <p>L037. Sara 30:14</p> <p>L038. Actually have the same views as we do.</p> <p>L039.</p> <p>L040. Facilitator 30:20</p> <p>L041. Okay</p> <p>L042.</p> <p>L043. Carrie 30:20</p> <p>L044. Um other pupils in our school think that most um not that many people</p> <p>L045. care about climate change.</p> <p>L046.</p> <p>L047. Facilitator 30:30</p> <p>L048. Yeah. What do ya reckon?</p>	<p>Feeling connection with their peers</p> <p>Not feeling alone in their views: from questionnaire</p> <p>Not feeling alone in their views: from questionnaire</p>
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<p>L049. L050. Rey_30:31 L051. Other people in our school um want to talk about climate change L052. L053. Carrie_30:39 L054. Um other pupils in our school think that they they are doing something to L055. help climate change because "are you doing anything to help climate L056. change?" like more than half said <u>yes</u> they they're doing something L057. L058. Facilitator_30:57 L059. doing something L060. L061. Carrie_30:58 L062. <u>So</u> it shows us they're doing something here. L063. L064. Facilitator_31:01 L065. Yeah L066. L067. Daisy_31:01 L068. <u>Yeah</u> other pupils in our school think that the school isn't doing as much as L069. they could do to deal with climate L070. L071. Carrie_31:09 L072. Sort of sort of they're doing a <u>little shows</u> but it's surprising as well that L073. there's more people who think that they're not doing enough then people L074. think they yes they are doing enough, which is very surprising, cos it's fifty- L075. two no and only forty-three yes, which is very similar but it's still a couple L076. more people five more pupils thinking that it's not they're not doing L077. L078. Facilitator_31:38 L079. They're not doing it and they're not doing enough. What about then from L080. this okay so from it for yourselves then "what is important for me is" for L081. this L082. L083. Sara_31:49 L084. Other people also care. L085. L086. Facilitator_31:52 L087. Okay, yeah. What is important? L088. L089. Rey_31:55 L090. For me is that people have <u>a</u> opinion on climate change. L091. L092. Facilitator_32:06 L093. Okay yeah. What about you Daisy and Carrie what do you think? L094. L095. Carrie_32:13 L096.</p>	<p>The importance of knowing peers want to talk about climate</p> <p>The importance of knowing that peers are doing something</p> <p>The importance of knowing that peers are doing something</p> <p>Feeling connection with their peers Not feeling alone in their views: from questionnaire</p> <p>The importance of knowing others care (peers)</p> <p>The importance of others (peers) engaging</p>	<p>L097. Um what is important for me is how only fifty percent fifty fifty are thinking L098. of the UK Government are helping. L099. L100. Facilitator_32:24 L101. Yeah L102. L103. Carrie_32:25 L104. I thought that lots of people would think they're not helping, but it's just a L105. surprising that fifty fifty. L106. L107. Facilitator_32:34 L108. That there's more than you thought L109. L110. Carrie_32:36 L111. ((in overlap)) Yeah L112. L113. Facilitator_32:36 L114. were thinking that they were in a positive way about L115. L116. Carrie_32:39 L117. ((in overlap)) Yeah L118. L119. Facilitator_32:39 L120. the government L121. L122. Sara_32:41 L123. But we did the question like "do you think the UK government is doing L124. anything." <u>So</u> I put yes because they're doing something to put anything L125. L126. Facilitator_32:53 L127. <u>Yeah</u> you had a long conversation about "anything" or "enough" or L128. different things didn't you as well to kind of, yeah, but it's important to L129. notice that phrasing though isn't it are they doing anything as opposed to, L130. yeah. What do ya reckon Daisy for you? What about what's important L131. about it for you do you reckon? L132. L133. Daisy_33:07 L134. Um that the majority of people in this survey actually know what climate L135. change is because if you've got like what climate change is in the back of L136. your mind, your mind's going to automatically if you go to do something L137. which could greatly affect the environment, it's just going to be there in the L138. back of your mind, just to being there like this is going to have a big impact L139. and you'll see something and go, "Oh, that's climate change" because if you L140. start noticing it, you're more likely to do something about it. L141. L142. Facilitator_33:35 L143. Ah so it's the one, is that so it's important for you to know that they know L144. what it is</p>	<p>Group leading to new understandings: challenging thinking</p> <p>The importance of knowing peers recognise climate change</p>
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<p>L145.</p> <p>L146. Daisy 33:41</p> <p>L147. ((in overlap)) Yeah</p> <p>L148.</p> <p>L149. Facilitator 33:41</p> <p>L150. so they can, they can notice it and act</p> <p>L151.</p> <p>L152. Daisy 33:44</p> <p>L153. Yeah</p> <p>L154.</p> <p>L155. Facilitator 33:45</p> <p>L156. Yeah yeah. Okay, last one. "Now I want to" what?</p> <p>L157.</p> <p>L158. Unknown group member 33:51</p> <p>L159. Now I want</p> <p>L160.</p> <p>L161. Facilitator 33:52</p> <p>L162. With the you've got this you've got this this has come in these results,</p> <p>L163. you've done, you</p> <p>L164.</p> <p>L165. Rey 33:59</p> <p>L166. Now I want to show other people I want to, urgh trying to phrase this right.</p> <p>L167. I want to show people that there are people who care. So like even though</p> <p>L168. it's only two hundred and seventy five and there's like a thousand people in</p> <p>L169. our school, that's still two hundred and seventy five people that have that</p> <p>L170. want to talk about it. So if we like show people, like, oh, it's not a waste of</p> <p>L171. time to talk about it then maybe people would want to talk about it, like,</p> <p>L172. maybe want to learn about it more wanting, like, just have like just hear</p> <p>L173. about not even just talk about it, just hear. And then even that can like cos</p> <p>L174. even hearing about it from like other people, not just, even though I said at</p> <p>L175. some point that not speaking about it ((inaudible)) like hearing about it,</p> <p>L176. and then at some point in time talking about it, because you need time to</p> <p>L177. like make your own opinion you don't make your opinion just like that. You</p> <p>L178. like think about it as long as long as you like hear about it it's still like</p> <p>L179. something important something important to know because it's a current</p> <p>L180. issue happening in our world</p> <p>L181.</p> <p>L182. Carrie 35:10</p> <p>L183. Now I want to show Miss Hail the opinion of the school about climate</p> <p>L184. change.</p> <p>L185.</p> <p>L186. Facilitator 35:16</p> <p>L187. Ah and what in particular, like you have to say to her do you think?</p> <p>L188.</p> <p>L189. Carrie 35:22</p> <p>L190. ((in overlap)) about how what they think about climate change as a whole,</p> <p>L191. of the UK and ((how it works sort of thing)) about climate change and what</p> <p>L192. they think about the school like question six and stuff because it sh- and</p>	<p>Supporting others: telling others that there are people who care</p> <p>The importance of knowing peers want to talk about climate</p> <p>The importance of talk with people in power: headteacher</p>		<p>L193. how what they think about other people aswe- sort of the whole</p> <p>L194. questionnaire ((laughs))</p> <p>L195.</p> <p>L196. Facilitator 35:40</p> <p>L197. Yeah yeah</p> <p>L198.</p> <p>L199. Carrie 35:43</p> <p>L200. Like t- to show what the pupils think and stuff and how they see climate</p> <p>L201. change and stuff like that.</p> <p>L202.</p> <p>L203. Facilitator 35:54</p> <p>L204. What about you two? What do you want to do now ((pause)) from this?</p> <p>L205.</p> <p>L206. Sara 35:59</p> <p>L207. I kind of wanna tell these people that they are not alone.</p> <p>L208.</p> <p>L209. Facilitator 36:04</p> <p>L210. ((in overlap)) Ah</p> <p>L211.</p> <p>L212. Sara 36:05</p> <p>L213. They are actually pe- like this many people actually have the same opinion</p> <p>L214. as them.</p> <p>L215.</p> <p>L216. Facilitator 36:05</p> <p>L217. Yeah. How would you do that?</p> <p>L218.</p> <p>L219. Sara 36:17</p> <p>L220. I don't know, maybe we could maybe send this to form like pictures of this</p> <p>L221. and people could see it, but I don't know if it's like allowed</p> <p>L222.</p> <p>L223. Rey? 36:28</p> <p>L224. ((in overlap)) Mentioned on</p> <p>L225.</p> <p>L226. Carrie 36:28</p> <p>L227. Or mentioned under like Twitter or the headteacher's blog. Yeah the</p> <p>L228. headteacher's blog cos all the parents see it and then the parents maybe.</p> <p>L229.</p> <p>L230. Facilitator 36:38</p> <p>L231. That's an important</p> <p>L232.</p> <p>L233. Mr Snow (teacher sitting in) 36:40</p> <p>L234. We could ask about that</p> <p>L235.</p> <p>L236. Facilitator 36:41</p> <p>L237. Yeah, that's something to ask. Yeah, so that's, yeah definitely ((inaudible))</p> <p>L238. ask about that. Then what about what about you Daisy now from this, what</p> <p>L239. you want now?</p> <p>L240.</p>	<p>The importance of sharing pupil opinion with the headteacher</p> <p>Supporting others: telling others that they are not alone</p> <p>Facilitating action</p>
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<p>L241. Daisy 36:52 L242. Er it's difficult L243. L244. Facilitator 36:53 L245. It is hard isn't it I mean maybe there's no there might not be a fully formed L246. idea about that yet you know L247. L248. Daisy 36:59 L249. Um ((pause)) I'm probably a mixture of what everyone's said to be honest L250. yeah L251. L252. Facilitator 37:07 L253. Yeah, that's fine, that's fine. Wow okay you've done this, just the fact that L254. you went out, you, you designed it, you got it sent out, what was just that L255. experience of knowing that that was going out? L256. L257. Unknown group member 37:22 L258. ((in overlap)) ((inaudible)) L259. L260. Carrie 37:23 L261. What was what I was like at the end of the day I think it was on Friday or L262. Monday it wasn't on Monday it was last last Friday. L263. L264. Facilitator 37:31 L265. Yeah L266. L267. Carrie 37:31 L268. I was waiting for my friends after school and I got the teams on my phone L269. that he sent out and I just pressed the link and already two hundred and L270. something people had answered and I was a bit like "Whoa two hundred L271. people have already answered this" and it just made me feel ha- a bit L272. happy inside that like they have people have actually answered because I L273. was like inside I was a bit like had a feeling that like ((inaudible)) like even I L274. know a hundred is quite is quite a lot but still like only a hundred out of like L275. everybody who got it did it and I was I just felt like it'd be a questionnaire L276. but people'd ignore it. And so then when two hundred and something L277. people did it I made me feel that we have done something at least to show. L278. L279. Facilitator 38:17 L280. Yeah, definitely, definitely. Okay. Well, you've got this, that, you know, I L281. mean, I think that's great. That you know that you've done that, you've L282. done that and you've managed you asked everyb- you n- asked everybody, L283. and you found out you know some important things and from that, so one L284. of the things you've said then is you want to tell Miss Hail that. And that we L285. want to ask Ms. Hail particular things about how we can how you can kind L286. of let all these people know that they're not, not the only one who L287. answered saying, "Yes, I think it's happening" or, "I think it's going to affect L288.</p>	<p>Happiness from peer engagement</p> <p>Recognition of group efficacy</p>	<p>L289. my future" or any of these things you kind of do think to kind of feel they L290. will not be alone. L291. L292. Rey? 39:01 L293. Yeah L294. L295. Facilitator 39:01 L296. So you've got two, two really kind of key things there that haven't you as L297. well as other stuff as well. L298. L299. Carrie 39:07 L300. ((in overlap)) Cos sorry L301. L302. Facilitator 39:07 L303. Oh sorry go on L304. L305. Carrie 39:07 L306. Cos this questionnaire is not just for anybody, it's the school's so it's like L307. kind of important to us and Miss Hail a bit well sort of because it's not like L308. just a random people doing a questionnaire it shows what kid- like I'm like L309. eleven to sixteen year olds think, well maybe not 15 year olds, think about L310. school and stuff. L311. L312. Facilitator 39:30 L313. Okay. And that means that's actually bringing you together in a kind of us L314. group isn't it with her L315. L316. Unknown group member 39:34 L317. Uhm L318. L319. Facilitator 39:34 L320. so you're in the same coming from the same point of view, which leads us L321. very neatly into thinking about Tuesday L322. L323. Rey? 39:41 L324. ((in overlap)) Yes L325. L326. Carrie ? 39:41 L327. Yeah L328. L329. Facilitator 39:41 L330. which is it okay after school? Gonna be alright? ((in overlap)) Because you L331. were just wondering about it weren't you? L332. L333. Rey 39:46 L334. I think so yeah yeah I checked it L335. L336. Facilitator 39:48</p>	<p>Recognition of shared interest with the headteacher</p>
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<p>L337. ((in overlap)) Should <u>be</u> ok? L338. L339. <u>Rey 39:49</u> L340. and I can do it <u>at a later time</u> in the day so yeah L341. L342. <u>Facilitator 39:51</u> L343. Okay so you can do it that's fine okay that's no problem. Okay, and it came L344. up earlier didn't you said <u>Mrs Hail</u> is coming but you were going to you also L345. wanted to invite somebody else, which is fine L346. L347. <u>Carrie 40:02</u> L348. <u>Mr Rain</u> my geography teacher because he's retiring L349. L350. <u>Facilitator 40:04</u> L351. Okay L352. L353. <u>Carrie 40:05</u> L354. And he's been here for so long that he might could like it could show the L355. questionnaire could show him something because of he's known loads of L356. the pupils for so long. Like my friend um my friend my brother's friend L357. Sophie her mum went to this school and she's the same age as my brother L358. who's coming up to year seven next year. <u>So</u> it's like quite amazing so I just L359. thought ((if we)) show it he'd be able to L360. L361. <u>Facilitator 40:31</u> L362. ((in overlap)) to see your kind of ((pause)) change L363. L364. <u>Carrie 40:34</u> L365. <u>Yeah</u> to see and cos he's a geography teacher he might like it too. L366. L367. <u>Facilitator 40:37</u> L368. Okay, so are you <u>gonna</u> invite him? L369. L370. <u>Carrie 40:39</u> L371. Yeah, I can ask him on Monday. L372. L373. <u>Facilitator 40:41</u> L374. Okay. L375. L376. <u>Mr Snow</u> (teacher sitting in) <u>40:43</u> L377. <u>Yeah</u> I can send an email. L378. L379. <u>Facilitator 40:45</u> L380. Lovely. Is there anybody, so it's up to you, this is your choice about. L381. L382. <u>Sara 40:50</u> L383. I was thinking about our head of year. L384.</p>	<p>Outer world coming in: school community, other school staff</p>	<p>L385. <u>Rey 40:51</u> L386. <u>Yeah</u> our head of year L387. L388. <u>Carrie 40:56</u> L389. Maybe <u>maybe</u> L390. L391. <u>Rey 40:57</u> L392. We'll see we'll see L393. L394. Group <u>together 40:58</u> L395. ((Group laughter)) L396. L397. <u>Mr Snow</u> (teacher sitting in) <u>40:58</u> L398. Okay. L399. L400. <u>Carrie 40:59</u> L401. ((Does)) do you know if <u>Mr Ice</u> will come? L402. L403. <u>Facilitator 41:03</u> L404. I think <u>Mr Ice</u> is <u>gonna</u> be in our group. Good. That's good yeah and then L405. you just need to think what you're going to say to them. L406. L407. <u>Carrie 41:12</u> L408. <u>Yeah</u> we Sara looks like she's got L409. L410. <u>Facilitator 41:15</u> L411. Sara's got Sara's got her they've got her bit read- already. We said we'd see L412. where we were, we weren't L413. L414. Unknown group <u>member 41:15</u> L415. ((in overlap)) yeah L416. L417. I haven't got mine yet L418. L419. <u>Facilitator 41:20</u> L420. expecting everybody to have anything perfectly ready so it's no problem. L421. L422. <u>Rey 41:26</u> L423. Yeah, I've first drafts so L424. L425. <u>Facilitator 41:28</u> L426. <u>Yeah</u> exactly these things take a little bit of you know some trying things L427. out L428. L429. <u>Carrie 41:32</u> L430. I don't want to speak to them like it's written you know I want to speak to L431. them. L432.</p>	<p>Importance of speaking in a real way to staff</p>
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<p>L433. Facilitator 41:35</p> <p>L434. Yeah</p> <p>L435.</p> <p>L436. Carrie 41:36</p> <p>L437. Sometimes something will just pop into your head that you wanted to</p> <p>L438.</p> <p>L439. Facilitator 41:39</p> <p>L440. That you want to add. So, okay so let's, I think actually quite useful, almost</p> <p>L441. to think you've got you've got some ideas you've already <u>got</u> and you've</p> <p>L442. probably got ideas in your head, which is fine.</p> <p>L443.</p> <p>L444. Carrie 41:48</p> <p>L445. We could maybe do a mind map of what we might want to say, like, really</p> <p>L446. the ideas you might want to say like topics but like don't have to write it</p> <p>L447. out maybe</p> <p>L448.</p> <p>L449. Facilitator 41:57</p> <p>L450. Yeah, cos you could just speak from what you feel that's the other option</p> <p>L451.</p> <p>L452. Carrie 42:02</p> <p>L453. Yeah</p> <p>L454.</p> <p>L455. Facilitator 42:02</p> <p>L456. It'd be quite nice if you do have a copy that you might feel comfortable</p> <p>L457. giving</p> <p>L458.</p> <p>L459. Unknown group member 42:02</p> <p>L460. ((in overlap)) Ah yeah</p> <p>L461.</p> <p>L462. Facilitator 42:02</p> <p>L463. afterwards might be quite nice because that that means they've to look</p> <p>L464. back at it again</p> <p>L465.</p> <p>L466. Rey? 42:12</p> <p>L467. They can't forget about it</p> <p>L468.</p> <p>L469. Facilitator 42:13</p> <p>L470. That quite nice and</p> <p>L471.</p> <p>L472. Carrie 42:14</p> <p>L473. Can share that book</p> <p>L474.</p> <p>L475. Facilitator 42:14</p> <p>L476. You can show the book. <u>So</u> what would you like it to be like, are you I'm</p> <p>L477. assuming we're ok to be in here.</p> <p>L478.</p> <p>L479. Mr Snow (teacher sitting in) 42:21</p> <p>L480. Yeah</p>	<p>Importance of speaking in a real way to staff</p>	<p>L481.</p> <p>L482. Carrie 42:21</p> <p>L483. I feel like</p> <p>L484.</p> <p>L485. Facilitator 42:21</p> <p>L486. So how would you want to organise it? As they come in do you want stuff</p> <p>L487. for them to look at as they come in or?</p> <p>L488.</p> <p>L489. Carrie 42:27</p> <p>L490. Yeah should be like a presentation slash like a talk I think.</p> <p>L491.</p> <p>L492. Facilitator 42:31</p> <p>L493. Okay, so what do you reckon? Okay, show me how you want it. So ((in</p> <p>L494. overlap)) let's have a look.</p> <p>L495.</p> <p>L496. Carrie 42:35</p> <p>L497. ((in overlap)) We can like show them what we've learned and what we've</p> <p>L498. got and then talk to them about stuff that we about stuff.</p> <p>L499.</p> <p>L500. Daisy 42:43</p> <p>L501. ((in overlap)) Like these can go on a table and this stuff</p> <p>L502.</p> <p>L503. Facilitator 42:45</p> <p>L504. Right. <u>So</u> you want some stuff on a table on a table</p> <p>L505.</p> <p>L506. Carrie 42:48</p> <p>L507. ((in overlap)) Like the questionnaire</p> <p>L508.</p> <p>L509. Facilitator 42:48</p> <p>L510. to look at and the questionnaire</p> <p>L511.</p> <p>L512. Unknown group member 42:50</p> <p>L513. ((inaudible)) and maybe we can put these posters</p> <p>L514.</p> <p>L515. Facilitator 42:53</p> <p>L516. Not necessarily paint samples</p> <p>L517.</p> <p>L518. Group together 42:55</p> <p>L519. No ((group laughter))</p> <p>L520.</p> <p>L521. Carrie 42:56</p> <p>L522. Okay spread these out and then maybe like</p> <p>L523.</p> <p>L524. Rey 42:59</p> <p>L525. Maybe the this?</p> <p>L526.</p> <p>L527. Unknown group member 43:01</p> <p>L528. Yeah, maybe they can have a copy of that</p>	
