

WHAT CAN I DO?

Reimagining how adult education in-service teachers can be supported to develop their praxis in education/ learning for sustainability through voices from the global and local frontline

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Abstract

The escalating climate and environmental crises require all parts of the education system to contribute to a just transition. If adult education in England is to purposefully engage with education and learning for sustainability, the question arises, 'How can in-service adult educators be supported to develop their praxis in education/learning for sustainability?'

Using an extended transformative learning theory lens, this thesis considers the reflections of adult educators whose insights were gathered at two education/learning for sustainability development projects—one global, one local.

Key findings reveal a range of challenges and dilemmas, learning, and changes to praxis, as well as the future hopes of these adult educators when considering 'What can I do' [in education/learning for sustainability]? Drawing on the data and considering a future refocusing and purposing of adult education in England, the thesis re-imagines a future-oriented, transformative and regenerative model for adult educator praxis development in education/learning for sustainability, through proposing the Teacher Development Goals model. A new framing of the role(s) of adult educator supports the Teacher Development Goals alongside the identification of ten tasks for adult educators in education/learning for sustainability. The thesis also presents a new green research framework for future research projects in education.

Acknowledgements

Music had been my constant companion through the writing of this thesis. I have therefore dedicated a track to all the people who have helped me and supported me along the way. I have indicated below, the tracks and where you can listen to them.

This thesis is dedicated to all those who work in our amazing sector, in particular the adult educators who so brilliantly represent us all through their voices and reflections in this research. I see you and recognise the importance of your work and the way it transforms lives; our time is now. **Empire of the Sun (2008) *We Are the People*.**

[Sound recording]. EMI Australia.

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List of abbreviations, acronyms, and initialisms

Abbreviation in this thesis	Abbreviated term
AE	Adult education
AE/LfS	Adult education/learning for sustainability
AFE	Adult (and) further education
AFE/LfS	Adult (and) further education/learning for sustainability
ALE	Adult learning and education
APCEIU	UNESCO Asia-Pacific Centre of Education for International Understanding
CoEU	The Council of European Union
COP	[United Nations Framework Convention on Climate Change] Conference of the Parties
CPD	Continuing professional development
CSCT	Curriculum Sustainable Development Competencies and Teacher Training
CSET	Curriculum sustainable development and teacher training
DfE	[UK government] Department for Education
EAUC	EAUC: The Alliance for Sustainability Leadership in Education (2020)
EEF	Education Endowment Foundation
E/LfS	Education/Learning for Sustainability
ESD	Education for Sustainable Development

Abbreviation in this thesis	Abbreviated term
ETF	Education Training Foundation
EU	European Union
FE	Further Education
FHS	[Danish] folk high schools
GC	Green changemakers project
GCED	Global Citizenship Education
GFE	[United Kingdom] General Further Education College
GRALE	[UNESCO] Global Report on Adult Learning and Education
GRETA	European research and development project that aims to create cross-institutional recognition processes for adult and continuing education teachers' competences.
GRFfE	Green research framework for education
IALs	Institutes for adult learning
IPBES	The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPCC	[United Nations] Intergovernmental Panel on Climate Change
ITT	Initial teacher training
LA	[United Kingdom] local authority
L&WI	Learning and Work Institute
LFS	Learning for sustainability

Abbreviation in this thesis	Abbreviated term
LSIP	Local skills improvement plan
LSD	Learning for sustainable Development
NIACE	National Institute of Adult Continuing Education
n.p.	No page number. This referencing abbreviation is used in-text following the year of publication for web-based publications where there is no page number and, in the bibliography, when page number information is incomplete.
NVQ	[UK] National Vocational Qualification
PD	Professional development
PFL	People's Future Lab project
PrD	Praxis development
PST	Pre-service elementary teacher
RTA	Reflective thematic analysis
SDGs	United Nations Sustainable Development Goals /Global Goals
SET	The Society for Education and Training , part of the Education Training Foundation
s.l.	<i>sine loco</i> referencing abbreviation used in the bibliography when there is no known place of publication.
s.n.	<i>sine nomine</i> referencing abbreviation used in the bibliography where there is no obvious publisher.
SSESD	Specialist Status in Education for Sustainable Development
TA	Thematic [data] analysis

Abbreviation in this thesis	Abbreviated term
TDGs	Teacher Development Goals
TL	Transformative learning
TLT	Transformative learning theory
UIL	UNESCO Institute for Lifelong Learning
UK	United Kingdom
UN	United Nations
UNCC: Learn	One United Nations Climate Change Learning Partnership
UNECE	United Nations Economic Commission for Europe
UNESCO	United Nations Educational, Scientific and Cultural Organization
US or USA	United States of America
WEA	Worker's Educational Association
WWF	World Wide Fund for Nature
YTS	Youth Training Scheme

Alphabetical list of abbreviations, acronyms and initialisms used in this thesis

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Chapter 1: Introduction

“Nevertheless, she persisted”

1.1 What can I do?

What can I do? Is a question I have considered since I was a teenager first engaging in social justice activism. The interrelated social, environmental and climate crises which engulf our world currently, continually challenge my answer to this question in both my personal and professional life.

The scientific community and the annual Intergovernmental Panel on Climate Change (IPCC) report that the world is likely to exceed 1.5°C in the early 2030's without deep, immediate emissions cuts (IPCC ,2023). The Conference of the Parties (COP), year on year, demonstrates the refusal of the Northern Hemisphere to take account of and responsibility for its historical actions and financially support the global south, which is at the forefront of the climate and environmental emergency (IPCC, 2022). War and genocide are in our news every day. Extreme and devastating weather events are now on our doorsteps. The biodiversity of the planet and the species that dwell on it are disappearing at alarming rates (Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, 2019; World Wide Fund for Nature, 2022).

Environmental social movements of recent years, whose methods included non-violent direct action, civil disobedience and mass mobilisation for change, have been quieted by our governments (Liberty, 2022; Pickard, 2023). My experience of our education systems and the people who work in them is one of ongoing depletion

(Education Policy Institute, 2023; Freedman, 2024; Institute for Fiscal Studies, 2024). Yet there is a small, but growing group of educators, civil society actors, community activists and others who persist (for example, Ella Baker School of Organising, XR Educators, Transition Together and Great Transitions Network)—I count myself among them.

Debates around the role and purpose of education in supporting a just transition to a more sustainable world can be traced back over fifty years (Schumacher, 1973) Orr (2004) and Sterling (2024) exemplify the many writers who (for decades now) lament the lack of actual change and impact in terms of living and learning more sustainably as a global society. What is clear to me is that any contribution towards the transition to a just and sustainable world requires social and cultural change as well as technical and scientific solutions and this shift must be holistic, and rooted in both social and planetary justice. It must pay attention to addressing inequalities, preventing the continual recreation of these in our systems and contexts.

All parts of the education ecosystem have a responsibility and a part to play in this transition. For adult education, this requires an urgent need to reframe its historic social purpose. Further, it requires education and learning that is transformative to support the level of social learning required, and this particularly relates to adult education in its widest context. It will require a transformative learning revolution. For educators and teachers also, across all curriculum areas and levels of learning. They are, as this thesis will argue, a critical part of this change and have the potential to contribute greatly to a just transition (United Nations Educational, Scientific and Cultural Organization, 2009; 2017a).

Yet, in the school sector in England, the government Department for Education (DfE) explicitly tells teachers they must maintain an impartial stance on political issues (DfE, 2022a). In the adult education sector, where this research is located, educators and teachers are largely ignored. The lack of any policy formulations on adult education or its workforce in the Post 16 FE and Skills White paper published in November 2025 is but the most recent demonstration (DfE, 2025). Adult education in England is facing an existential, ideological and participation crisis (Evans, 2025).

What I see now more than ever before is a crisis of identity and imagination in the possibilities of what adult education can contribute to our world.

**An open letter from Melanie Lenehan to adult educators,
Originally written in 2021**

Dear Colleagues

After an incredibly tough two years, and as we move towards and start to look to the future, I wanted to share some personal and professional reflections on what "being" and "becoming" an adult educator is in our current social and global context. My reflections have many questions and challenges to ourselves as adult educators. The intention is not despair but hope for a collective endeavour to come together to explore these ideas and thoughts further.

I'd just like to take a moment to remind you that what we do matters. It matters to our students, and it matters to our world. So, I'd like to say thank you and hope that our collaborative efforts, both now and in the future, to meet the many challenges of our world, within our classrooms and through our work with our students, might inspire others.

I believe it's time for us as adult educators to change the conversation. We need a focus on the future and the incredible challenges that lie ahead of us and future generations. But let's not forget our past. Let's reclaim our social purpose as a sector, let's stand for social and planetary justice. Let's not wait for it to happen through strategies and policies defined by those with and in power. Let's challenge ourselves to do more. Let's create hope, and at the same time, hope for more.

After twenty-five years of working in adult education in England, what I see now more than ever before is a crisis of identity and imagination in the possibilities of what adult education can contribute to our world. The external view of adult education has been reduced to measurable impacts and outcomes of educational interventions, which, if they do not contribute to economic productivity and growth, have no value, purpose, or meaning. The pervasive neo-liberal, advanced capitalist ideology is manifested in education policy, funding and the compliance regimes that engulf us, haunt our classrooms, our identity and our agency as adult educators.

What I know for certain is that the tensions will continue to heighten between old paradigms and new perspectives, which seek transformative transitions for "collective sustainable futures". Our work as adult educators surely is not just about interventions, correcting the deficiencies in the other parts of the education ecosystem, but transitions, hope and imagining new futures. Our work is participating in and creating moments of learning in individual and collective transformative change. Not just for our students, but also for ourselves.

Figure 1: My (2021) open letter to the adult education sector (reproduced in appendix 1)

Regularly, in my professional role as Principal of an adult education college, I see the external policy-driven view of adult education in England reduced to measurable impacts and outcomes of educational interventions, which, if not contributing to economic productivity and growth, have no value, purpose or meaning (Smith and Duckworth, 2020a; 2022). How, in this context, can I, and other adult educators, begin to consider the answer to the question ‘What can I do?’, when:

The pervasive neo-liberal, advanced capitalist ideology manifested in adult education policy or the lack of it and the funding and compliance regimes that engulf us, haunt our classrooms, our identity and our agency as adult educators.

The quotation above is from the open letter I wrote to the adult education sector in 2021—a provocation that helped me decide to embark on this doctoral journey. My letter is reproduced in full in [appendix 1](#).

1.2 From my question to the research questions

Figure 2: The journey from 'what can I do?' to 'What can we do?'



Figure 2: From asking 'what can I do?' to 'What can we do?'

My thesis tracks the various questions, opportunities, doubts and discoveries as my question expands from ‘What can I do?’ to the more collegiate, more hopeful question of ‘What can we do?’ to re-imagine future support for the development of adult educators’ praxis in education and learning for sustainability (E/LfS).

1.3 Language matters

It’s important to be clear here about the language I use in this study because as Rushton (2025) states, language really matters. The language of sustainability itself is increasingly seen as contested. Griswold (2016:116) warns that the meaning behind using the language of sustainability can be transformative or transmissive, depending on its application. Language to describe sustainability has developed and changed over several decades. Challenges to the language and to the United Nations (UN, 2015) Sustainable Development Goals (SDGs) focus on the seemingly untenable contextualisation of sustainability within the development/growth economic imperative (Hickel, 2019; Raworth, 2017).

In this research, I use Education/Learning for Sustainability (E/LfS) as the preferred term but where citing sustainability and education policy, research or the literature uses the term Education for Sustainable Development (ESD) then that is what I will use.

1.4 The research questions

If adult education in England is to purposefully engage with E/LfS, the question becomes: not ‘what can I do?’ but one of **‘How can in-service adult educators be**

supported to develop their praxis in E/LfS?’ and to find out the answer, asking 3 inter-related research sub-questions:

- i. What are the perceptions of adult educators of the current challenges, globally and locally, in their E/LfS praxis?
- ii. What learning and praxis development do adult educators identify as a result of engaging in global/local transformative learning E/LfS development projects?
- iii. What could a future-oriented reimagining of in-service adult educator praxis development in E/LfS look like?

Working alongside two existing future-oriented teacher development projects, these are the questions I ask in this research to re-imagine what future support for the development of praxis in E/LfS could look like for in-service adult educators.

1.5 Opportunities: local and global

During my doctoral journey, and as part of my day job, I was involved in two future-oriented teacher development projects with adult educators around the subject of sustainability: One global, the People’s Future Lab (PFL). The other —Green Changemakers (GC)— local to where I work in the UK West Midlands region. The projects are described further in chapters 3 and 4.

Although these projects took place in different temporal and spatial contexts, each sought to explore and support the development of praxis in E/LfS. Both introduced and discussed different theoretical perspectives and allowed time to experiment with pedagogy and curriculum content. At the end of the projects, I invited participants to

join focus groups as my central research/data collection method. I am most grateful they said 'yes'.

1.6 Reality: The day job

My research presented me with what Gunter et al (2021:377) describe as the challenge of how, as doctoral researchers, professionals reflect on the “interplay between research, identities, values and the reality of the day job”. Reflecting this challenge my research process will be intentionally organic, reflexive and opportunistic.