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<p>L529.</p> <p>L530. Facilitator 43:03</p> <p>L531. Yeah we can give them that</p> <p>L532.</p> <p>L533. Carrie 43:04</p> <p>L534. We can give them a copy of it when they come in</p> <p>L535.</p> <p>L536. Facilitator 43:06</p> <p>L537. They come in. And is there a question, is there something as they come in,</p> <p>L538. you want them to think about, as it as they come in, do you want to come</p> <p>L539. in and ask them if there's something really important you want them to</p> <p>L540. hold in their minds as they come in or is there something.</p> <p>L541.</p> <p>L542. Sara 43:17</p> <p>L543. How dare you!</p> <p>L544.</p> <p>L545. Group together 43:19</p> <p>L546. ((Group laughter))</p> <p>L547.</p> <p>L548. Facilitator 43:20</p> <p>L549. Well, it's up to you. You can always</p> <p>L550.</p> <p>L551. Carrie 43:24</p> <p>L552. We could maybe ask them at the start to ask us a question at the end like a</p> <p>L553. question they want to ask us.</p> <p>L554.</p> <p>L555. Facilitator 43:32</p> <p>L556. That's nice as well yeah</p> <p>L557.</p> <p>L558. Sara 43:33</p> <p>L559. Maybe they could complete the questionnaire like their own questionnaire.</p> <p>L560.</p> <p>L561. Facilitator 43:37</p> <p>L562. Oh</p> <p>L563.</p> <p>L564. Carrie 43:38</p> <p>L565. Maybe they could see ours. Yeah maybe we could give them the</p> <p>L566. questionnaire and then we can see the results of the pupils to see if they</p> <p>L567. get similar results to the pupils.</p> <p>L568.</p> <p>L569. Facilitator 43:48</p> <p>L570. So do we need to con we can they do it before or how to, so how do you</p> <p>L571. want them to do it?</p> <p>L572.</p> <p>L573. Carrie ? 43:54</p> <p>L574. They could do it at the start</p> <p>L575.</p> <p>L576. Facilitator 43:55</p>		<p>L577. they need to just</p> <p>L578.</p> <p>L579. Sara 43:56</p> <p>L580. When they come in we can give them a question sheet. Then they answer</p> <p>L581. it, like yes, no, okay just tick box</p> <p>L582.</p> <p>L583. Facilitator 44:03</p> <p>L584. Yeah</p> <p>L585.</p> <p>L586. Sara 44:04</p> <p>L587. and they can go sitting</p> <p>L588.</p> <p>L589. Carrie 44:05</p> <p>L590. And then we could show them the actual results</p> <p>L591.</p> <p>L592. Sara 44:08</p> <p>L593. And we could ask how many answered which one and then we can tell the</p> <p>L594. actual pupils answered, and then they we can see like the difference.</p> <p>L595.</p> <p>L596. Carrie 44:17</p> <p>L597. Yeah, their reaction and what they think.</p> <p>L598.</p> <p>L599. Sara 44:19</p> <p>L600. And we can see how our age</p> <p>L601.</p> <p>L602. Facilitator 44:23</p> <p>L603. Right</p> <p>L604.</p> <p>L605. Carrie 44:24</p> <p>L606. Age difference</p> <p>L607.</p> <p>L608. Mr Snow (teacher sitting in) 44:25</p> <p>L609. You can put your questions onto a bit of paper and print it out</p> <p>L610.</p> <p>L611. Carrie 44:29</p> <p>L612. Yeah that'll be good</p> <p>L613.</p> <p>L614. Daisy 44:27</p> <p>L615. ((can see)) their opinions on what the schools doing compared to the kids</p> <p>L616. think.</p> <p>L617.</p> <p>L618. Facilitator 44:34</p> <p>L619. Right, so that's so okay so we've got just so that I'm so that you're gonna</p> <p>L620. have it set up with stuff for them to look at?</p> <p>L621.</p> <p>L622. Carrie 44:41</p> <p>L623. Yes</p> <p>L624.</p>	<p>Generational divide: age – staff and students</p> <p>Facilitating/ supporting action</p>
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<p>L625. Facilitator 44:41</p> <p>L626. They're gonna come in, I like you're gonna say, as they come in you're going to give them the</p> <p>L627.</p> <p>L628.</p> <p>L629. Carrie 44:47</p> <p>L630. ((in overlap)) the questions</p> <p>L631.</p> <p>L632. Facilitator 44:48</p> <p>L633. the copy of the staff version, yeah.</p> <p>L634.</p> <p>L635. Carrie 44:51</p> <p>L636. Yeah, well, so they're exactly the same, it's just not with the answers</p> <p>L637.</p> <p>L638. Facilitator 44:54</p> <p>L639. slightly different without the answers they have to fill it in</p> <p>L640.</p> <p>L641. Carrie 44:57</p> <p>L642. Yeah</p> <p>L643.</p> <p>L644. Facilitator 44:58</p> <p>L645. Is somebody gonna then then you're going to do that are you?</p> <p>L646.</p> <p>L647. Carrie 45:03</p> <p>L648. Yeah, we're going to tell them about the questionnaire and stuff</p> <p>L649.</p> <p>L650. Facilitator 45:05</p> <p>L651. Are you you're going to start with a questionnaire or you're going to tell them about yours, your own stuff?</p> <p>L652.</p> <p>L653.</p> <p>L654. Rey 45:10</p> <p>L655. Maybe we should start with the questionnaire so they so they don't have any outside opinion</p> <p>L656.</p> <p>L657. Carrie 45:13</p> <p>L658. Yeah and then we can then afterwards we can show what we've done and then they can ask some questions about some stuff.</p> <p>L659.</p> <p>L660.</p> <p>L661. Facilitator 45:20</p> <p>L662. Okay, right that's fine okay so they come in</p> <p>L663.</p> <p>L664.</p> <p>L665. Carrie 45:23</p> <p>L666. Yeah</p> <p>L667.</p> <p>L668. Facilitator 45:23</p> <p>L669. You give them the questionnaire, what are you going to say to them as they come in?</p> <p>L670.</p> <p>L671.</p> <p>L672. Carrie 45:26</p>		<p>L673. We could say</p> <p>L674.</p> <p>L675. Rey 45:26</p> <p>L676. Please complete like, hi, welcome.</p> <p>L677.</p> <p>L678. Facilitator 45:29</p> <p>L679. Okay coming in.</p> <p>L680.</p> <p>L681. Rey 45:31</p> <p>L682. Hi, welcome to</p> <p>L683.</p> <p>L684. Carrie 45:33</p> <p>L685. our geography, climate thing. ((laughs))</p> <p>L686.</p> <p>L687. Facilitator 45:36</p> <p>L688. Oh yeah give it a name give it a name</p> <p>L689.</p> <p>L690. Carrie 45:38</p> <p>L691. Climate research</p> <p>L692.</p> <p>L693. Rey 45:40</p> <p>L694. We would like you to fill out this this questionnaire</p> <p>L695.</p> <p>L696. Carrie 45:46</p> <p>L697. to see your point of view</p> <p>L698.</p> <p>L699. Rey 45:46</p> <p>L700. to see your point of view but keep it with you until the end maybe.</p> <p>L701.</p> <p>L702. Carrie 45:50</p> <p>L703. Or maybe not till the end well after you finish we'll show</p> <p>L704.</p> <p>L705. Rey 45:55</p> <p>L706. Give it to us.</p> <p>L707.</p> <p>L708. Daisy 45:56</p> <p>L709. So then we can show your answers</p> <p>L710.</p> <p>L711. Sara 46:02</p> <p>L712. We could just get them to put their hand up, and we record the data then.</p> <p>L713.</p> <p>L714. Daisy 46:07</p> <p>L715. They can put their hand up and we can go most of you the majority answered most like.</p> <p>L716.</p> <p>L717.</p> <p>L718. Carrie 46:10</p> <p>L719. ((in overlap)) Yeah, or they can answer yeah, or we can ask them the questions.</p> <p>L720.</p>
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<p>L721. L722. Facilitator 46:15 L723. Okay, so they come in, you give them the questionnaires, they <u>have to go</u> L724. and they're <u>gonna</u> have to where then do you want them to go next? L725. L726. Carrie 46:20 L727. Sit like L728. L729. Facilitator 46:21 L730. They have to they're <u>gonna</u> sit. Are you <u>gonna</u> let them look at stuff at the L731. beginning while they're filling out their questionnaire? L732. L733. Unknown group member 46:32 L734. Yeah L735. L736. Carrie 46:32 L737. We can talk to them whilst they're L738. L739. Rey 46:32 L740. They can sit like this L741. L742. Facilitator 46:33 L743. Do you want them facing like do you want them in a big <u>circle</u> or do you L744. want them facing one way? L745. L746. Unknown group member 46:37 L747. Will we have the projector? L748. L749. ((in overlap)) What do you feel? L750. L751. Carrie 46:39 L752. Yeah we can make a PowerPoint slide. L753. L754. Rey 46:43 L755. We can make a Power Point and be like hi week one we did L756. L757. Daisy 46:47 L758. When would we make that though? That's the thing. L759. L760. Rey 46:49 L761. Could we just make it on our own and we could give maybe give our own L762. ideas as PowerPoints and then L763. L764. Mr Snow (teacher sitting in) 46:55 L765. You could do it on Teams L766. L767. Carrie 46:56 L768. We could do it now.</p>	<p>Manageability: student time and workload</p> <p>Facilitating action</p> <p>Manageability: student time and workload</p>	<p>L769. L770. Mr Snow (teacher sitting in) 46:58 L771. You know on Teams you can edit the same document L772. L773. Daisy 47:01 L774. We could pick a time and then all message each other on Teams. L775. L776. Facilitator 47:05 L777. Okay L778. L779. Daisy 47:07 L780. So on the weekend we can do something L781. L782. Rey 47:09 L783. So then on week one we did x y and z L784. L785. Facilitator 47:11 L786. Okay, yeah L787. L788. Rey 47:12 L789. But and then week two we won't make it too boring, you know, leave out L790. things and they'd be like <u>like</u> what do you then be like, I don't know ask and L791. then after each slide we ask, what we did and like how do you think it's L792. going to like <u>benefit</u> the school? L793. L794. Daisy 47:28 L795. Any questions or L796. L797. Rey 47:29 L798. Do you have any questions and all that and then we'd be like, okay, second L799. slide and someone else can take a turn talking about <u>it</u> L800. L801. Mr Snow (teacher sitting in) 47:34 L802. Yeah L803. L804. Rey 47:35 L805. So everyone has a turn having contributed to it L806. L807. Facilitator 47:38 L808. Okay L809. L810. Carrie 47:38 L811. We could ask them questions of what they think and get their opinion. L812. L813. Facilitator 47:42 L814. Okay L815. L816. Carrie 47:42</p>
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<p>1817. Questions you've asked us so we could get their opinion</p> <p>1818.</p> <p>1819. Facilitator 47:45</p> <p>1820. Ah</p> <p>1821.</p> <p>1822. Daisy 47:45</p> <p>1823. Or we could ask them on the way in how they feel about all climate change</p> <p>1824. and everything.</p> <p>1825.</p> <p>1826. Carrie 47:49</p> <p>1827. Yeah. Like we could ask, "how do you feel the world's changed?"</p> <p>1828.</p> <p>1829. Facilitator 47:54</p> <p>1830. Oh these oh right okay so you've got some really good questions there okay</p> <p>1831. so you're adding in some really so we've got you're going to give them the</p> <p>1832. questionnaire as they come in.</p> <p>1833.</p> <p>1834. Carrie 48:04</p> <p>1835. Yeah</p> <p>1836.</p> <p>1837. Facilitator 48:04</p> <p>1838. You'll have this stuff out of them to have a look at while they're filling out</p> <p>1839. the questionnaire and they can have a look.</p> <p>1840.</p> <p>1841. Carrie 48:09</p> <p>1842. ((in overlap)) They can walk around.</p> <p>1843.</p> <p>1844. Unknown group member 48:10</p> <p>1845. Yes</p> <p>1846.</p> <p>1847. Facilitator 48:10</p> <p>1848. Then you're going to</p> <p>1849.</p> <p>1850. Unknown group member 48:12</p> <p>1851. do the presentation</p> <p>1852.</p> <p>1853. Facilitator 48:12</p> <p>1854. You're going to do a kind of you want to do more of a standing up bit where</p> <p>1855. you kind of</p> <p>1856.</p> <p>1857. Sara 48:17</p> <p>1858. Could we like sit in a half circle two meters away so we don't have to wear a</p> <p>1859. mask.</p> <p>1860.</p> <p>1861. Carrie 48:22</p> <p>1862. They're the students and we're the teachers</p> <p>1863.</p> <p>1864. Facilitator 48:25</p>	<p style="text-align: center;">Outer world coming in: COVID masks</p> <p style="text-align: center;">Power switch: students being the teachers</p>	<p>1865. Also maybe it's a different feel, isn't it. It's a half circle okay let's see what</p> <p>1866. that would look like.</p> <p>1867.</p> <p>1868. Unknown Speaker 48:40</p> <p>1869. ((Noise of tables/chairs being moved; inaudible group talk))</p> <p>1870.</p> <p>1871. Sara 48:40</p> <p>1872. You feel more powerful ((inaudible)) the further away they are.</p> <p>1873.</p> <p>1874. Facilitator 48:43</p> <p>1875. You'll feel more powerful them being further away?</p> <p>1876.</p> <p>1877. Unknown Speaker 48:51</p> <p>1878. ((inaudible group talk))</p> <p>1879.</p> <p>1880. Carrie 49:07</p> <p>1881. Miss Hail can sit like in the middle.</p> <p>1882.</p> <p>1883. Facilitator 49:09</p> <p>1884. So you might want to label her seat.</p> <p>1885.</p> <p>1886. Unknown Speaker 49:11</p> <p>1887. ((Group laughter))</p> <p>1888.</p> <p>1889. Facilitator 49:12</p> <p>1890. In the middle. So you're going to have a selection of and the rest of you can</p> <p>1891. sit in - because you know you can be together with them cos you're not</p> <p>1892. like you're trying to be us aren't you</p> <p>1893.</p> <p>1894. Carrie 49:22</p> <p>1895. So after we've done the presentation we can sit down with them</p> <p>1896.</p> <p>1897. Facilitator 49:24</p> <p>1898. Yeah be with them and so</p> <p>1899.</p> <p>1900. Rey 49:27</p> <p>1901. We don't want it to be too awkward.</p> <p>1902.</p> <p>1903. Facilitator 49:28</p> <p>1904. And then when do you want to when you want to do your letters?</p> <p>1905.</p> <p>1906. Rey 49:32</p> <p>1907. We could maybe read them out.</p> <p>1908.</p> <p>1909. Facilitator 49:33</p> <p>1910. Yeah</p> <p>1911.</p> <p>1912. Rey 49:34</p>	<p style="text-align: center;">Wanting to feel powerful when speaking to staff</p> <p style="text-align: center;">Importance of their headteacher</p>
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<p>L913. We could make a copy of them so they can read it</p> <p>L914.</p> <p>L915. Carrie 49:48</p> <p>L916. So then me and Daisy could make one</p> <p>L917.</p> <p>L918. Sara 49:48</p> <p>L919. ((in overlap)) So maybe they can read out loud</p> <p>L920.</p> <p>L921. Carrie 49:49</p> <p>L922. ((inaudible))</p> <p>L923.</p> <p>L924. Facilitator 49:49</p> <p>L925. Well so if you do that bit</p> <p>L926.</p> <p>L927. Group together 49:50</p> <p>L928. ((in overlap inaudible group talk))</p> <p>L929.</p> <p>L930. Rey 49:51</p> <p>L931. it would be cool if we like voiced them</p> <p>L932.</p> <p>L933. Carrie 49:52</p> <p>L934. Yeah.</p> <p>L935.</p> <p>L936. Rey 49:52</p> <p>L937. So it doesn't seem</p> <p>L938.</p> <p>L939. Carrie 49:52</p> <p>L940. ((inaudible))</p> <p>L941.</p> <p>L942. Rey 49:52</p> <p>L943. It's not like script- not like scripted but like, it's like that's our idea so if we</p> <p>L944. talk about it in a different way, it will still have the basis of what we're</p> <p>L945. talking about. So, we have like this script like the letters can be like our</p> <p>L946. main like this is what we actually want to talk about. But if we start talking</p> <p>L947. about something else it's not like an important</p> <p>L948.</p> <p>L949. Daisy 50:11</p> <p>L950. It's not the end of the world</p> <p>L951.</p> <p>L952. Rey 50:11</p> <p>L953. It's not the end of the world so then if so say we start talking about I don't</p> <p>L954. know not not basically this like as like a point. But if we read all this oh okay</p> <p>L955. blah blah</p> <p>L956.</p> <p>L957. Facilitator 50:23</p> <p>L958. Yeah. Okay great okay so do you want to give us a taster of your letters?</p> <p>L959.</p> <p>L960. Rey and Sara 50:30</p>	<p>Importance of speaking in a real way to staff</p>	<p>L961. ((nervous giggles))</p> <p>L962.</p> <p>L963. Sara 50:31</p> <p>L964. ((inaudible))</p> <p>L965.</p> <p>L966. Facilitator 50:36</p> <p>L967. How did you want that bit because if you've got you've got this half circle</p> <p>L968. but you could do you want to just join the circle up at that point, do you</p> <p>L969. want to stand do you want to sit you can talk to them on the same level.</p> <p>L970.</p> <p>L971. Daisy 50:45</p> <p>L972. ((I don't)) have that feeling whether I want to stand or not</p> <p>L973.</p> <p>L974. Carrie 50:49</p> <p>L975. Yeah it depends</p> <p>L976.</p> <p>L977. Facilitator 50:50</p> <p>L978. You can decide</p> <p>L979.</p> <p>L980. Unknown group member 50:51</p> <p>L981. Decide at the time</p> <p>L982.</p> <p>L983. Daisy 50:51</p> <p>L984. Yeah spur of the moment</p> <p>L985.</p> <p>L986. Facilitator 50:52</p> <p>L987. Okay, go go for wherever you feel like, try experiment with it yeah.</p> <p>L988.</p> <p>L989. Rey 50:57</p> <p>L990. Ill sit down, see how it feels</p> <p>L991.</p> <p>L992. Facilitator 51:03</p> <p>L993. It's different, isn't it, and it's a different feeling.</p> <p>L994.</p> <p>L995. Rey 51:06</p> <p>L996. For many years the world has being harassed by our doing, our machines,</p> <p>L997. our rubbish, and we as the society have not cared. Until now publicly now</p> <p>L998. people want to bring change to our world, a world one metal straw and</p> <p>L999. tote ((inaudible)) bag at a time. Now that's the world what about South</p> <p>2000. Wales High School? Over the 2020 2021 year, South Wales High School has</p> <p>2001. been improving its use of bins and recycling. Our- the new bins are giving</p> <p>2002. people the chance to recycle and after going through the mountains of bags</p> <p>2003. that still live in those bins, other people in our school community seem to</p> <p>2004. think that paper bins equal everything bins. This is not right, recycling</p> <p>2005. cannot happen if paper has been touched by yoghurt, we have to educate</p> <p>2006. people on how they bin their rubbish or perfectly good paper will have to,</p> <p>2007. which did not have to, contribute to the already overwhelming litter of the</p> <p>2008. school ((inaudible)) But how do we educate people in any sort of</p>	<p>Strength of expression: "harassed", "overwhelming litter"</p> <p>Seeing uncare: society</p> <p>Responsibility at a society level</p> <p>What young people see: the "mountains of bags"</p> <p>What young people see: misuse of the recycling system</p> <p>Importance of education</p> <p>Importance of integration of the climate message across school: not just a topic</p>
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<p>2009. 2010. 2011. 2012. 2013. 2014. 2015. 2016. 2017. 2018. 2019. 2020. 2021. 2022. 2023. 2024. 2025. 2026. 2027. 2028. 2029. 2030. 2031. 2032. 2033. 2034. 2035. 2036. 2037. 2038. 2039. 2040. 2041. 2042. 2043. 2044. 2045. 2046. 2047. 2048. 2049. 2050. 2051. 2052. 2053. 2054. 2055. 2056.</p>	<p>environmental issue from <u>clim</u>- from climate change to littering. We don't, we don't force it upon people we don't make, make it too obvious. We engrave it into every school curriculum but not in a massive way so as in ((inaudible)) lessons like that. In PE they show different ways to travel beside cars, in chemistry they show how carbon emissions affect our atmosphere and more. After two hundred and twenty after out of two hundred and <u>seventy five</u> responses fifty-two people think that our school is not doing enough to help climate change. Let's prove them wrong. Let's make this school the most environmental school in Cardiff and Wales.</p> <p>So kind of like a motivational thing so it shows like, like if they're not feeling like people care that this is like the last question so we do care but I'm very, very passionately, because like I was look- reading I was watching YouTube videos about like Greta Thunberg and other people like, not just like climate change and environmental stuff but other things, because I <u>wanna</u> see other things and I was trying to see which how it made people feel so I watched the audience.</p> <p><u>Facilitator 53:03</u> Yeah</p> <p><u>Rey 53:04</u> <u>So</u> I was keeping an eye on I was listening to what they were saying, but also how they were reacting. <u>So</u> they're using like making it more personal to them. <u>So</u> talking about a wider world, and then making it into wherever they were so say if they were in like Alabama or something like that. Well not exactly like but somewhere there, they started talking about how it affects Alabama, like how it kind of gives them like makes it seem like, oh, it's not like that far away from where they live. <u>So</u> it's happening there and then, so it gives them a new perspective. <u>So</u> say so I was while I was writing it I was thinking back on um I know the world is like the entire world and how they react to it, but how South Wales High School reacts to it is what they care about because they run it. So that was kind of what my basis of my letter was so I tried to give ideas of how they could help. So, I know they're probably thinking about this stuff but then giving them ideas could maybe show that these pupils would react something if them, or, or like someone from their school thought about it, they could react to it better because it's like their ((inaudible)) something like that so.</p> <p><u>Facilitator 54:23</u> <u>Yeah</u> what yeah what I'm getting from that <u>aswell</u> is that you want you're wanting to show that kind of passion and that kind of the feeling. And you're also wanting to inspire and motivate action.</p> <p><u>Rey 54:35</u> Yes</p> <p><u>Facilitator 54:35</u></p>	<p>Wanting to inspire staff to act in school</p>	<p>2057. 2058. 2059. 2060. 2061. 2062. 2063. 2064. 2065. 2066. 2067. 2068. 2069. 2070. 2071. 2072. 2073. 2074. 2075. 2076. 2077. 2078. 2079. 2080. 2081. 2082. 2083. 2084. 2085. 2086. 2087. 2088. 2089. 2090. 2091. 2092. 2093. 2094. 2095. 2096. 2097. 2098. 2099. 2100. 2101. 2102. 2103. 2104.</p>	<p>The action is now the important thing</p> <p><u>Rey 54:38</u> ((in overlap)) Yes</p> <p><u>Facilitator 54:38</u> for you</p> <p><u>Rey 54:38</u> Cos them talking about it and then doing the bins which is <u>definitely</u> <u>important</u>. That is definitely a small thing that can bring about big change, but they're doing one little one that doing multiple different little things it manifests into a <u>massive big</u> amount more bigger thing so.</p> <p><u>Facilitator 54:57</u> Okay. We explored sitting. How did it feel sitting reading it sitting?</p> <p><u>Rey 55:04</u> While I was reading it, I felt like well when I was first reading over it I was like "oh god this sounds a bit cringy" and I didn't really want to think about it but after reading back on it like out loud it felt really ((pause)) like cool. I <u>wanna</u> say cool but then that sounds like a really basic word ((laughs)) as in like I felt like you know people I admire so people who um I see people every day, stand up and talk about what they believe in and what they and <u>and</u> like it just feels like they have like so much oh power, even though they're like my age or maybe a little bit older, because they have so much power and like so much like control over what they do and like they feel like they can, like it looks like they can change everything. <u>So</u> I tried to do something like that. When I was <u>reading</u> I felt like that. Like, I wouldn't know how it felt <u>like</u> but it just felt like ((pause)) me like having some sort of cos for years I've um for years um I've had no control over it. But then now it seems like now we're older we <u>can</u> do something about it. It's just like that's how it felt but I don't know if that's how I felt it.</p> <p><u>Facilitator 56:20</u> It felt like you were in you had some control.</p> <p><u>Rey 56:22</u> ((in overlap)) <u>Yes</u> some control</p> <p><u>Facilitator 56:23</u> And it felt like you had some</p> <p><u>Rey 56:24</u> Like my voice can do something like my words and which is what I wanted to do like my words do help people ((laughs)) and maybe this ((do something)). It sounds <u>really crazy</u>.</p>	<p>Small changes can make a big difference</p> <p>Valuing standing up and talking about what you believe in The importance of voicing your beliefs</p> <p>Having power through voicing your beliefs</p> <p>Feeling like you have control over what you do by speaking out Feeling power and control <u>in spite of</u> age The importance of feeling able to change things Importance of seeing role models like yourself who can enact change</p> <p>Feeling her voice can create change The feeling of being able to help people by speaking out</p>
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<p>2105. Facilitator 56:35</p> <p>2106. No that's fine. Does anyone have any, any, any comments for Rey or anything about</p> <p>2107.</p> <p>2108.</p> <p>2109. Sara 56:45</p> <p>2110. That was really good</p> <p>2111.</p> <p>2112. Rey 56:49</p> <p>2113. Thank you</p> <p>2114.</p> <p>2115. Sara 56:49</p> <p>2116. Inspiring</p> <p>2117.</p> <p>2118. Carrie 56:50</p> <p>2119. Sara do you wanna do yours?</p> <p>2120.</p> <p>2121. Facilitator 56:51</p> <p>2122. Do you want to do yours? And how do you do you want to try sitting in a</p> <p>2123. Daisy do you want to come join us sitting or do you want to stand there and</p> <p>2124.</p> <p>2125. Sara 56:58</p> <p>2126. ((in overlap)) I feel</p> <p>2127.</p> <p>2128. Facilitator 56:58</p> <p>2129. we'll, we'll be it kind of gives us a feeling doesn't it of um</p> <p>2130.</p> <p>2131. Sara 57:03</p> <p>2132. I feel superior</p> <p>2133.</p> <p>2134. Facilitator 57:04</p> <p>2135. Oh you feel quite superior</p> <p>2136.</p> <p>2137. Group together 57:07</p> <p>2138. ((Group laughter))</p> <p>2139.</p> <p>2140. Sara 57:07</p> <p>2141. I will just direct it to Mrs Hail so ((that)) some parts at the end.</p> <p>2142.</p> <p>2143. Facilitator 57:13</p> <p>2144. We could always look at her very directly when you say those bits. Really</p> <p>2145. look at her.</p> <p>2146.</p> <p>2147. Sara 57:20</p> <p>2148. Dear Miss Hail. I hope this letter finds you well. I'm writing in regards to a</p> <p>2149. recent study me and my fellow researchers have been doing for the last six</p> <p>2150. weeks helping Miss Togneri with her own research on how climate change</p> <p>2151. affects young people's mental health and well being. I believe our ideas will</p> <p>2152. make you consider climate change from a different perspective. As the</p>	<p>Group support</p> <p>Group encouragement</p> <p>Belief in their power to change opinion of staff: self-efficacy Common student-headteacher interest</p>	<p>2153. respective he- head teacher of our school I believe that our futures must be</p> <p>2154. close to you. Therefore, you must understand the weight of climate change</p> <p>2155. on my generation's shoulders, and you do understand our struggle. In the</p> <p>2156. past two years our school has made some really good improvements. For</p> <p>2157. example, we have started to recycle. Certainly, climate change is not a</p> <p>2158. surprise to anyone. At least it shouldn't be. We have seen its effects for</p> <p>2159. over one hundred years still today as I'm speaking to you no major action</p> <p>2160. has taken place. There are still people who deny the overwhelming</p> <p>2161. evidence, but no matter how long they choose to ignore it no one can await</p> <p>2162. destruction. At least my generation can't. You or our parents, grandparents,</p> <p>2163. and many politicians on the other hand will never live to see our situation</p> <p>2164. worsen, to see when the apocalypse starts. But I'm asking you to not ignore</p> <p>2165. the signs to not ignore our future. My future. The last weeks have been</p> <p>2166. really eye opening for me. Before meeting all these amazing people I felt</p> <p>2167. powerless, and alone with my views, worries about clima- worries about</p> <p>2168. climate change. I was made fun of and called Greta Thunberg for speaking</p> <p>2169. out loud for defending my opinion. I know for a fact that I am not the first</p> <p>2170. one, and sadly will not be the last one to experience it. That should not be</p> <p>2171. the reality to anyone in our school, in my year. Around a week later on a</p> <p>2172. Thursday afternoon I entered the geography room to find out I wasn't</p> <p>2173. alone, surrounded by all the great people who care. Everyone not is</p> <p>2174. everyone ((laughs)) not just the people worried about our environment</p> <p>2175. have the right to feel like they belong. I believe that is the school's duty to</p> <p>2176. stop shaming people for their beliefs and start to give better education.</p> <p>2177. People are scared of the unknown. We can't change the past, but we can</p> <p>2178. change the future, educate more people, spread more reliable information.</p> <p>2179. Make sure everyone knows, and more importantly understands what they</p> <p>2180. can do to help, to make a change. It's the little everyday things we can all</p> <p>2181. do. It's the little things that eventually add up to make the biggest change.</p> <p>2182. You can make a change for the better future. Better tomorrow. So now I'm</p> <p>2183. asking, what will you do?</p> <p>2184.</p> <p>2185. Group together 1:00:37</p> <p>2186. ((Group clapping))</p> <p>2187.</p> <p>2188. ((pause))</p> <p>2189.</p> <p>2190. Mr Snow (teacher sitting in) 1:00:38</p> <p>2191. ((inaudible)) ((laughs))</p> <p>2192.</p> <p>2193. Facilitator 1:00:38</p> <p>2194. I don't know what to say now. ((laughs)) Oh, wow, okay. Well, it ends with a</p> <p>2195. really powerful what I'm thinking that ended with such a powerful</p> <p>2196. question, so nice as well. You can think about the order you'd like to</p> <p>2197. present your letters in. ((pause)) Do you want them to answer that</p> <p>2198. question? Do you want th- do you feel like it's important for them to even I</p> <p>2199. don't know in some way, write it down or say it or?</p> <p>2200.</p>	<p>Generational divide: weight on shoulders of young people What young people see: school starting to recycle</p> <p>Strength of expression: "overwhelming", "destruction", "apocalypse" Generational divide: who will live with climate change Generational divide: futures</p> <p>Group experiences leading to new understandings: "eye opening" The social cost of voicing environmental care: shamed for holding a different belief The significance of learning that you are not alone The group as a place to belong Finding my group: contained and supported by others who care A need to support others who feel alone The responsibility of the school: peer reactions and education The importance of education: solutions</p> <p>Small changes can make a big difference</p> <p>Group support and encouragement</p>
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<p>2201. Sara 1:01:07 I think it's more like rhetorical question it will make people think</p> <p>2202.</p> <p>2203.</p> <p>2204. Facilitator 1:01:12 Yeah to make for you, not to worry about to make them think about it.</p> <p>2205. Yeah, they'll go on. They did I liked the way as well you kind of brought up</p> <p>2206. the changes for yourself how you felt um because I think that makes it</p> <p>2207. particularly powerful and it builds that kind of connection as well doesn't it</p> <p>2208. which is as well. Yeah. You've got two really powerful letters already. You</p> <p>2209. you're thinking, which is fine and that was it's absolutely fine. Shall we've</p> <p>2210. got about four minutes or so that's okay. ((pause)) Um I think it'd be quite</p> <p>2211. good to work out who wants to do what for to prepare for Tuesday</p> <p>2212.</p> <p>2213.</p> <p>2214. Carrie 1:02:03 Yes I feel that one person should do the Power Point because I feel like</p> <p>2215. somebody might make a Power Point and somebody might change it and it</p> <p>2216. might annoy somebody.</p> <p>2217.</p> <p>2218.</p> <p>2219. Sara 1:02:13 Why don't we all do like few slides.</p> <p>2220.</p> <p>2221.</p> <p>2222. Carrie 1:02:16 I feel like somebody could like just do it and then we all have to say, "that's</p> <p>2223. good". Just say oh, we should change that quickly change this. So everyone</p> <p>2224. has a say on it but just somebody who's good at doing. I know I won't have</p> <p>2225. time to make a PowerPoint this week or but like as well.</p> <p>2226.</p> <p>2227.</p> <p>2228. Facilitator 1:02:34 Will will anybody have time to make PowerPoint is a good idea but I'm just</p> <p>2229. wondering, do you have time to make PowerPoint because if you don't you</p> <p>2230. don't you know that's okay you didn't have to kind of</p> <p>2231.</p> <p>2232.</p> <p>2233. Rev 1:02:45 I might I can see</p> <p>2234.</p> <p>2235.</p> <p>2236. Carrie 1:02:49 Sara's really good</p> <p>2237.</p> <p>2238.</p> <p>2239. Sara 1:02:51 I can find some time</p> <p>2240.</p> <p>2241.</p> <p>2242. Facilitator 1:02:53 You think you might have time to collaborate, so you might have time, but</p> <p>2243. only those who feel that they have you know</p> <p>2244.</p> <p>2245.</p> <p>2246. Sara 1:03:04 Those like all we need to, like how many slides do you want you just make</p> <p>2247. one little PowerPoint yourself then send pictures. I'll just put it into one. So</p> <p>2248.</p>	<p>Collaborative group</p> <p>Manageability: students having time</p>	<p>2249. send me kind of the ((inaudible)) learn how to speak to the PowerPoint and</p> <p>2250. it's not like a</p> <p>2251.</p> <p>2252. Carrie 1:03:19 I can like message</p> <p>2253.</p> <p>2254.</p> <p>2255. Mr Snow 1:03:20 I don't know if you know how teams works but I've just made a blank</p> <p>2256. PowerPoint on the files section of the team page.</p> <p>2257.</p> <p>2258.</p> <p>2259. Sara 1:03:29 Yeah we could all like add a few like slides</p> <p>2260.</p> <p>2261.</p> <p>2262. Mr Snow (teacher sitting in) 1:03:31 So if you just put what you want and then Sara can organise it.</p> <p>2263.</p> <p>2264.</p> <p>2265. Carrie 1:03:35 ((In overlap)) Yeah cos. Yeah cos I'm not good at making PowerPoints. I</p> <p>2266. know you're good at making them</p> <p>2267.</p> <p>2268.</p> <p>2269. Sara 1:03:57 Yes</p> <p>2270.</p> <p>2271.</p> <p>2272. Carrie 1:03:56 Only because only because for the Welsh Bacc we needed to do a big like</p> <p>2273. Power Point and Sara's really good at making it</p> <p>2274.</p> <p>2275.</p> <p>2276. Facilitator 1:04:06 Okay, so you know, oh lovely. So this is your that's what you're gonna have</p> <p>2277. that to give</p> <p>2278.</p> <p>2279.</p> <p>2280. Carrie 1:04:13 Give to the teachers</p> <p>2281.</p> <p>2282.</p> <p>2283. Facilitator 1:04:13 So is somebody gonna stand there to hand them out? ((inaudible)) to give</p> <p>2284. the detail.</p> <p>2285.</p> <p>2286.</p> <p>2287. Carrie 1:04:18 Yeah someone will hand them out</p> <p>2288.</p> <p>2289.</p> <p>2290. Facilitator 1:04:19 So who is going to be the handing out person</p> <p>2291.</p> <p>2292.</p> <p>2293. Carrie 1:04:20 ((In overlap)) I don't mind doing that</p> <p>2294.</p> <p>2295.</p> <p>2296. Facilitator 1:04:22</p>	<p>Facilitating action</p>
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2297.	Carrie great	
2298.		
2299.	<u>Mr Snow (teacher sitting in) 1:04:22</u>	
2300.	You might just <u>wanna</u> check the questions though so for example "when	Teacher offering support
2301.	did you learn about climate change before you came to South Wales High?"	
2302.	you might just want to	
2303.		
2304.	<u>Carrie 1:04:30</u>	
2305.	Maybe have you taught anything about.	
2306.		
2307.	<u>Facilitator 1:04:40</u>	
2308.	<u>Oh</u> that's nice	
2309.		
2310.	<u>Mr Snow (teacher sitting in) 1:04:32</u>	
2311.	What I'll do is I'll pop I'll put it in the same <u>place</u> and you can edit it	
2312.		
2313.	<u>Rey 1:04:38</u>	
2314.	Yeah, have you taught cos I think people are ((inaudible))	
2315.		
2316.	<u>Carrie 1:04:43</u>	
2317.	<u>Yeah</u> and then like	
2318.		
2319.	<u>Rey 1:04:44</u>	
2320.	Even Miss Hail has taught people so	
2321.		
2322.	<u>Facilitator 1:04:48</u>	
2323.	Okay, so somebody, so you're all <u>gonna</u> have a look at all also just <u>gonna</u> ,	
2324.	have a look, you're <u>gonna</u> go in and have a look at the questionnaire as well	
2325.		
2326.	<u>Carrie 1:04:56</u>	
2327.	yeah <u>yeah</u>	
2328.		
2329.	<u>Facilitator 1:04:56</u>	
2330.	Happy with that. Okay so Sara's heading up the PowerPoint	
2331.		
2332.	<u>Sara 1:04:56</u>	
2333.	<u>Yeah</u> but if everyone can like do some	
2334.		
2335.	<u>Facilitator 1:05:03</u>	
2336.	Just put a bit in.	
2337.		
2338.	<u>Sara 1:05:07</u>	
2339.	Put the titles	
2340.		
2341.	<u>Daisy 1:05:08</u>	
2342.	<u>Yeah</u> I've got quite a lot to do to get ready for Duke of Edinburgh on	
2343.	Monday.	
2344.		