My ongoing and long-time professional involvement with the Global Folk High School Movement and the Global Network for Folk High School Research is where I feel most connected and understood as an adult educator, activist and researcher. It is a space where I can consider the question ‘What can I do?’ with a shared purpose—feeling part of something bigger, where my values and ideas are respected and listened to. It is sometimes the only space where I can truly consider my own intentions and actions framed by Apple (2016: 505–515) as nine tasks for scholar activists in education:

1. bearing witness to negativity
2. pointing out contradictions and opportunities for action
3. broadening the definition of research
4. reconstructing elite knowledge for progressive needs
5. keeping radical traditions alive
6. critiquing those traditions when inadequate

7. acting in concert with progressive social movements
8. being a committed mentor
9. using one's scholarly privilege to serve the public good

These 'tasks' were my guide and framework for action throughout my Doctorate adventure. They frame my own praxis and steer the use of this term within this study.

What follows in this thesis reflects my personal journey in the midst of the multiple crises described above, to find hope, for the sector to which I have dedicated my career, to explore future possibilities and opportunities for those who work as educators within it, and for us to be able to answer both questions: 'What can I do?' and 'What can we do?'.

This has not been a linear quest. The research moments within this thesis have unfolded as my doctoral journey has progressed and intertwined with my working life. They are also a culmination of, to this point in time, a thirty- year career in adult education, working as a teacher, tutor-organiser, regional education manager and for the last ten years as a college principal.

Ask me who I am—I am an adult educator. Ask me what I do as an adult educator—I persist.

Chapter 2: Literature review

Adult education is intriguing, crucial, fragile and complex.
Professor Jon Torfi Johansson (2016)

2.1 Introduction

Intriguing, crucial, fragile and complex. AE is all of these things, so too adult educators, students and the planet. People and planet in the midst of climate and environmental crises. No small task then to review and make sense of the literature as I begin my doctoral journey. I sketched a plan. In my mind at first. Then as it grew, on big sheets of paper. Until, I had a map for my journey.

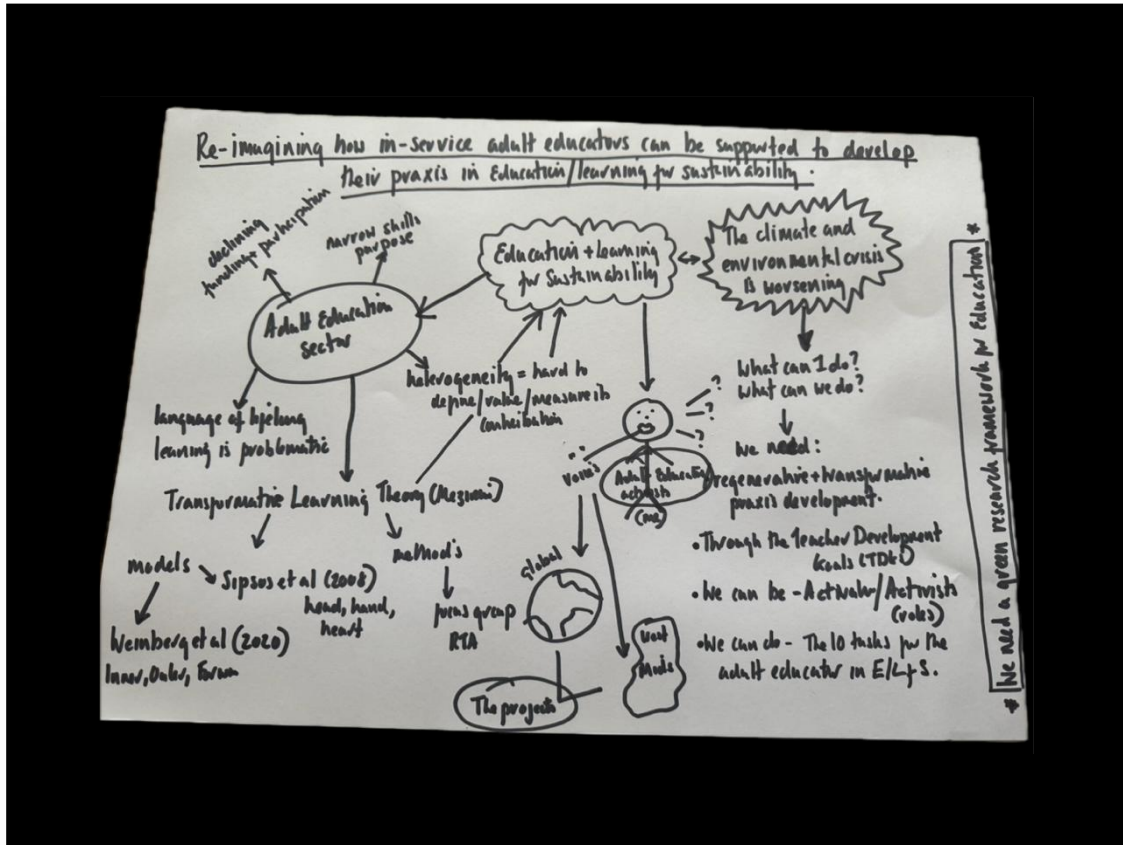


Figure 3: Where to look and what will I find?

This literature review and the rest of my thesis is the story of my journey and the stories of others I encountered and joined me along the way—reading what they have written, asking questions, listening, looking, capturing what I saw and heard, trying to make sense of it all to hopefully find answers to my quest

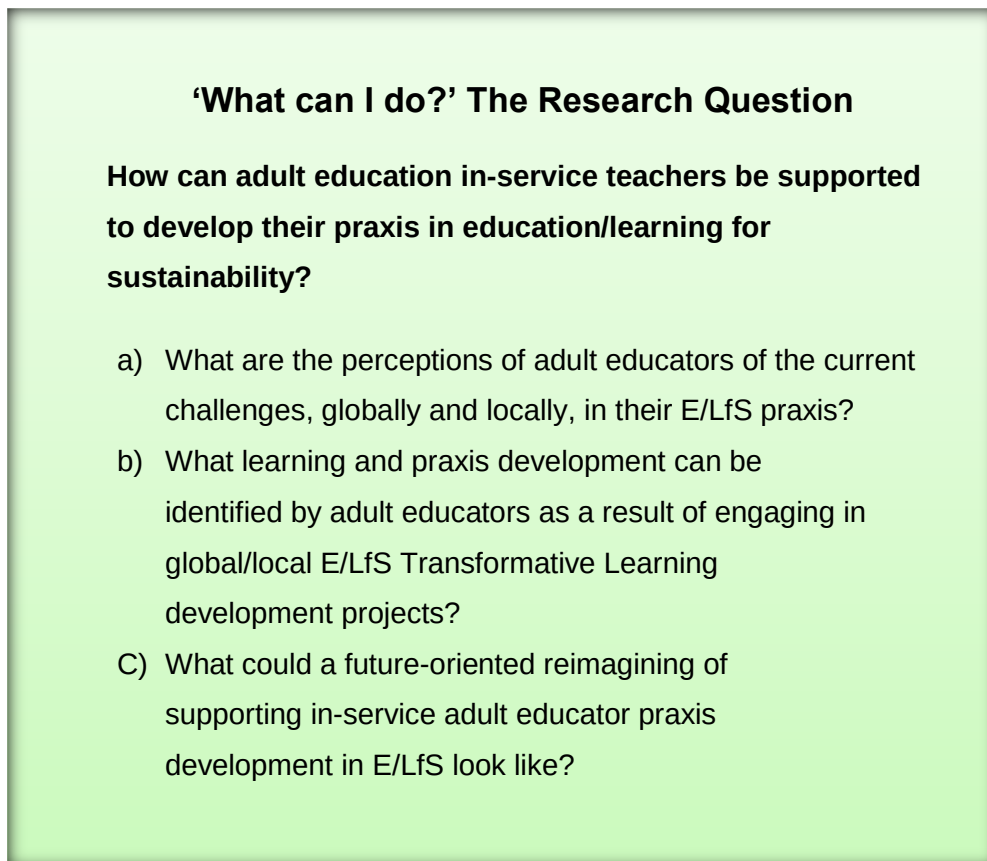


Figure 4 What can I do? The research question

First stop? This chapter will provide a brief contextualised overview of the AE sector in England through an historical lens. A lens that will reveal the loss of the sector’s original social purpose, the decline in central government funding, and a resulting profound fall in participation rates. Next, I will explore some of the published literature relevant to my research question.

2.2 Adult education in England: a brief overview

AE has a long history reaching back into the late 18th and 19th centuries (L&WI, 2025). Tuckett (2022: 3-4) describes AE as having a “tradition, culture and heritage distinctive from other parts of the post-16 education system and a history intertwined with social purpose and supporting social movements”. He describes, for example, how when the 9 Institutes of Adult Learning (IALs), like Fircroft College and the WEA, were founded it was on a model of pedagogy that positions students as rounded, whole human beings and how

In Britain, for example, adult education played such a role in the emergence and development of second-wave feminism, offering safe places for women who were not ready to go to women’s movement consciousness-raising groups to put their toes in the water and explore what the ferment of feminist debate meant for them. (Tuckett, 2015: 993)

With the 1960’s and 1970’s described by Holford et al (2022: 2) as the ‘heyday’.

A heyday no more. AE’s history is increasingly defined by a continual narrowing of its purpose most obviously beginning in the 1980s, when under the Conservative ideology of neoliberalism, the shift in government policy towards the language of employability started. For example, the then Department of Education and Science and the Department of Employment 1986 white paper, ‘Working Together: Education and Training’, sought to rationalise vocational education and strengthen collaboration between employers and colleges. It introduced National Vocational Qualifications (NVQ’s) and expanded the Youth Training Scheme (YTS) to tackle youth unemployment. Forty years later, and under a Labour government, the DfE Post 16 FE and Skills white paper (2025) is attempting to do the same.

In *Powerful Pedagogy*, the DfE (2025), considers case studies in pedagogical approaches in AFE. These are used to frame AFE pedagogy primarily as a driver of effective practice, emphasising adaptable teaching, supportive student relationships, and whole institution approaches that build learner confidence and improve measurable outcomes. In contrast, Smith and Duckworth (2022) position further education (FE) as a transformative space rooted in social justice, arguing that its pedagogy must be explicitly critical, dialogic, and values-driven to challenge dominant policy narratives and foster collective empowerment. Mulà and Tilbury (2023) in their work on Education for Sustainability offer a systemic dimension, presenting pedagogy as a lever for sustainability transitions through reflective practice, competency development, and institutional alignment with global challenges. These markedly different perspectives reveal a sector negotiating multiple possibilities for its purpose, values and pedagogical approaches: one centred on effectiveness and outcomes, another on hope and emancipation, and a third on systemic transformation towards sustainability.

The reality of the funding and policy context of AE today in England suggests a sector in crisis. At the heart of that crisis is the loss of its social justice purpose. Lazaridou and Papageorgiou (2011:4), argue that despite AE historically being concerned with improving social, economic and political conditions, the current focus on techniques, methodologies and strategies has made it into “a policy-formulated sphere, ... empty of ideals ...*[from which]* ... we need to reclaim our ideological foundations as adult educationalists”. How then does a sector which is chronically underfunded and lacking in purpose and imagination respond to the multiple crises facing the world today?

2.3 The role of (Adult) Education in Sustainable Development

Given these challenges, it's not surprising that the role and function of AE in E/LfS is not straightforward and contested. The debate on the role of education in meeting global sustainability goals goes back decades. Most recently it has been framed around achieving the United Nations (UN) 17 Sustainability Goals (SDGs) published in 2015 when they succeeded the earlier Millennium Development Goals.

SDG 4 seeks to “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” (UN, 2015: 18). In the UK, higher education (HE) institutions have taken the lead on the SDGs. The Universities of Manchester, Reading, Keele and Strathclyde all regularly top the Times Education SDG impact ratings (Peres, 2017). In 2022, DfE published its ‘Sustainability and Climate Change’ strategy, explicitly linking education to delivering progress towards the SDGs. The focus is mainly on schools and universities, requiring them to have a sustainability staff lead and publish a climate action plan.

The role of AE in achieving the SDGs is largely invisible in DfE policy, but it is not only in the UK that AE is forgotten. It is global. Writing about the launch of the SDGs at the United Nations Educational, Scientific and Cultural Organization (UNESCO) General Assembly in 2015, Milana et al (2017: 626) describe a substantial absence in or insufficient articulation of adult learning and education in how the 2030 agenda conceives SDG 4 and its framework for action. This, they argue, was in part due to the UN adopting ‘lifelong learning’ and not AE as the preferred language. They highlight that, in the main, “educationalists have been critical towards the general tendency to replace the term ‘education’ for ‘learning’ in policy debates and

deliberations”. As discussed in the introduction, language matters and using amorphous terms like ‘lifelong learning’ instead of ‘AE’, contributes to its invisibility both in terms of its potential contribution and impact in E/LfS.

The challenge around how language is used within education more generally is wider than the AE sector and has:

... facilitated a re-description of the language of education in terms of an economic transaction in which, (1) the learner is the (potential) consumer, the one who has certain needs in which the (2) teacher, the educator or the institution is seen as the provider and (3) education itself becomes a commodity, thing to be provided or delivered. (Biesta, 2006: 9-10)

The SDGs are global nation level goals and so attempt a wider definition. According to the UN (2015: 43), the most widely accepted definition of sustainable development is “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” They position this as a radical concept because never yet in human history have the full needs of the present been met let alone those of future generations too.