2345.	<u>Facilitator 1:05:14</u>	
2346.	Of course. And remember you don't have to tell them everything.	
2347.		
2348.	Group <u>together 1:05:19</u>	
2349.	No <u>oo</u>	
2350.		
2351.	<u>Facilitator 1:05:21</u>	
2352.	Just you can choose you can choose something that you thought was	
2353.	important for you or whatever it is.	
2354.		
2355.	<u>Carrie 1:05:27</u>	
2356.	Cos the them and us thing we could put down not the whole conversation.	
2357.		
2358.	<u>Facilitator 1:05:35</u>	
2359.	You could just tell them a bit about that. Yeah. And what was the other	
2360.	thing, you've got the questionnaire going out you've got the Power Point.	
2361.	Oh, you did say <u>as well</u> you wanted to do, you wanted to ask them how they	
2362.	feel, was it how they feel about climate change or how they feel at the end,	
2363.	or what do you want to	
2364.		
2365.	<u>Daisy 1:05:53</u>	
2366.	Er how do they feel at the end.	
2367.		
2368.	<u>Sara 1:05:54</u>	
2369.	Should we like ask it at like the start	
2370.		
2371.	<u>Rey 1:05:54</u>	
2372.	This is what I mean	
2373.		
2374.	<u>Daisy 1:05:54</u>	
2375.	<u>Yeah</u> then at the end	
2376.		
2377.	<u>Facilitator 1:05:59</u>	
2378.	<u>So</u> you're <u>gonna</u> just is one of you just <u>gonna</u> say that to them we'd just like	
2379.	you to think about	
2380.		
2381.	<u>Carrie 1:06:03</u>	
2382.	<u>Yeah</u> Daisy and Rey can say that	
2383.		
2384.	<u>Facilitator 1:06:05</u>	
2385.	Okay, so you're on there how they, how they feel, is it, are you asking how	
2386.	do you feel about climate change or how do they feel about coming in?	
2387.		
2388.	<u>Rey 1:06:15</u>	
2389.	"How do you really feel about" ((pause)) hmm	
2390.		
2391.	<u>Carrie 1:06:20</u>	
2392.		