UNESCO provided a clearer definition, focused more on purpose and the contribution of education to the SDGs in a report in 2021. More than one million people globally were involved in developing the report which called for “a new social contract for education to repair past injustices while transforming the future” (UNESCO 2021:5). This new social contract in education aims to rebuild our relationships with each other, with the planet and technology. Although the report refers to ‘lifelong learning’, it makes no mention of adult education— posing a

fundamental challenge to any discussion on the contribution of AE to Education for Sustainable Development (ESD). Interestingly, there were no UK academics represented on the Commission or the advisory board of this UNESCO thought leadership report; just three UK universities and one school responded to the call for evidence. There was no representation from the UK AFE sector. Since publication, there has been no analysis or debate about its findings within AFE in England. For the UK at least, national governmental political and economic priorities appear to be impacting on any action on the recommendations. Although ‘green skills’ is emerging as the language of UK government policy.

2.4 The global context of adult education in education/learning for sustainability

Grotlüschen et al. (2024) explored the role of ALE in delivering the SDGs in 8 case study countries, Australia, Brazil, India, Jordan, Kyrgyzstan, South Africa, Thailand and Ukraine. They found ALE

... poorly positioned to play a leading role in realising SDG 4 despite its potential to do so. This is due to it playing a secondary and/or misunderstood role in lifelong learning, leaving it underfunded, with a poorly trained workforce and narrow agenda which is often not well coordinated or systematised. (Grotlüschen et al., 2024: 214)

Again, reflecting how language contributes to the invisibility of AE the authors identified a scepticism about the role of ALE in realising SDGs due to the ways in which it is currently monitored, as it can currently only be monitored in terms of formal education. This, they argue “reflects the challenges of developing a monitoring tool that can be reliable and applicable across non-formal AE” and how it is the

“formal/non-formal/informal characteristics of AE, and its historical roots and values that are what separates ... [AE] ...from other parts of the education system.”

(Grotlüschen et al., 2024: 214)

Though not exclusively focused on the contribution of ALE to the SDGs, some monitoring does exist. Every three years UNESCO publishes a Global Report on Adult Learning and Education (GRALE). GRALE 5 (the fifth such report) was published in 2022 and found that much more needs to be done to achieve the level of investment required for ALE to fully realise its contribution to the SDGs. UK participation GRALE reports is patchy—submitting evidence to only two of the five reports to date. This reflects the absence of any UK-wide AE sector supporting infrastructure since the demise of the National Institute of Adult Continuing Education (NIACE) in 2015 and subsequent decline in meaningful UK engagement with international discourse on the current and future potential of AE.

This creates an additional challenge to AE being recognised as a valued part of the education system. Belete et al. (2020:281) highlight how the flexibility to adapt to unique localised needs and conditions both “gives strength to non-formal AE and makes it a difficult sector to monitor using a standardised metric”. Yet in countries such as Denmark and other parts of the Nordic countries, non- formal education, particularly grounded in the folk high school tradition finds support for this model of education at government and regional policy and funding levels.

The folk high school is a residential model of education originally established in Denmark in 1879. It can now be found across the world. The main aim of the folk high schools is “life enlightenment, public education, and democratic education” (Hojsholerne, the Association for Danish High schools in Denmark, 2025: n.p.). Such ambition requires a quite different educational environment and approach to most other types of schools found in Denmark or elsewhere.

A distinctive feature of folk high schools is their freedom. There are no fixed curricula, grades, or exams. Folk high schools are free to design their educational practice and to plan the content of courses and activities based on the main aim of folk high schools and the core values of the individual school. Teachers teach what they want, and according to Danish law, they can freely choose how they do that to pursue the main aim.

The pedagogical and educational practices of the folk high schools are based on “concrete, lived experience of life” (Korsgaard, 2019: 19). While students do acquire knowledge and skills in certain subjects, the main purpose of the teaching is not to

acquire a particular skill set, “but to open the eyes, minds and hearts of students and teachers alike to aspects of the human existence and to shed light on the lives they are living, both individually and collectively” (Korsgaard, 2019: 20).

2.5 Green skills and the SDGs

Since 2015, the role of education in contributing to a sustainable future has been framed globally by the UN around the SDGs. The emerging language around ‘green skills’ is potentially confusing with respect to the SDGs.

Driven mainly by government policy, green skills are defined by the UK Parliament as, “the knowledge, abilities, values and attitudes needed to live in, develop and support a society which reduces the impact of human activity on the environment” (UK Parliamentary Office of Science and Technology, 2022:1). Green skills are particularly associated with sectors that will play an obvious role in reaching Net Zero greenhouse gas emissions by 2050, such as power, home heating, waste, and resources.

In the UK, where the purpose of the AFE sector is now solely defined around its contribution of employment skills to productivity and the economy, it’s not surprising that green skills (narrowly defined in terms of meeting government targets on Net Zero) is emerging as the dominant paradigm for ALE. Making Dunlop and Rushton (2022: 1) wonder if the DfE climate action strategy is not a strategy at all but “a placebo for policy”.

There remains however, uncertainty as to what green skills actually means in terms of the education and learning required to develop them. There is an economic

determinism which sits at the heart of the language policy and funding to support green skills development. Green skills, like the green economy, are narrowed to a definition of only those skills required for 'green jobs' and 'green employment'. The UK's Green Jobs Taskforce defines 'green jobs' as "employment in an activity that directly contributes to - or indirectly supports - the achievement of the UK's net zero emissions target and other environmental goals" (UK Parliament, 2022: 3).

Some relatively early analysis of current participation in education for green skills (Green Skills Roadmap West Midlands, 2026) highlight green skills as a social justice issue in which women, minority ethnic communities, and disabled people are woefully underrepresented in the fast-growing green sectors and also in the education opportunities currently available to develop green skills. Such reports have begun to show the recreation of familiar inequalities that persist in too many employment sectors, communities and places. In response, the Sustainability Directory (2026) argues "Ignoring green skills development undermines the very possibility of a just transition, risking increased social inequality and regional disparities as traditional industries decline" (Sustainability Directory, 2026: n.p.). And further, that access to education and training is crucial for a just transition, along with efforts to raise awareness of green opportunities, the SDGs and social justice - but sometimes it then turns out still for the same narrow ends, "Failing to cultivate green skills leaves individuals unprepared for the future labour market and impedes the growth of sustainable industries" (Sustainability Directory, 2026: n.p.).

There is also however, more nuanced definition of green skills emerging that is potentially more meaningful and helpful to adult educators and to the context of this

research. AimHi Earth, is a sustainability training organisation focused on climate and nature communication, Their Chief Scientist, Matthew Shribham, writes:

... the only positive green future that is workable in the long term, according to the best available science, is a future that builds our human systems to work with and in support of the rest of nature, rather than against it. This means that we urgently need an economy that not only sustains the life and resources around us but regenerates nature too. Clearly this cannot be done with the economy we have, continuing with business as usual. We need a new “green economy”. (AimHi Earth, 2023)

The AimHi Earth model extensively widens what green skills could and should be and articulates how these can be represented into fifteen green skills. These do have some harmony with the vocational skills required for green jobs, but they also include a much broader spectrum including: critical, systems and nature thinking, scientific understanding, nature connectivity, practical and technical hard skills, long term thinking, dynamic operations and crisis management, historical and cultural understanding, monitoring skills, baseline fall back skills, pioneer and entrepreneurial skills, interpersonal skills and kindness, information skills, defence skills, diverse thinking and non-neurotypicality, artistry and storytelling skills.

This much wider definition of green skills offers the AFE sector an opportunity to consider green skills across all curriculum areas, not just those with an obvious green vocational pathway. This expanded conceptualisation of green skills will be a useful tool for both future analysis and conclusions in this thesis. A further synthesis of these skills into four areas of thinking, (nature thinking, people thinking, systems thinking and technical thinking) is demonstrated below in figure 5.

Figure 5: Green skills thinking 4 thinking areas—nature thinking, people thinking, systems thinking and technical thinking.

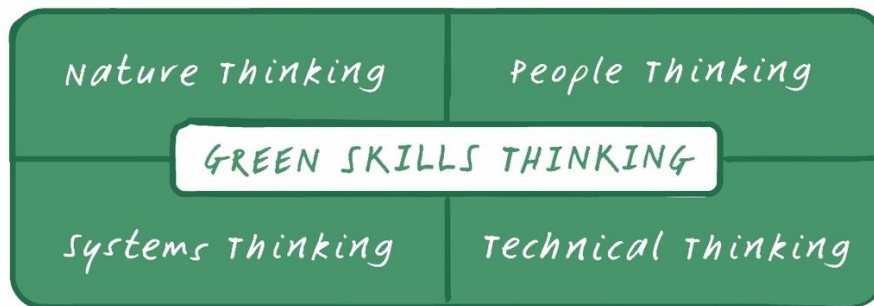


Figure 5: AimHi Earth 15 green skills synthesised into 4 thinking areas (produced by the Green Changemakers 2024)

The crisis in the UK AE sector outlined above is a consequence of neglect in terms of policy focus and funding and, most fundamentally, because this neglect has resulted in the severing of its social purpose roots. The severing of social purpose is stark in the UK but also visible at a global level. Whilst there has been some attempt by the UN to rethink the purpose of education in a sustainable future, and some monitoring of the contribution of AE, the heterogeneity of AE makes this difficult. Language, like education, is never neutral and the discussion above shows the consequences that adopting the term ‘lifelong learning’ has had for AE in the potential contribution and impact it can make to a just and sustainable global future. As Von Kotze and Walters highlight:

Language is culturally weighted: The words we use to interpret and make sense of the world colour the way we see it. They are not ‘objective’ tools for description, as the natural sciences would claim. The language used is imbued with power and the knowledge framework or system it draws on is equally representative of specific power relations (2023; 20).

The language of sustainability and lifelong learning require both an explicit recognition of their power dimensions, and the consequences of their usage both on the global and systems level in terms of AE but also within our classrooms and as practitioners.

2.6 The adult educator in E/LfS

What does this crisis in purpose, policy and funding neglect and invisibility in ESD for mean for the adult educator in E/LfS, who are the focus of this research? The role of the teacher in AE is debated more than in any other part of the education sector (Butterwick, 2014; Ioannou, 2023). As Jögi (2025) notes, the teacher of adults has many more additional expectations which include: the multiplicity of contexts, professional identity issues, and the tighter links to governmental policy than other parts of the education sector. She states that “this paradox highlights the ongoing challenge of professionalisation in AE” (Jögi, 2025: 1). Historically, the role of the adult educator/teacher as facilitator is deeply rooted in the development of the andragogical approaches, first articulated by Alexander Kapp, a German gymnasium teacher in the 19th century and then popularised by Malcolm Knowles (1980; 1984). Though more popular in America, his position was that in the education of adults, teachers can only ever be “facilitators and supporters in learning processes that are largely self-directed and controlled by the learners” (Knowles et al., 2015: 43). For Fischer and Mandell (2021: 4) in the context of E/LfS, this “involves a rethinking of the role of the teacher as an active facilitative role, concerned with asking critical questions and of integrating real-world experiences into new learning”. Making use of adult students prior learning and life experiences is common practice in both AE

theory and praxis. (Brookfield, 1995; Knowles, 1980; Mezirow, 1991). This will be an area for further exploration in this study.

UNESCO's most recent guidance for teachers in AE, 'Curriculum globALE (2021)' includes the facilitation role as well as two new dimensions that involve different roles aspects, namely:

- providing knowledge and developing competencies (teachers as experts and instructors)
- supporting and facilitating the learning processes (teachers as coaches and facilitators)
- supporting personal development, empowering participants and motivating them for lifelong learning (teachers as guides and motivators (UNESCO, 2021: 17).

A further dimension to the role of the adult educator, which often differs from other parts of the education sector is the teacher as a co-learner. Clover (1999: 107) describes this as one of three role dimensions educators assume. In the co-learner dimension the teacher, "recognises, shares, interacts with other learners' experiences and co-creates knowledge with them". This is also a critical element in Freirean pedagogical praxis. For Freire (1998b: 72), "education must begin with the solution of the teacher–student contradiction, by reconciling the poles of the contradiction so that both are simultaneously teachers and students.". This means the teacher works with learners and tries to find out about their lives and experiences even as learners may be questioning their values. When this happens, Freire argues, students become co-learners and knowledge is created collaboratively. Kashin (2020), expanding this Freirean praxis argues:

.. the educator becomes a co-learner and is a participant in the process of learning, discovering, challenging and changing. In this relationship between the student and the teacher, there is an atmosphere of trust and respect, authenticity, and a sense of enthusiasm and interest in others as well as challenges of other's points of views [*sic*] (2020: 42).

For Freire (1998b: 31) this dialogical aspect of pedagogical praxis means that “whoever teaches learns in the act of teaching, and whoever learns teaches in the act of learning”. Dialogical pedagogical methods, a key Freirean pedagogy will also be explored further in this study.