2393. "What do you think" "do you" like maybe a question that they could like
 2394. change after they we have shown them everything
 2395.
 2396. [Rey 1:06:29](#)
 2397. "Do you have any, do you have any press- is your, Do you have any pressing
 2398. like not pressing concerns as like in specific questions like, as an overall do
 2399. y-, have you got Have you got a concern for, like, are you concerned that
 2400. climate change is going to be affecting like the youth and if it was like out of
 2401. one to ten
 2402.
 2403. [Facilitator 1:06:49](#)
 2404. Give them a scale?
 2405.
 2406. [Carrie 1:06:50](#)
 2407. Maybe like yeah
 2408.
 2409. [Facilitator 1:06:52](#)
 2410. Do you want to draw it on a big bit of paper? They could mark themselves
 2411. where they are
 2412.
 2413. Unknown group [member 1:06:56](#)
 2414. Yeah
 2415.
 2416. [Facilitator 1:06:57](#)
 2417. And then see if they see if they've changed. I don't know, oh there we are
 2418.
 2419. [Mr Snow \(teacher sitting in\) 1:07:04](#)
 2420. I was just thinking is that ok?
 2421.
 2422. It just says
 2423.
 2424. [Facilitator 1:07:13](#)
 2425. Yeah.
 2426.
 2427. [Mr Snow \(teacher sitting in\) 1:07:14](#)
 2428. 45 minutes should be about right
 2429.
 2430. [Carrie 1:07:15](#)
 2431. I was going to ask [Mr Rain](#)
 2432.
 2433. [Mr Snow \(teacher sitting in\) 1:07:19](#)
 2434. [Yeah](#) on this is [Mr Rain](#), [Mr Ice](#), [Mr Sleet](#), Miss Gale, and obviously [Mrs Hail](#)
 2435. so that's five.
 2436.
 2437. [Carrie 1:07:28](#)
 2438. Yeah, and we can move the tables a bit [more](#) so we have a bit more space.
 2439.
 2440. [Facilitator 1:07:31](#)