Clover's (1999) role dimensions will also be scrutinised further in this study. They include: the educator-activist

... who in addition to pure educational purposes, s/he undertakes, together with other community members and groups, political initiatives for sustainable communities, therefore combining pedagogy with political action; and the reflective practitioner, who critically reflects on the values, experiences, and incentives in relation to all aspects of their educational practice. (Clover, 1999: 107)

These multiple roles and dimensions of the adult educator could be more or less prevalent in the context of the main research question of this study. Re-imagining of the support for the development of praxis in E/LfS will need to consider these different aspects.

2.7 Adult educator as activist/changemaker

Rooted in the traditions of AE with a social purpose, is the role of the adult educator as an activist/changemaker. When asked about being an adult educator, Raymond Williams (1989: 225) said it was about “changing the world without recourse to revolution”. Williams, a writer and working-class activist, was working within a tradition of AE in England in the 1960’s that was rooted in the idea of a social movement that promoted democratic participation and social inclusion.

In an open letter to adult educators, in 1961, Williams wrote about AE organisations, saying that “We are always in danger of losing that which we can never afford to lose”. The organisations of social justice and the institutions of democracy are worth working for” (Williams, 1961: n.p.). This inspired me to write my own open letter to adult educators in 2022 ([Appendix 1](#)). I have used this letter in a variety of contexts; at the People’s Future Lab project educator conference in 2022 and in a workshop session at the CSPACE conference in 2023. The discussions and online interactions through my letter have informed the development of this research.

There is a lack of research on the role of the adult educator in terms of positioning the role of activism or changemaking, particularly in the context of E/LfS. In the UN’s Recommendations for Adult Learning and Education (RALE) (2017: 7) adult educators are expected to, “act as change agents and advocates, facilitating individual, communal and societal transformation”. For Sutoris (2022: 183), teachers are ‘second level responders in the climate crisis’. Though focused on teachers in schools, Timm and Barth (2021) propose two types of teachers in their research and consider their E/LfS competences. The first are teachers who function as change

agents by interacting with students (in-class teachers); and the second are teachers who function as change agents by inciting institutional change (structure-oriented teachers). Their study, though situated in elementary (primary) education in the USA, recognises that both types of teachers are necessary when implementing change for sustainability in school settings. This is a helpful distinction and adds to the debate on the role of teachers as activists/changemakers and will be considered further in this thesis.

Although there was no E/LfS focus, Pantić and Florian (2015) looked at teacher agency within the context of social justice in schools, which should have some crossover. They found that empirical evidence about the ways in which teacher agency operates in schools and beyond is scant, partly due to the lack of conceptual clarity about the nature and purpose of teacher agency and change. They found that the way teachers act in a particular environment, “is likely to result from complexly interdependent relations of their personal and professional beliefs and dispositions, degrees of autonomy and power, and interactions with other actors within the social contexts in which they work” (Pantić and Florian 2015: 334) and they go on to highlight the following four features:

- Purposes (including teachers’ perceptions of their moral roles, identity, motivation and understanding of social justice)
- Competence (e.g. understanding broader issues influencing their practices, collaboration with colleagues, families and communities, engagement in professional and social networks, (micro-) political competence)
- Autonomy (individual and collective efficacy, degrees of power and trust in relationships, school climates, principal’s leadership, opportunities for participation in decision-making, broader policy and sociocultural contexts)

- Reflexivity (including capacity to articulate tacit knowledge, meaning-making of structures and cultures, critical reflection on own practices and transformative learning) (2015: 333-351)

These four features overlap with many of the purpose and reflexivity role aspects identified by Clover (1999). The additional aspects of political competence and degrees of power and autonomy at both an individual and collective level will also be considered in this study.

Whilst not focused on teachers/educators as changemakers but students in HE, Macagno et al. (2024) go further in giving insights to the process involved in developing as an activist/changemaker. They define changemakers as:

... people with a bias to action, strong sustainability values, and a wide range of skills and competencies, which they apply to create sustainability transitions on individual, organisational, and systems levels. (2024: 18)

Finding,

Nurturing changemakers requires developing their competencies, mindsets, and confidence... [and] ... the pedagogy needs to accomplish at least three outcomes: (1) instil basic sustainability literacy (also known as competencies), (2) transform mindsets, and (3) build individual confidence. (Macagno et al., 2024: 2-4).

In developing the role of adult educator as E/LfS changemaker/activist the orientation to action will be key and central to supporting praxis.

From the discussion above, we can see that the challenge of the heterogeneity of AE and the multiplicity of its settings is also manifested in the workforce in terms of their role as educators. The nature and characteristics of the AE sector also seem to work

against a unified or shared understanding of the role of the adult educator. As Zagir and Dorner's (2021: 44) review of the international studies in this field found, adult educators, "lack a unified identity due to the diversity and heterogeneity of the field of adult learning and education ...[and] ...this impedes on recognizing adult learning professionals and leads to a fragmented focus on their professionalization". Further consideration of this in the context of the current professional development offer for adult educators will be addressed below.

2.8 Current professional development of adult educators in E/LfS

According to the UNESCO's global action programme in 2015, priority three of five is "building capacities of educators and trainers". The Council on European teachers and trainers for the future (CoEU, 2020: 1), describes adult educators as "an indispensable driving force of education and training and work in the world of today ...[with a]..."crucial role in preparing individuals of all backgrounds and ages to live, learn and work in the world of today, as well as in creating and leading future changes." Whilst this was the stated ambition at both a global and European level, an overview of major dimensions of the professional development of adult educators within European policy documents, reports and research, found adult educators "play an essential role in AE and society in general, are an important factor for securing quality in the sector and are considered to be a critical pillar of AE" (Ioannou, 2023: 378). The research highlights that few adult educators are offered adequate PD even though "PD is acknowledged as an essential quality factor in the teaching staff working in this particular sector" (Ioannou, 2023: 380). Where PD for adult educators is discussed, it is usually within the context of competencies. Ioannou (2023) argues

that the heterogeneity of AE, requires a “looser” conceptualisation of Professional Development for adult educators in order to “denote the building of an organised community of practitioners, who are somehow both visible in and able to shape their field” (2023:382).

Kaplan et al. (2015: 3) research asserts that, “successful, long-term, and motivated teaching requires persistent desire for excellence, a commitment to life-long learning, and access to high quality professional development”. Kaplan and Garner (2018: 72) argue that successful teacher professional development programmes, “must address not only content and pedagogy but also the complex processes that promote the professional role identity development that drives teachers to learn, develop, and sustain strong commitments to new practices and to the profession”. They offer a model for the development of role identity called the ‘dynamic systems model of role identity’, (DSMRI)—four primary contextually constructed and interdependent components that underlie teacher action:

- ontological and epistemological beliefs
- purpose and goals
- self-perceptions and self-definitions
- perceived action possibilities

The DSMRI model does not specify “the particular content, structure, or process” instead it holds that change in teacher role identity, “manifests patterns of complex dynamic systems: it is non-linear, non-deterministic, highly contextualized, and can exhibit chaotic characteristics such as sudden increases or decreases in order and complexity” (Kaplan, et al., 2015: 13). Further, “Knowledge of the teachers’ RI and its

characteristics is of utmost importance to the teacher educator, PD designer and facilitator” (2015; 13).

These studies show that models to support E/LfS PrD should consider role identity, whether in the context of activism or not and they should require a focus on the external environment and challenges; the particular context of that teacher’s work; their self-identity and perceptions; the realities of their ability and confidence to take-action, individually and collectively within their contexts.

The description by Rubin and Brown (2019: 236) of the current PD model for school teachers, about which they say “It is clear that we are spending a tremendous amount of resource on professional learning, with questionable outputs and outcomes” may not be that dissimilar to adult educators’ PD. They advocate a different approach—one that will promote sustainability and wellbeing more broadly for students, educators, and the system itself. One that begins by recognising teachers:

... are first and foremost adult learners; therefore, they both learn differently and require an approach that honours and builds from their life and work experiences... [So]... rather than treat them monolithically, there is the need to acknowledge that they have different needs and are on a continuum in their knowledge and skill development (Rubin and Brown, 2019: 238).

Seemingly obvious, but often not recognised within in-service teacher development. This approach is helpful to this research firstly, because it positions teachers as adult learners, a duality in the context the focus of this research for teachers of adult learners. Secondly it acknowledges that a homogenous, one size fits all PD offer will

not transform praxis and finally it acknowledges for the first time in the research that sustainability and well-being must be promoted.

There has been some positive development in supporting new teachers in adult and further education to teach about sustainability, due mainly to a change in the professional standards for teachers and trainers, to “promote and embed education for sustainability (ESD) across learning and working practices” (ETF 2022). This is one of twenty standards which, although not statutory, are widely adopted across the sector and the ETF PD prospectus.

My own experience in the sector is that a coordinated sector-wide support offer for in-service teachers is seriously lacking. The current ETF sustainability PD offer to in-service teachers is an online continuing professional development (CPD) programme, called ‘Embedding education for sustainable development’. It has been offered three times to date. It involves 12 hours study, over 6 online sessions (with approximately 25 participants on each course). A further one hour, on demand session, entitled “Effective teaching practice in ESD”, is also available but only to those who are members of the Society for Education and Training (SET). At a time when colleges and other organisations are struggling with frozen budgets the costs of these courses are not insubstantial. Other generic carbon literacy training is offered by the Carbon Literacy Project, again at a cost. The World-Wide Fund for Nature (WWF) offers a 90-minute training course for teachers working with 14-18-year olds.

The last time the ETF carried out a sector survey on its PD offer was in 2021.

Findings relevant to this study include:

- 74% of teaching staff felt that they had not received adequate training to embed sustainability in their work nor to educate learners about sustainability or climate change (ETF 2021: 5).
- 94% thought all UK learners should be taught about sustainability issues. (ETF 2021:15)

DFE FE workforce statistics for 2022/23 show there are 81,900 teachers in further education in the UK; 51% teach vocational subjects. There are no statistics available for adult education, another reflection of the neglect of this sector.

The current ETF offer therefore nowhere near meets the criteria outlined above by either Kaplan et al (2015) or Ioannou (2023). There has been no analysis as to whether the current offer is having any impact, or not, in contributing to E/LfS in AFE. Griswold (2016:117) would describe the current offer as transmissive education: “curricula created and controlled by a few [*that*] either recreates the accepted social order or a new order determined by its creators (generally government and industry)”. Sterling (2011:23) would concur and offer a distinction between “maintenance learning (adjustments or adaptations are made to keep things stable in the face of change)” and transformative or second-order learning. Second order learning, when applied to organisations, is said to be, “doing better things rather than doing things better” (2011: 23). This second level learning should be a move away from the efficiency and effectiveness approaches so dominant in education policy and research today but it clearly continues to define the sector’s PD.

In the context of the research question, a transformative learning approach must be the ambition.

2.9 Developing adult educators in E/LfS

When considering the development of support for in-service adult educators, the literature reveals a tendency to frame it through competencies and competency frameworks. I have reviewed and analysed multiple competency frameworks discussed in the academic literature for the period 2008-2022. Table 1 below summarises the main frameworks and models in relation to AE and adult educators. Most, but not all, include aspects of ESD. The frameworks are presented in date order with key descriptors and the main challenges or limitations of each framework in the context of developing adult educator E/LfS PrD.

Table 1 Summary of sector competency frameworks 2008-2022

Framework name, author and date	Key descriptors	Challenges/limits/ strengths of framework
Get Sorted EAUC (2008)	• Generic competences: • Critical thinking and independent enquiry • Self-management • Effective participation (and listening) • Team working • Reflective learning • Creative thinking • Key sustainability competences: • Connections and interdependences (systems thinking) • Visioning and looking forward • Empathy and engaging with others • Ethics and values • Action-orientated and change agent skills • Coping with complexity and uncertainty.	• Specific for the UK FE sector • Focus is learner competencies not teachers
Comenius 2.1 Project CSCT model Curriculum, Sustainable development, competencies and teacher training) (2008)	The CSCT model identifies ESD competences under three dimensions of competences (1) teaching/communicating (2) reflecting/visioning (3) networking and five domains (i.e., knowledge, systems thinking, emotions, values and ethics, action)	• European focused • Teacher as an individual agent in an organisation and member of a particular community • not specific to ALE • school focused

Framework name, author and date	Key descriptors	Challenges/limits/ strengths of framework
Dutch Institute research Voor Beleind (2010) Key competencies for ALE professionals	19 key competencies in 3 categories • Generic • Specific – teaching • Specifics – supporting teaching	• Not specific to teachers but to adult learning providers • Has to be contextualised to geography and institutional context • Limited to European context
United Nations Economic Commission for Europe (UNECE) (2012) Learning for the Future – competencies	Based on the Delor (1996) 4 pillars of ALE (learning to know, learning to do, learning to live together, learning to be) a) Learning to know refers to understanding the challenges facing society both locally and globally and the potential role of educators and learners (The educator understands...) b) Learning to do refers to developing practical skills and action competence in relation to education for sustainable development (The educator is able to...) c) Learning to live together contributes to the development of partnerships and an appreciation of interdependence, pluralism, mutual understanding and peace (The educator works with others in ways that...) d) Learning to be addresses the development of one's personal attributes and ability to act with greater autonomy, judgement and personal responsibility in relation to sustainable development (The educator is someone who...)	• Most developed framework as it offers a holistic approach which can apply to learners and teachers E/LfS • Has not been assimilated into AE in UK
Rauch and Steiner 2013 KOM-BiNE competency framework	ESD specific Focus on process orientated dynamic Framework as an alternative to indicator-based models	Only applicable to teams – idea of sharing the competencies in teams not individuals
GRETA model – Germany (2016)	Professional self -monitoring Professional values and beliefs Professional knowledge and skills Subject and field specific knowledge	Specific to German context – ALE focused not ESD

Framework name, author and date	Key descriptors	Challenges/limits/ strengths of framework
Wahlgren (2016) Adult educator competencies	4 organising thematic subcategories: (1) communicating subject knowledge (2) taking prior learning into account (3) creating a supporting a learning environment (4) The adult educator's reflection on his or her own performance	Based on European studies Generic to ALE does not cover ESD or LSD
UNESCO IUL GCED model (2019) North-South Centre of the Council of Europe.	• Holistic competency concept • Subject specific (global citizenship) • Didactic pedagogical competence • Professional self-awareness, values and beliefs • Context and field capacity	Focus on global citizenship education – doesn't cover ESD
UNESCO Curriculum GlobALE (2021 latest version)	• Generic framework with a human-rights- based approach • Curriculum for training of new teachers in ALE	Lacks detailed elaboration with respect to ESD/global citizenship Focus on the key tasks of teaching and nothing beyond
European Commission, Joint Research Centre (2022) Greencomp	The EU reference framework for sustainability competences 12 competences in 4 areas: • Embodying sustainability values • Embracing complexity in sustainability • Envisioning sustainable futures • Acting for sustainability	Generic to all learners, all ages and all levels – not specific to ALE teachers

Table 1: Summary of sector competency frameworks 2008-2022

Most of the frameworks in Table 1, above, use the language of competencies to describe what skills and attributes adult educators need to develop. But as shown in Table 1, only four of the frameworks from the last two decades explicitly refer to E/LfS. The curriculum GlobALE (latest version 2021) is the most far-reaching in terms of attempting to offer a framework which can be used globally. It is focused primarily on the teaching skills required for teaching adults but offers very little in terms of E/LfS. Similarly, the German GRETA model (2016) and the Dutch Institute (2010) research focus on AE but not on ESD. Whilst the GRETA model focuses on

teaching and individual teachers, the Dutch model is aimed at organisations, with different people taking on different aspects of AE.

The Wahlgren (2016) model is also very focused on teaching and the support of students but offers no contribution to ESD. UNESCO's GCED model moves a competency framework into a specific subject, that of global citizenship. This model argues for a holistic competency concept and does move beyond 'teaching skills', including professional self-awareness, values and beliefs, context and field capacity. However, whilst there is some cross-over with global citizenship education and E/LfS, there is no explicit E/LfS content in this model. There are however high degrees of compatibility in terms of the generic and specific teacher skills across these models; subject specific knowledge, teaching strategies to support adult students, professional values and beliefs and across all, reflection skills.

Earlier competency models to support E/LfS, such as the KOMB-iNE (2013) model and the CSCT model (2008) focus on whole organisation approaches, within which the teacher plays one of many roles. Neither model is focused on AE specifically but aimed more towards schools. The EAUC's 'Get Sorted' (2009) guidance is the only framework which related to the Further (not Adult) Education sector in England. This is also a generic set of outcomes and competencies for all ESD so not particular to teacher development at all. The UNECE (2012) Learning for the Future, though now thirteen years old is the only model to apply specific sustainability competences to the work of educators in Higher Education. It is framed around the Delours four pillars of learning (1996): learning to know, learning to do, learning to be and learning to live

together. In the original model of education, each pillar is given equal importance and should inform education throughout life.

Green comp (2021) is the most recent framework to emerge but it is applicable to all learners, all ages and all levels of learning so again not specific to AE or adult educators. The framework does however mark a shift away from what is taught (sustainability content) to what is learned (sustainability learning outcomes). As the UNESCO GCED report (2022:14) highlights, all the models described above “rather contribute to concealing the fact that competence is both developed and enacted only in an integral way, where all competence elements are closely interlinked”. It goes on to state that

the complexity of the competences involved in the learning process, directly and indirectly, highlights the complexity of the role of the adult educator. Acquiring or strengthening these competences requires PD opportunities to enable adult educators to address the many challenges of their role (UNESCO GCED, 2022: 15).

This further supports the current disconnect discussed above, in terms of the acknowledgement of multiple dimensions of the role of the adult educator, particularly in the context of E/LfS and the lack of support and professional development they are offered to develop their praxis.

Approaching this from a slightly different angle, Mulà and Tilbury (2023) European report on teacher education for sustainability, whilst aimed at trainee, rather than in-service educators offers a systemic focus for development. They propose eight leverage points which they argue when taken as a whole, can “reshape teacher

education at scale” (2023: 11). These eight points include: political and policy commitment, professional competencies and standards, recognition and reward, micro-credentials and certification of learning, resources for a sustainable future, collaborative enquiry and peer learning, framing as innovation and renewal, fresh insights and visions using technology (2023: 10-15). This systemic level of change is suggested as an antidote to “piecemeal initiatives” (2023: 9), which it could be argued characterise the current offer in the AFE sector. This offers a useful framework to analyse the recommendations arising from this study.

Obviously, any framework or model, whether directly applied to adult educators, AE or ESD can be structured in different ways. This analysis has shown that, as yet, there is no model which takes AE/LfS as its starting point to consider the support and development needs of in-service educators. This is possibly a reflection of the status and challenges of defining the AE sector described above. There is a need to consider competences in the context of professional development opportunities but also how to sustain practice in and beyond the classroom and PD interventions. This issue will be considered further in the context of the research question.

In terms of the adult educator the literature review has so far examined the challenges of the sector, the complex and multiple dimensions of the adult educator role and the current support that is available for professional development. What is missing in all of the models and frameworks discussed above is any consideration of well-being, highlighted as crucial by Rubin and Brown (2019). It is becoming increasingly clear that working as an adult educator in these times and engaging in E/LfS requires some reflection on the impacts on students’ and teachers’ wellbeing.

2.10 Eco-anxiety and hope in E/LfS

The lack of answers to the “what can I do?” question, beyond the superficial, fly less, recycle more and wear used clothing, is resulting in growing despair and inaction across the globe. There is an increasing acknowledgement and recognition of growing levels of eco-anxiety, particularly in young people. Eco-anxiety can be viewed as born from anger, frustration and resentment at the lack of political and structural change. Hickman et al. (2021) ground breaking survey of 1,000 children and young people (aged 16–25 years) in each of ten countries (Australia, Brazil, Finland, France, India, Nigeria, Philippines, Portugal, the UK, and the USA) revealed widespread climate anxiety amongst children and young people:

Respondents across all countries were worried about climate change (59% were very or extremely worried and 84% were at least moderately worried). More than 50% reported each of the following emotions: sad, anxious, angry, powerless, helpless, and guilty. More than 45% of respondents said their feelings about climate change negatively affected their daily life and functioning, and many reported a high number of negative thoughts about climate change (e.g. 75% said that they think the future is frightening and 83% said that they think people have failed to take care of the planet). (Hickman et al., 2021: 865)

Eco-anxiety points to “the nature of denial, despair and grief in relation coming to terms with the planetary crisis” (Hicks, 2002: 157). Hicks contends “educators often make things worse for students by teaching about global issues as if they were solely a cognitive endeavour” and rather seeks a holistic learning experience: “A true sense of empowerment must come from both head and heart, but this requires educators who have also worked through these issues for themselves (Hicks, 2002:

108). The job of education in such circumstances is, as Raymond Williams memorably put it, is “to make hope possible, rather than despair :convincing” (Williams, 1989: 118). Selby and Kagawa (2018:315) call this active hope, “based on a clear view of reality following working through despair helps us to deeply and truly long for and gives us determination to move in that direction”. Ojala and Lakew (2017: 82) agree, describing hope as a “multifaceted concept consisting of a complex mix of existential, emotional, cognitive and action components”.

In the context of education and ‘teaching hopefully’, Ojala’s (2012: 11) research argues that “educators and leaders have an important role in promoting constructive hope by demonstrating a caring attitude, and manifesting caring in practice, even in the face of collective denial about the criticality of climate change”. Hicks (2002) also encourages teaching which embraces “the whole spectrum of emotions and feelings, caring and careless attitudes- the entire emotional range ...[and] all opinions and taboos, the questions not often asked and even denialist attitudes should have the right to exist and be expressed” (Hicks, 2002: 142).

Verlie et al. (2020: 132) acknowledge climate education, “can provoke a profound mix of emotions including anger, fear, worry, hopelessness, grief and disillusionment”, and highlight that denial and disengagement often arise not from disinterest but as a method to protect the self from engaging with information that is ‘too disturbing’. Their research offers strategies for teachers to enable them to cultivate hope in their classrooms, including:

- Engagement– approaches involving deep reflection, critical thinking, active discussion, reflective journaling, problem solving, debate, transdisciplinary and the

consideration of alternative viewpoints and futures. Inquiry and problem- based learning pedagogies underpinned such strategies.

- Validating/acknowledging – (such as by listening or otherwise witnessing), normalising and sharing vulnerability – providing spaces to discuss emotions explicitly, naming them. Normalising them and acknowledging it is hard and no one has the definitive miracle solution. Sharing vulnerabilities and cultivating emotional solidarity.
- Support – to cope with, adapt to and manage these emotions. Involves the emotional labour of students feeling cared for. Helping students build caring communities with their peers and enabling them to resource themselves appropriately. Cultivating a welcoming and supportive environment in the classroom. Building a community. Helping them to look after themselves, taking active rest, taking time out to spend time on things that matter to them.
- Empower – to counteract feelings of hopelessness. Exploring alternatives to the status quo, connecting them to activist or similar groups, showcasing role models and providing and exploring opportunities. Incorporating alternatives into the curriculum. Helping people identify, explore and take up opportunities. Individual actions that can be taken – “Empowerment is best achieved through connecting students with others so they can engage in collective environmental action.” (Verlie et al., 2020: 132)

The idea of empowerment, as outlined above, is a term frequently used in AFE, leading to a dilution and sometimes misapplication of the term and its meaning. In their work, Mulà and Tilbury (2009) levels of empowerment of adult learners, bring a more nuanced perspective that is helpful for this research. They identify three levels of empowerment, and that they say are buildable and cumulative. These are:

- Latent empowerment: A feeling of having more drive, ability, and possibility to act individually and/or collectively to foster sustainability that has not yet led to action
- Active empowerment: Having more drive, ability, and possibility to act individually and/or collectively to foster Gross National Happiness (GNH)/sustainability that has led to actions (activism)
- Transformative empowerment: Having more drive, ability, and possibility to act individually and/or collectively to promote GNH/sustainability that has led to action (activism)

and the desired transformation” (Mulà and Tilbury, 2009: 90-92)

These three levels of empowerment, framed within a sustainability context support and add depth to the strategies that Verlie et al (2020) outline above to counteract the sense of helplessness that can sometimes occur in climate education. These will need to be considered in the analysis of the data from the projects used in this research.

2.11 Teachers’ wellbeing in E/LfS

As the spotlight has turned to the increasing levels of eco-anxiety amongst young people, (no research was found on the eco-anxiety of adult students), what then for the teachers who are teaching E/LfS? Whilst there is an increasing focus on teacher burnout and the subsequent loss of teachers to the profession as a whole (Farrell and Bishop 2025), little attention has been paid to the impact of teaching E/LfS on teachers. Though not with a focus on AFE, Verlie et al. (2020:160) argue that this is an emerging field, and “research is increasingly identifying the issues of ecological distress, eco-anxiety, and climate grief”. They argue that “these painful experiences arise from heightened ecological knowledge and concern, which are commonly considered to be de facto aims of environmental education” (Verlie et al., 2020:160).

However, their study found that, “little research investigates the issues of climate change anxiety in educational spaces, nor how educators seek to respond to or prevent such emotional experiences” (Verlie et al., 2020: 2). Further, they found that, “educators felt that supporting their students to face and respond to ecological crises was an extremely challenging task, one which was hindered by time limitations, their

own emotional distress, professional expectations, society-wide climate denial and a lack of guidance on what works” (Verlie, et al., 2020: 160). They argue that from their own study and the literature they reviewed, it was clear that “many climate change educators feel that they need more support and resources to be able to engage people with such a complex topic”. The participants in their study also “noted that a lack of time was a key barrier to them being able to engage appropriately with their students’ ecological emotions (Verlie et al., 2020: 160). They conclude “teachers and educators clearly need their own emotional wellbeing to be considered and supported as well, and programs and initiatives that can offer that would no doubt be beneficial” (Verlie, et al. 2020: 160).

Working as an educator in these times is tough. This section of the literature review has shown the impact the wider adult sector crisis and neglect is having on its workforce in terms of a lack of investment in E/LfS PD. It has highlighted the multi-dimensional expectations on the role of the adult educator. The educator/activist element of the role was tied to the historical wider social purpose of the sector. Its decline is reflected in the lack of educator/activist research found in this review. At a global level, the adult educator is seen as important in achieving the SDG ambitions but at European and UK levels reality reveals a mostly piecemeal and transmissive approach with little analysis of impact or consideration of how to sustain PrD. A number of frameworks and models do exist, mostly framed around a competency approach to the development of teachers in E/LfS. Currently, none exists specifically to support the development of adult educator’s praxis in E/LfS, perhaps showing the lack of focus or care for the sector. Multiple societal crises are having a significant impact on students’ and teachers’ wellbeing, but there is a gap in terms of support for

educators in how to meet their students' needs and teach hopefully. This will be considered throughout this thesis.