2441. You can yes what we can do is if we come in, well you can come a bit earlier
 2442. so we can be whatever we can, depends how early you want to be here
 2443. obviously you might be in classes but, if you, you know, if you want me to
 2444. come in a bit earlier so you can run through it, if it was it [depends](#) what
 2445.
 2446. [Mr Snow \(teacher sitting in\) 1:07:51](#)
 2447. [Yeah](#) there's a class in here and then they go at twenty to so
 2448.
 2449. [Facilitator 1:07:55](#)
 2450. They go at twenty to
 2451.
 2452. [Carrie 1:07:56](#)
 2453. We can set it up
 2454.
 2455. [Daisy 1:07:58](#)
 2456. I've got chemistry
 2457.
 2458. [Rey 1:08:00](#)
 2459. I'm down in English so I'm not far
 2460.
 2461. [Oh](#) I might be doing more rubbish so I'm doing the recycling thing so
 2462.
 2463. Group together [1:08:10](#)
 2464. ((inaudible group talk))
 2465.
 2466. [Sara 1:08:10](#)
 2467. I have art but I have completed so like I can
 2468.
 2469. [Facilitator 1:08:44](#)
 2470. [So](#) we can be here from twenty to so that's fine you can get set up. [So](#) I
 2471. think I think you know what you're doing
 2472.
 2473. [Rey 1:08:53](#)
 2474. Yes
 2475.
 2476. [Facilitator 1:08:53](#)
 2477. I'm [gonna](#) send an email to Bobbie just to check [whether or not](#)
 2478.
 2479. [Rey 1:08:57](#)
 2480. ((in overlap)) I'm not sure
 2481.
 2482. [Facilitator 1:08:58](#)
 2483. she [wa-](#) just to check out what her situation is.
 2484.
 2485. [Rey 1:09:01](#)
 2486. I texted her
 2487.
 2488. [Facilitator 1:09:03](#)