2.12 Considering our inner sustainability

If, as adult educators working in E/LfS our task is to support students to find their own answers to the question 'What can I do?', then as Lazaridou and Papageorgiou (2011: n.p.) argue, "we need to reclaim our ideological foundations" starting with ourselves. Cranton (1996: 25) applied Transformative Learning (TL) to the development of adult educators thirty years ago and found that when transformative learning as professional development occurs, "educators critically examine the assumptions that underlie their practice, the consequences to their assumptions, and develop alternative perspectives on their practice". The development of TLT within the context of E/LfS will be considered further below.

A new and emerging area which seeks to provide an additional perspective on how to achieve a global sustainable future, is inner sustainability. As the AimHi Earth 15 green skills attempt to move the conversation forward about the skills required for a Just Transition, thinking around inner sustainability attempts to shift the debate forward by moving beyond the focus on the external dimension as both the cause and possible solution to the climate and environmental emergency. I first came across the idea of inner sustainability as part of the Peoples Future Lab project. In a discussion paper prepared for the project. In July 2021, Christian Dietrichsen, project leader Centre for SustainaBElity (Center for Væredygtighed), introduced the term 'Væredygtighed' but acknowledged that it's difficult to translate directly into English

hence his suggestion to use the term SustainaBElity. Another term the organisation uses is 'weatherability'.

According to Dietrichsen (2021) "SustainaBElity has to do with your self-image, your world view, your beliefs, your convictions, your driving forces, your state of mind, your bodily awareness, your relationship to nature...and such things. It's the inner part of sustainability, where the root cause of humankind's many crises are found. "Oil and coal didn't create the climate crisis. The gas stations, the cars and the machines didn't either. We did. You and I and everybody else". (2021: 1). However, Dietrichsen is very clear that inner sustainability is not about putting responsibility for the climate and environmental emergency on individuals. Rather he argues that "SustainBEality is an invitation to look for the 'inner calibration', and that "the inner ecosystems must be balanced along with the external ecosystems" (2021: 2)). This concept of internal and external dimensions of sustainability considered together will be critical in the reimagining of support for E/LfS PrD.

Wamsler et al. (2021: 841) have undertaken a systematic, multi- disciplinary literature review in terms of the inner sustainability dimension which seeks to analyse, "how the linkages between internal and external change are portrayed and understood in current research". They argue that there is an "urgent need for a more integral understanding that links internal and external (collective and systems) approaches to support transformation" (2021:841). This view is supported by systems theory, another important line of thinking to support a sustainable transition (Sterling, 2024). Systems theory, defined by Wamsler et al. (2021:841) as "internal dimensions (values, beliefs, worldviews/ paradigms and associated internal capacities) as a deep

leverage point for change”, as they tackle the root causes mentioned above. Mulà and Tilbury (2023) used the idea of leverage points in the context of Initial Teacher Training (ITT) as a counter approach to shallow based initiatives. Systems thinking is also one of the four categories in the AimHi Earth Green Skills. The potential deep leverage points for AE and its teachers in E/LfS will be helpful to this study.

Reflecting Bateson’s levels of learning (Bateson, 1972) and Lange’s ideas around deep sustainability (Lange 2024) which are rooted in Transformative Learning Theory, Wamsler et al. (2021: 842) conceptualise leverage points as “places to intervene in a system with increasing impacts on collective and system change”. Shallow leverage points consist “of external parameters, such as taxes or incentives, and they are the focus of current socio-environmental and climate policies”. On the other hand, “deep leverage points address internal dimensions; are more difficult to influence, but lead to more substantial change, as it is from this level that the system’s goals, structures, rules and parameters emerge” (Wamsler et al., 2021: 842).

Interaction between the inner and outer domains that highlight the “internal qualities and approaches that we need to enable change toward sustainability” (Wamsler et al., 2021: 844). They suggest that certain internal qualities/capacities underpin people’s learning, namely:

- Awareness – presence, attention, self-awareness and self- reflection
- Connection - compassion, empathy, kindness, generosity
- Insight – perspective taking, sense making, different ways of knowing
- Purpose – activation and reflection of one’s values, sense of purpose, intentions and responsibilities

- Agency – sense of empowerment and related skills/qualities that can foster and enhance co-operation and co-creating of meaning and action taking (Wamsler, et al., 2021: 844)

These qualities and approaches influence, in turn, “the three dimensions of agency at individual and collective level: interbeing, inter-thinking and interacting” (2021: 848).

This involves

pro-social and pro-environmental attitudes and behaviours at individual and collective levels, but also systemic change, if enabling factors are put in place and people’s potential as change agents is systematically supported. (Wamsler et al., 2021: 848)

However, they caution that such models will result in clearly-defined outcomes. They highlight instead that such “relational approaches to sustainability”, effective outcomes are “always emergent”. Their model is instead “heuristic enabling learning, which is about discovery, rather than fixed solutions”. (Wamsler et al., 2021: 843)

Usefully for this research, they found that there were few examples where such ideas have been developed with a specific target group in mind, e.g. adult educators/teachers. This is due to the fact that, in the studies in their research there is a clear lack of attention to the professional and working environment. They argue that “the design of safe spaces for reflection, learning and co-creation, and building trust are often seen as important enabling factors for supporting transformative skills and associated changes” (Wamsler, et al., 2021: 842) Further, they stress the importance of creating these conditions and spaces that “can nurture a culture of care and inner growth, from a place of shared, universal values and interconnection” (Wamsler, et al., 2021: 849). Mermelstein (2018: 1) argues that the internal

resource, the self, is often one of the most overlooked resources in teachers' PD "but by critically reflecting on what one has been doing and what the outcome of these actions has been, can lead to an enhancement of performance in future endeavours".

Ives et al. (2023), agree with the Wamsler et al. (2021) finding that the "nascent field of inner transformation is dynamic and emerging, with varied terminology, a breadth of applications, and intense debate about possible contributions as well as limitations and shortcomings" (Ives et al., 2023: 2777). They argue for the interdependence of the inner and outer dimensions of sustainability and also that there is a latent multiple potential in all of us to enact and enable transformative change which will support a sustainable future. Their paper also highlights the challenge in the breadth of applications and the varying and multiple uses of the terminology. They argue that inner sustainability refers to, "so-called inner dimensions, defined as our individual and collective mindsets, values, beliefs, world views and associated cognitive, emotional and relational abilities and capacities" (Ives et al., 2023: 2778). Their model is called IMAGINE and focuses on the "systematisation of the six core characteristics of inner transformation and inner–outer change processes, organised under the dimensions of ontology, praxis and epistemology. All six characteristics are "entangled, intertwined and interdependent" (Ives et al. 2023: 2778).

The six characteristics are interdependence of the inner and outer dimensions, multiple latent human potential of change, activation of the inner dimensions across individual and collective levels, generating inner transformative capacities through intentional practices, the inclusion of diverse perspectives and the expansion of related knowledge systems. (Ives, et al., 2023: 2780).

A critical part of inner sustainability is nature connectedness. Stenfors et al. (2025) argue that nature connectedness is one of the transformative qualities needed for sustainability. According to Rushton (2025: 60), nature connectedness, “broadly explores how humans think and feel and how they experience nature”. In her writing on teacher education in schools, Rushton (2025:61) says the way humans relate to nature is “connected to well-being and pro-environmental behaviours” and therefore, “exploring dimensions of young people’s connectedness and the role of education is increasingly important (2025: 61). This literature review however found no research on nature connectedness specifically in the context of AFE. The DfE Sustainability and Climate Change Strategy (2022: 6-7) emphasises the importance of enabling children and young people to learn from and connect with nature, arguing that such experiences help cultivate pro environmental values. The strategy makes no mention of nature connectedness in AFE.

Whilst some theorists, such as Boda et al. (2021: 4) have suggested that inner transformation is “reductionistic and focusses only on individuals’ capacities for change”, Ives et al (2023: 2785) argue that “Inner transformation recognises ontologically that each person possesses innate, intrinsic capacities for connexion and change”. This contributes to a fundamental reimagining of the potential contribution that everyone can make in terms of a sustainable future. Further, the work required for inner sustainability can be viewed as a deep leverage point with its focus in the deep dimensions of learning that are required for a sustainable future. It can also give some further insights into the “what can I do?” question, which is fundamental to the purpose of adult education and its teachers in E/LfS and will be explored further in future chapters.

2.13 Transformative learning theory in E/LfS

As thinking develops around E/LfS, different theoretical perspectives are emerging to support its framing and development. These include critical theory and eco-pedagogy (Misiaszek, 2020), systems theory (Sterling, 2001) and post-humanism (Haraway, 2016). Inner sustainability has been explored above and has some crossovers with Transformative Learning Theory (TLT) through its focus on how movements in mindsets, values, beliefs and worldviews can change behaviours, emotions and actions and that the shift can occur at the individual and collective level.

This research will focus on TLT within adult education/learning for sustainability. Unlike other theoretical perspectives in E/LfS, transformative learning theory is rooted in and specific to Adult Education. This is critical for the field in which this study is located. It goes further than inner sustainability thinking by describing the stages and process of transformation, including the conditions required for deep learning and change to occur. TLT originated in the work of Jack Mezirow (1991, 1995, 1997, 2000). In its original context, transformative learning in adult education involves “critically reflecting on and reinterpreting one’s beliefs, values, and assumptions to develop a new worldview” (Mezirow, 1991: 5). His original work describes a series of stages that occur, usually starting from a disorienting dilemma which then leads to critical self-reflection, rational discourse, perspective transformation; then to revised assumptions and behaviours which lead to changes in beliefs and actions.

Mezirow was influenced by several writers (e.g. Habermas, 2008; Dewey, 1966) including Paulo Freire who according to Fleming (2022:7) he acknowledged

frequently: “one can wonder if there is a distance between the critical consciousness of Freire and the critical reflection of transformative learning”. Three further points of the alignment between the respective theoretical positions of Mezirow and Freire are highlighted by Fleming (2022). Firstly, in the emancipative potential of adult learning as “grounded in the freedom to think critically, understand in mutual respectful dialogue with others and act individually or collectively to change the world” (2022:8). Secondly, the valuing of “open open-minded teachers” who will both learn and teach as part of the pedagogical process. And thirdly, the emphasis on learning from experience (2022: 8).

The concept of the development of praxis, central to this research, is grounded Freire’s work (1998a, 1998b). He used the idea of praxis to consider the interplay between reflection and action, particularly when it is concerned with political action and was directed at structures which need transforming. This focus on praxis supporting transformation or disruption, as in Apple’s (2016) nine tasks outlined in chapter 1, are critical to the ambition of reimagining the support for adult educators in E/LfS.

TLT has evolved over time (Lange, 2004). In its original form, the focus was the individual; it has since been expanded to include community and, subsequently, a planetary view. Lange (2004: 137) highlights how, in the expansion of these perspectives, beyond the individual focus, the idea of transformation “goes beyond epistemological processes of a change of worldview to an ontological process of a change in being in the world”. Singleton (2015: 5) argues that the blending of transformative learning and education for sustainability “is a natural partnership

because sustainability and transformative learning requires a change in perception, a change in values and active engagement”. Transformation is a common theme in the ESD literature. Aboytes and Barth (2020) found that the main areas considered in the literature were in higher education, teacher training in schools and non-formal and informal learning.

Sterling (2024:37) questions if, by being seen globally as a key to resolving environmental and sustainability issues, education isn’t part of the problem, “reproducing knowledge which perpetuates injustice and the climate crisis”. He argues that it is paradoxes and arguments like this that have made educators, interested in sustainability and social justice, to look towards TLT “as a way of conceiving and practising educational forms that might take us to the depth of things”, in the context of this debate on the purpose and impact of our education ecosystem where, “there is a call for a re-examination of assumptions and values, critical thinking and new creativity, the concept of transformative learning is coming to the fore” (Sterling, 2024: 49). His perspective aligns with this study, in its ambitions to challenge the current narrowly defined purpose of AE in the UK and the dominant transmissive E/LfS PD offer to teachers.

For many theorists, the concept of social learning becomes important in debates around AE and a just and sustainable transition. The widening of the language and thinking around sustainability and green skills, necessitates a much broader understanding and definition of the learning required, (as opposed to just the education required). This broader definition highlights the enormity of the learning required by the entire global population. For Sterling (2001: 15) this means an

education journey of “learning, re-learning and un-learning”. Armitage et al. (2008: 5) define social learning as “the collaborative or mutual development and sharing of knowledge by multiple stakeholders (both people and organisations) through ‘learning by doing’. Through this lens there is a “focus on context, participative approaches, on collective (rather than individual) learning, on self -organisation and on emergence rather than pre-determined learning outcomes” (Armitage et al., 2008: 5).

The core principle of social learning, and the role of experience and development of sustainability competences are inherently part of transformative learning according to Aboytes and Barth (2020) who argue that the sustainability context provides an empirical grounding that highlights this. They discuss how in the context of the external conditions of social learning, power relations are reported as a crucial factor in management and decision-making processes. This can have a negative impact when “influential external stakeholders who limit proper access to information and constrain opportunities for participation, therefore triggering a sense of futility and a lack of agency” (Aboytes and Barth, 2020: 993) This understanding will need further exploration in this study in the context of the research questions.

The social context of learning is also viewed as of particular importance in transformative learning for sustainability. Aboytes and Barth (2020:1004) identify the importance of social interaction among learners that it is “manifested in the creation of supportive social environments for learners where they can feel safe and trustful, such as in a peer- network or in community- based support”. Transformative learning involves two distinctive elements of social learning: firstly, “social learning as the

social environment that surrounds the learning process or learning that occurs via social interaction” and secondly, social learning as a “learning outcome of a group, community or society”. (Barth et al., 2017: 1005) This suggests that planning educational interventions to create supportive learning conditions which consider: power relations, time and space for reflection and discourse, social interaction and support, is important. In social learning, the role of experience and the “competencies for sustainability learning are therefore inherently a part of Transformative Learning” (Barth et al, 2017: 1006). If we are to view the professional development of adult educators in E/LfS as an educational intervention, with the potential to be a deep leverage point, then the conditions required for this learning are critical. Reimagining the support to develop E/LfS PrD will need to consider this.

Sipos et al. (2008) explicitly link sustainability education with transformative learning through the organising principle of head, hands and heart. ‘Head’ refers to engaging the cognitive domain through academic study, inquiry and understanding of ecological and sustainability concepts. ‘Hands’ refer to the enactment of the psychomotor domain for learning practical skill development and physical work such as building, planting, painting etc. ‘Heart’ refers to the affective domain in forming values and attitudes that are translated into behaviours. Whilst the domains build on Bloom’s (1956), they report that their “framework resonates with indigenous and community-based education traditions, which emphasize holistic integration of cognitive, affective and psychomotor domains, and the importance of place and relational learning” (Sipos et al., 2008: 74).

As the Sipos head (cognitive), heart (affective) and hand (psychomotor), or knowing, feeling, doing model discussed above demonstrates, transformative learning brings with it a holistic view of 'learning as change' and a move to action which engages the whole person. Singleton (2015) building on the Sipos' et al. (2008) approach adds to it the dimension of place. Place, she argues "... offers a stimulating, authentic context for meaningful educational experiences that hold potential for personal growth for learners beyond academics ...[and] provides a context, an internal and external landscape, that frames, organizes and anchors experience which is needed to extract meaning and construct knowledge" (Singleton, 2015: 4).

As discussed in the introduction, many writers (Orr, 2004; Lange, 2024; Schumacher, 1997; Sterling 2024) lament the lack of actual change and impact in terms of living and learning more sustainably as a global society. They contrast shallow change (transmissive) with the deep (transformative) change required for a just and sustainable transition. Sterling's work on levels of learning develops Bateson's (1972) perspectives on the shift required from the Western individualistic to a more holistic worldview. Applying these levels to individuals, educational organisations and whole education systems, Sterling (2024:153) describes first order learning as "doing more of the same, that is change within particular boundaries and without examining or changing the assumptions or values that inform what you are doing or thinking". Second order learning refers "to a significant change in thinking or in what you are doing as a result of examining assumptions and values and is about understanding the inner or subjective world" (Sterling, 2024: 153). He argues that most of the learning that goes on in our current education system is first level learning, what

Freire (1998a) would call banking education, usually delivered through transmissive pedagogies. Sterling argues that second level learning is much deeper and more challenging as it “involves the learner critically examining and if necessary, changing their values, beliefs and assumptions” (Sterling, 2024: 153).

Bateson (1972: 301-304) describes a third level of learning which could be said to be “epistemic learning”. Sterling (2024:153) describes this as involving “a shift of epistemology or operative way of knowing and thinking that frames people’s perception of, and interaction with the world”. Moving from first to second, or from second to the third level, he describes as difficult and challenging, because it “poses significant challenges to existing beliefs and ideas, reconstruction of meaning, discomfort and difficulty” (2024:154). This challenge, he says is both for the learner and for the teacher/educator who is designing and/or facilitating such learning experiences. This is important for my study and the reimagining of the support for PrD for adult educators. It also leads to profound and repeated questions of whether deep change or level three learning is possible within existing organisations. According to Clark (2012) and Lange (2024) deep sustainability is best pursued outside of regular institutions as the philosophy of ‘knowing’ in deep transformative sustainability, conflicts with most existing structures in education.

Findings by Bostrum et al. (2018: 6) provide additionality, contending that transformative learning “is processual, interactional, long-term, and cumbersome, acknowledging the societal and personal conflicts involved in such transformation”. They propose a move away from Mezirow’s individualistic emphasis and argue for “partnership and plural participation, alongside an ideal of communicative rationality

(Bostrum, et al., 2018: 21). In contrast to the perspectives above on where third level learning or deep sustainability can occur, they contend that “learning is seen as social and mutual within a network, institution or system” (Bostrum et al., 2018: 40) and argue that there are “assumptions that learning and TL is a win-win situation” but “there are some teachers for whom this will not ever resonate, just as there are within the general population” (Bostrum et al., 2018: :21). They highlight that, “transformative learning processes that are collective, open-ended and reflexive are a vital part of sustainable development” (Bostrum et al., 2018: 2). This focus on the collective element of transformative learning will be an important dimension in the analysis of the learning teachers might describe in this study.

The most recent application of TLT to teacher development within E/LfS can be found in the Weinberg et al. (2020) inner, outer, forward model. The Weinberg et al. (2020) study and proposed framework, explores transformative learning among pre-service elementary teachers (PSTs) enrolled on a sustainability science course. They found that the pre-service teachers look inward (thinking and feeling), outward (making connections, relating to others) and forward (taking -action). They note that all the PSTs experienced a disorientating dilemma, the foundation on which transformative learning takes place. Their analysis adds three additional elements which are helpful for this research. Firstly, they frame the inner, outer and forward orientations around the Mezirow ten phases of transformative learning. Secondly, they apply this to (pre-service) teacher training, uncommon within the inner-outer sustainability debates as noted by Wamsler et al. (2021). Thirdly, they add an additional dimension, the forward orientation, which is intended to cover the final stage in transformative theory,” a reintegration into one’s life based on the conditions

dictated by one's perspective' (Mezirow, 2020: 22). They argue, "Teachers are well-positioned to raise awareness, cultivate agency, and spur action on sustainability challenges with and through their students—building a pathway to a sustainable future by equipping their students to be agents of change" (Weinberg et al., 2020: 1786).

Each of the models considered above, which use transformative learning as the underpinning theory in the context of E/LfS, have been identified through the literature review as offering this study potential ways to frame the methodology, data analysis and discussion and conclusions chapters. These will be explored further within the respective chapters.

2.14 Literature review conclusions

The literature review has shown that although adult education is seen as an important part of E/LfS, its form can make it difficult to quantify and so demonstrate its value contribution at a national or global level. Adoption of the language of lifelong learning in place of AE, has fomented invisibility and misunderstanding. The lack of focus on the development of adult educators can be seen as a consequence of this invisibility. Where it is discussed, adult educator development is usually concerned with the professionalisation of the workforce and reduced to a set of competencies, or a transmissive approach.

TLT, though never conceived in this way by Jack Mezirow, is emerging as a natural fit for both E/LfS and educator development. If a transformative, social learning revolution in (adult) education is required for a just transition and future, then a

significant investment in the teaching workforce to deliver this is going to be needed. This literature review has shown that this is currently lacking in terms of both resources such as pedagogical tools, curriculum content, and research-based models of professional development that move beyond a transmissive approach. Further research is therefore needed to focus on the development of adult educator's praxis in E/LfS. The main research question of, how can adult education in-service teachers be supported to develop their praxis in E/LfS? has therefore been developed and frames the intention of this research.

Chapter 3: Methodology

**“That’s where my learning is, from my friends here.”
People’s Future Lab educator**

3.1 Introduction

Using an extended transformative learning theory lens, this thesis considers the reflections of adult educators. This chapter sets out the methodology for this research, which, through listening to voices and insights from the global and local AE frontlines, aims to understand and reimagine support for in-service teachers to develop their praxis in E/LfS. I position the research within the field of AE and the study participants as adult learners.

I describe how, in the absence of a suitable methodological framework, I propose a Green (Reflective) Research Framework for Education (GRFfE), within a green/sustainable paradigm, and a focus on regenerative versus extractive practices.

I explore using TLT as the theoretical underpinning, including for the process by which the research questions will be distilled into questions for the focus groups, using the three styles of reflection described by Farrell (2012) and how I will need to extend the Weinberg et al. (2020) inner, outer, forward model to develop a green methodology. Initially, this will simply be a research tool specific to this study, but in Chapter 5, I will consider the potential for its wider use.

This chapter will introduce the two projects, one global and one local, from which the participants in this study will be recruited. My ethical considerations and process will also be described, including the choices and decisions I made as a researcher when

deciding to use focus groups for data collection and the Braun and Clarke (2019; 2021; 2022) and Braun et al. (2024) approach to reflective thematic analysis (RTA) to develop the analytical framework.

3.2 A Green Methodology? Towards a sustainable research process in education

This research includes field research and attempts to frame the research within a sustainable paradigm. The current focus on research methods in sustainability tends to focus on either the causes and impacts of environmental and climate injustice or technical solutions to these problems. There is even less discussion in the field of education on framing a sustainable research process.

Reflexive practice throughout my doctoral journey has led me to ask myself a series of questions about the practice of green/sustainable research alongside the content of such research. AFE research has immense potential to present different stories for a different future, stories which generate hope and possibility (Macy and Johnstone, 2022). Further, if the potential for the adult education sector to reconnect to its social purpose through E/LfS is realised, then green research in education must surely be rooted in this (Maylor et al., 2024).

This research, therefore, proposes for consideration a green research framework for education (GRFfE), which I will develop and use to frame this research. The development of this green methodology will form part of my contribution to developing new knowledge. The process has involved me reflecting on several considerations throughout the entire research process, including the choices I will

make as a researcher and the questions I will ask of myself at every stage of this research process and report on in this thesis. This is important to sustain my orientation to the main research question and to maintain my commitment to the process of the research being framed through a green/sustainable paradigm.

Table 2 below summarises the green research framework for education, listing areas of choice that researchers in the field of E/LfS need to consider as part of their research practice and corresponding self-reflection questions to use as a tool to support researchers in making the choices and decisions.

Table 2: A green (reflective) framework for education research (Lenehan, 2026)

Areas of choice and decision-making in research	Self-reflection questions for researchers
Researcher positionality	• Does the researcher position themselves as an active researcher/ learner within the field of E/LfS?
Research question	• Do the research question(s) relate to some aspect of E/LfS, for example, the UN 17 SDGs (UN, 2015).
Theoretical underpinnings	• Does the theory used have some relationship to sustainability or is it being applied in a new way that focuses on E/LfS?
Participants	• Are participants treated as active partners in the research process? • Do the participants have experiences relevant to the field of E/LfS?

Areas of choice and decision-making in research	Self-reflection questions for researchers
Research method(s)	• Do the research methods used minimise the impact of the resources used, travel, time, etc. (including the digital footprint)? • Does the research use opportunities which are already in existence? If not, why not? • Does data collection happen where the participants are?
Analysis and conclusions	• Does the data analysis and conclusions of the research contribute new knowledge to E/LfS?
Publication of the research	• Will the research be published outside of journals and in spaces the participants/beneficiaries of the research can easily access?
Dissemination of the recommendations/findings	• Will the recommendations and findings be widely shared within the relevant sector and outside of academia?

Table 2: a green framework for education research (Lenehan, 2026)

In the introduction to this thesis, I describe my positionality as an adult educator activist. The research question is firmly grounded in E/LfS. The literature review in Chapter 2 provides an analysis of how the theoretical underpinning of transformative learning is increasingly being used within sustainable research in education but is rarely used in the professional development of adult educators.

This research places participants as partners with the researcher in the projects and the research, an approach which has been used previously in the sector (Smith and Duckworth, 2022). It will use existing, innovative projects as an ethnographic framing

of the research, with one project having a global focus and the other a local. In terms of the use and management of resources, this research will mainly create a digital footprint. Although this is not without its own carbon usage challenges, it is the most efficient in terms of taking existing opportunities and resource management. The study will contribute to an under-researched field of adult educator praxis development in E/LfS. I am committed to sharing this knowledge in the spirit of collaboration within the sector and between adult educators internationally.

This research sits within the field of adult education, where Grummell and Finnegan (2020: 1) identify a “commitment to doing research in a critical and participatory manner.” Although the field of AE research is highly diverse in terms of its international nature and practice, they describe the field as having a focus on collaborative pedagogies and research that “demands methodological and theoretical creativity [...*calling for a...*] willingness to rupture hierarchical relations in order to create new collaborative spaces of learning and research” (Grummell and Finnegan 2020: 3). Consistent with Apple’s (2016) critical scholar/activist approach, Grummell and Finnegan (2020: 4) argue “the focus therefore cannot be on data gathering but sparking and encouraging collective and critical knowledge production with people”. Importantly, in the context of this research they describe it as involving “sitting with uncertainty and emergence, allowing space and time for the form to emerge as part of the reflective process” (Grummell and Finnegan, 2020: 4).