2489.	<u>Oh</u> you texted her a	
2490.		
2491.	<u>Rey 1:09:04</u>	
2492.	I haven't had a reply or anything	
2493.		
2494.	<u>Carrie 1:09:05</u>	
2495.	Did you say she had written something?	
2496.		
2497.	<u>Rey 1:09:08</u>	
2498.	She said she had written a letter.	
2499.		
2500.	<u>Facilitator 1:09:09</u>	
2501.	<u>Oh</u> has she that's wonderful	
2502.		
2503.	<u>Rey 1:09:11</u>	
2504.	She didn't she's like <u>yeah</u> I'm not sure she's listened but she said so <u>so</u> I'm	
2505.	just assuming	
2506.		
2507.	<u>Carrie 1:09:18</u>	
2508.	I'll message her on teams	
2509.		
2510.	<u>Facilitator 1:09:19</u>	
2511.	Even if she can't come if she would like her letter to be given. Oh, you	
2512.	know, she could, she could still be involved just even she can't be there she	
2513.	could have thoughts shared. Okay. Is everything okay? And you two you	
2514.	two <u>kind</u> of think about the how they feel. You're <u>gonna</u> do a scale, a scale	
2515.	for them, and do you want, they could have their own one? I don't know	
2516.	whatever they want.	
2517.		
2518.	<u>Daisy 1:09:56</u>	
2519.	((inaudible))	
2520.		
2521.	<u>Carrie 1:09:56</u>	
2522.	Name <u>name</u>	
2523.		
2524.	<u>Facilitator 1:09:57</u>	
2525.	Oh, that's a very good question. What's your name what are you saying	
2526.	what are you?	
2527.		
2528.	<u>Daisy 1:10:02</u>	
2529.	We could just all call it the climate change research group.	
2530.		
2531.	<u>Carrie 1:10:13</u>	
2532.	Yeah. Yeah. We could call it Young Students' Say on Climate.	Importance of voice: in their group name
2533.		
2534.	<u>Group together 1:10:29</u>	
2535.	((inaudible group talk))	
2536.		

2537.	<u>Daisy 1:10:31</u>	
2538.	Thank you	
2539.		
2540.	<u>Facilitator 1:10:36</u>	
2541.	No problem you know, everyone knows what they're doing? And	
2542.	remember if you want to take your data out you can in the next two weeks	
2543.	before <u>before</u> I transcribe it.	
	Transcribed by https://otter.ai and then checked against audio and edited by Facilitator.	

Post inquiry session reflection for YP5 using skills and validity criteria as questions:

Riley & Reason (2015) highlight the importance of group processes and have included quality criteria specific to group processes (p.187). I have adapted these for post-session reflection. I am also drawing on Chiu (2006): “Reflection on the participatory process, analysis of power dynamics and researcher reflexivity are often missing.” (p.187).

Being present and open: How much was I able to be open to the meaning myself and others put into our discussion and found from it?

I have noticed from transcription that I had misinterpreted a comment from one of the group asking to take something she had said out (this has been done). I had interpreted her comment as what she took away (the takeaway message) rather than to take something away – suggesting to me that I was not fully present to the meaning – this has made me wonder about the rest of the time?

Bracketing and reframing: What assumptions and constructs did I notice in this session? Was I able to reframe them or try out different constructs?

An assumption from one of the group was that they need to encourage action by the school leaders – this is a slightly different assumption about the purpose of the meeting – but interesting in itself about what this young person wants to happen. Our action in talking to the headteacher and others was originally meant to share what they have been doing and what they have found out about themselves and what supports them – however, we clearly have different purposes in this.

What are my assumptions and constructs?

I had assumed that we all were coming at this next meeting with the same broad point of view.

Radical practice and congruence: Was I aware during the exploratory activities of connections between my purpose as a researcher in this inquiry and person interested in taking climate action, how I frame things, the norms and theories I bring, the feeling of doing the action and things going on in the outside world?

I continue to be more aware of climate news. I am aware that as we explored and actively tried out ideas for the presentation that I could see that some of the group were really keen on encouraging action from the adults – not perhaps explaining the link to their own ways of managing difficult feelings around climate change.

Consider convergence and divergence: are we looking at the same thing several times or looking at different issues in successive cycles?

We are continuing to think about: do others care?

Authentic collaboration. Did anyone dominate the discussion, or were any voices left out?

Rey still contributes the most, though Carrie is now also very talkative. I have used rounds every session to ensure everyone gets some time speaking -and often check in with Daisy to ensure she has the space to share if she wants.

Challenging consensus collusion: Anyone in the group can question the group at any time to check for collusion, by asking devil’s advocate questions – why should we...?

I don’t think this happened (but I did check whether they really had time for a PowerPoint/ whether this was needed).

Managing distress: See check in section of our sessions – this is our “regular method for surfacing and processing repressed distress” (Riley & Reason, 2015, p.188).

Reflection and action: What was the balance like between reflection and action?

Reflection was key to the session – reflecting on the impact of the questionnaire – a big action from last week. However, we were also active in exploring possibilities and sections of the presentation. Feeling in an embodied way the impact of doing it – trying out wording, trying out sharing individual letters. We also looked at the image and video of the Mexico gas leak with the sea on fire – direct experience – and spoke directly about what it is like to view that – immediate reflection.

Chaos and order: What was the sense of chaos and order in this session?

It felt disordered at the start as they explored how they felt today. This was in part due to the fact that they needed to attend to personal needs (phone call home etc) just after this task was introduced. The arrangement of the group in the room was haphazard then, adding to the informality, but possibly to a sense of chaos and less focus? I drew us back in the arrangement of the chairs by forming a circle. This focused us for reflecting on the questionnaire. The session then became more chaotic again as we explored the possibilities of presentation actively – acting out sections trying out positioning and wording and reflecting on it.