This research will place at its centre the voices and reflections of the educators of adults. Biesta (2020: 4) notes: “educational research that seeks to contribute to the improvement of educational practice needs, in some way to find a connection with

educational practitioners, as they are central to the practice and the practising of education.”

3.3 Reflective practice and adult educators’ professional development

This research will frame in-service teachers in AE as adult, lifelong learners, just as their students are. This follows UNESCO’s recent campaign to highlight the importance of lifelong learning through its #ImALifelongLearner campaign (UNESCO UIL, 2023).

According to UNESCO and Shanghai Normal University (2025), in today’s complex world, “teachers face dynamic and multifaceted responsibilities. Beyond the subject knowledge specific to their role and context, they help students develop essential societal skills and attitudes” (2025: n.p.). Relevant to this research, UNESCO and Shanghai Normal University highlight that, “to meet the evolving demands of their profession, teachers must continuously upgrade their skills and knowledge ... [and]... Innovative solutions for ongoing teacher development are crucial” (2025: n.p.). Four points are quoted in full below to demonstrate how closely the UNESCO and Shanghai Normal University project (2023-2026) aligns with the context for this research:

For teachers to effectively contribute to advancing the Sustainable Development Goals, they must be critical and reflective practitioners. This involves continuously reflecting on their contexts and practices and enhancing their knowledge to adeptly navigate and respond to the evolving expectations and changes in society and the world.

Global challenges such as climate change, conflicts, demographic trends (including aging [sic] populations, youth bulges, and increased migration), and technological advancements amplify the need for teachers and their students to become lifelong learners.

Teachers and their professional development are grounded in a lifelong learning perspective to ensure the quality of teacher training and education. Pre-service training, in-service training, continuous professional learning are key over the course of a teacher's career

Lifelong learning is a cornerstone within the 2030 Agenda for Sustainable Development. (UNESCO and Shanghai Normal University, 2025: n.p.)

This research sits within the reflection/reflexivity paradigm, which means considering and thinking about myself and my own praxis in the context of my research journey. Olmos-Vega et al. (2023: 1095) describe reflexivity as “a set of continuous, collaborative, and multifaceted practices through which researchers self-consciously critique, appraise, and evaluate how their subjectivity and context influence the research processes”. Walsh (2003) describes four overlapping and interacting dimensions of reflexive processes: personal, interpersonal, methodological and contextual. Using these dimensions to frame this research will require consideration of reflexivity in the research aims and design, the theoretical underpinnings, and research methods and analysis.

Considering reflection/reflexivity within both teaching and the role of the teacher can be traced back to the work of Dewey. Dewey (1933) argued that reflection is a deliberate, structured process in which practitioners pause, question assumptions,

and make sense of experience rather than acting on routine or impulse. Teachers who fail to reflect, Dewey warned, become ‘slaves to routine’, relying on habit rather than informed decision-making. The concept of reflective practice has since been shaped significantly by the foundational work of Donald Schön, whose 1991 ideas introduces the processes of reflection-in-action and reflection-on-action. Using a wide number of professions, Schön argued that professionals must think critically both during and after their actions, reframing problems as they arise in complex, uncertain situations. Farrell (2012) builds directly on this framework by adapting Schön’s reflective principles for the context of language-teaching practice. Farrell’s work positions reflection as a compass that guides teachers to pause, examine, and make sense of their professional experiences. He extends Schön’s ideas by operationalising them into concrete reflective practices tailored to classroom realities. Farrell’s three distinct styles of reflective practice are explored below in the context of the focus group questions.

This study makes extensive use of tables in each chapter. As Cloutier and Ravasi (2021:113) highlight their use, “not only [to] increase transparency about data collection, analysis and findings but also—and not less importantly—organise and analyse data effectively”. Tables will be used in this study to summarise; demonstrate theoretical underpinnings; clarify some aspects of the study; and frame discussion/analysis of content. For example, in the literature review [Table 1 \(page 35\)](#) provides an overview and critique of key professional development frameworks 2008–2022. In this chapter, [Table 2 \(page no. 65\)](#) summarises the framing of green/sustainable research methods.

3.4 Research aims and questions

3.4.1 Aims

The aim of this research is to reimagine the development of in-service teachers' praxis to support E/LfS in AE. The research question and sub-questions clearly sit within the field of E/LfS and relate directly to UN SDG 4, and more specifically to target 4.7, which addresses education for sustainable development and global citizenship (UN, 2015).

As an adult educator, my experience over the last three decades has been that it is rare for us to engage in development projects which have a (global) goal of sustainable transformation, and even rarer to spend time reflecting on our own praxis to support this. Yet reflective practice is common in Initial Teacher Training (ITT) programmes and as a practice within adult education pedagogy itself. As Imel (1992) describes,

Reflective practice is a mode that integrates or links thought and action with reflection. It involves thinking about and critically analysing one's actions with the goal of improving one's professional practice [...] reflection and/or self-examination are perhaps the most convenient and doable approaches to professional development, [and] reflective practice is nothing new for teachers. (Imel, 1992: 2)

Cranton (1996: 180), writing within the context of transformative learning, views educators' professional development as a "process of critical self-reflection and self-

directed learning”. This, she says, has the potential to result in “a revision of one’s assumptions about teaching or one’s larger perspective on education”.

Originally designed to support the professional development of language teachers, Farrell (2012), building on the work of Schön (1991) identifies three distinct styles of reflective practice for teachers:

1. Reflection in action is what takes place in a classroom.
2. Reflection on action is what happens after the event has happened.
3. Reflection for action considers changes to future teaching practice.

Farrell (2012: 4), identifies the last of these as “the ultimate goal for teachers”. Table 3 below summarises how I will adapt Farrell’s three styles of reflection into phases in the development of participants’ praxis and to frame questions for the focus groups, which will be my method of data collection.

Table 3: Adapting Farrell’s three styles of reflection to develop the focus group questions for this research

Reflection in Professional Development (Farrell 2012)	Praxis development phase	Focus group question
Reflection-in-action	Learning that took place on the programme	1. What have you learnt from the project? 2. What are the challenges?
Reflection-on-action	Changes to praxis that took place as a result of the learning on the programme	3. What changed in you/your praxis?
Reflection-for-action	Learning to support future praxis	4. What are the possibilities/ dreams for the future?

Table 3: Adapting Farrell’s three styles of reflection to develop the focus group questions for this research

3.4.2 Behind the focus group questions

‘What have you learnt?’ and ‘What are the challenges?’ These questions invite participants to reflect on the learning for their E/LfS praxis as a result of the PFL and GC projects and what they perceive to be challenges to their praxis (at the end of their respective development programme).

The third question, ‘What (if anything) has changed in you or your praxis?’ encourages participants to reflect on changes in their praxis as a result of their learning. As both projects will take place over an extended period of time during which teachers will also teach within their own organisations, this gives them some, if limited, opportunities to act on their learning and actually change pedagogical praxis (including curriculum content).

Question four, ‘What are the possibilities for the future?’ is about reflection-for-action, making space for participants to dream about what might be possible for themselves and their future praxis.

Thinking about the future, or long-term thinking, is an extremely important element of E/LfS. Even though thinking about the future can be extremely (eco) anxiety producing, with the current state of global politics, thinking about the future can help us imagine different possibilities and therefore be hopeful rather than hopeless. In the AimHi Earth (2023) 15 green skills, long-term thinking, includes both ‘Cathedral thinking’ (investing in the present moment to build things that will last and be of value in a range of possible futures) and ‘7th generation thinking’ (considering the benefit to our great, great, great, great grandchildren, as our ancestors considered us). Given

the moments that this research will occur in the development of teachers' praxis, I feel it's really important to give the participants spaces in which to reflect on what they think could be possible in the future, to dream, even if it is grounded in a particular moment.

I will conduct this research within the framework of "research as praxis", informed in particular by Lather's (1991:56) work on emancipatory research, reciprocity and praxis. She describes the goal of emancipatory research as being "to encourage self-reflection and deeper understanding on the part of the researched" using empowering approaches whereby both the researcher and the researched become "the changer and the changed" (Lather, 1991: 56-59) and built on the principle of reciprocity in research, in which "we consciously use our research to help participants understand and change their situations" and deliberately use praxis as an 'interrupter strategy' (Lather, 1991: 57).

The concept of praxis and its development is essential to this research in terms of working out how adult educators can be supported to develop their E/LfS praxis. Freire (1998a) used the idea of praxis to consider the interplay between reflection and action, particularly when concerned with political action and directed at structures which need transforming. Praxis occurs when theory is used together with action, in order to change things for the better. Thompson and Heffernan (2021: 157) argue that the idea of praxis is important for social justice educators as it requires "practical wisdom, moving between the grounded and the particular and the general and the principled".

3.5 Introducing the theoretical perspectives and model

The literature review showed that although AE is seen as an important part of E/LfS, its form, given the heterogeneity of AE delivery, can make it difficult to quantify and so demonstrate its value contribution at a local, national or global level. The literature also highlighted how adopting the language of lifelong learning has added to its invisibility and to being misunderstood. The lack of focus on the development of adult educators can be seen as a direct consequence of this. Where it is discussed, adult educator development is usually concerned with the more general professionalisation of the workforce and is often reduced to a set of competencies, or a transmissive approach.

The urgent need to address multiple climate and environmental crises requires a transformative learning revolution in (adult) education for a just transition and future. This will require a significant investment in the AE teaching workforce.

Transformative learning (though never conceived in quite this way by its original theorist, Jack Mezirow) was identified through the literature review as a natural fit for both E/LfS and adult educator development—meeting the criteria in the green research framework for education. In the context of transformative learning, the theoretical framework used for this research, Mezirow (1991: 103) describes reflection as “the process of critically assessing the content, process or premise(s) of our efforts to interpret and give meaning to an experience”. Reflection, therefore, becomes the central dynamic in transformative learning. “It is the function of reflection that makes action possible” (Mezirow, 1991: 100). For Mezirow (1991), this requires us to stop and think, to create a pause.

Ironically, even though TLT is a distinctly adult education-focused theory, it has rarely been applied to the field of adult educators' professional development. A notable exception is the work of Cranton (1996), now 30 years old. TLT is becoming a common narrative within E/LfS but the literature review found scant research on this as a particular approach to any professional development framework to support teachers' capacity and confidence to teach about climate and environmental justice across all AE curricula. Whilst the role of teachers and teacher education in societal transformation towards sustainability is increasingly discussed, "little is known about transformative learning processes in teacher education programs" (Weinberg et al., 2020: 1767).

The framing of the Weinberg et al. (2020: 1767) inner, outer, forward transformative learning orientations in relation to Mezirow's ten phases of transformative learning is helpful to this study. This is because it analyses these stages in the context of teacher development in sustainability education. Weinberg et al. (2020) found PSTs in their study looked inward (thinking and feeling), outward (making connections, relating to others) and forward (taking action). They noted that all the PSTs experienced a disorientating dilemma, which is the foundation on which transformative learning takes place. However, they struggled with too little data from the PSTs to support their outer and forward orientations, i.e., through to the final stage of 'Reintegration', the stage that directly relates to taking action in the real world:

In the present study, it was this stage of transformative learning that marks the beginning of a considerable decline in prevalence within the data, meaning that there were fewer and fewer

instances [of *PSTs*] describing their experiences related to this stage and above (Weinberg et al., 2020: 1777)

As a result, although the inner, outer, forward model is useful, it is also limited by the framing of the orientations and the lack of data from participants. Viesca (2022: 4) describe pre-service and in-service teachers as having “different motivations, commitments, starting points and previous experiences with regard to sustainability” and that research in this area emphasises the need for flexible and personalised paths, as teacher education is not a linear process, but rather a chaotic one.

3.6 Extending the transformative learning stages

Analysing teachers’ reflections and perceptions in this study will require an extended and developed version of the inner, outer, forward orientations.

Mezirow’s original transformative learning theory is not without its critics for its focus on the individual (Brookfield, 1987; Fleming, 2022; Hoggan, 2023). Brookfield’s challenge is pertinent in the context of this study. He considers that the focus on individual cognition reframing for transformation is too narrow and should take into account wider contexts of power, ideology and social context. In particular, he advocates for critical thinking, arguing that “Learning is not only an individual cognitive act but a collective process of resistance, solidarity, and struggle against ideological domination” (Brookfield, 1987: 19). Brookfield (2005) also contends that the barriers to reintegration and transformation and what can therefore support and sustain transformation must be considered. Alongside dominant ideologies (racism, sexism and neoliberalism), which can inhibit sustained transformation.

Brookfield (2005) also highlights that institutions (workplaces, communities, schools, etc.) and individual isolation can work against sustaining transformation and argues for communities and supportive groups: “Without communities of practice and collective struggle, transformed perspectives are fragile and easily eroded by dominant ideologies” (Brookfield, 2005: 123). Similarly, in the context of schools and professional development, the Education Endowment Foundation (EEF) (2024: 6) argues, “An educational approach or idea may seem great in principle, but what really matters is how it manifests itself in the day-to-day work of people in schools, colleges, and early years settings”.

Given the above critiques, exploring what can inhibit and support the development of E/LfS praxis, this research project will further develop and extend the Weinberg et al. (2020) inner, outer, forward model. In the context of the ambition to re-imagine future-oriented support for adult educator PrD in E/LfS, a space to dream of possibilities is critical. Imagining alternatives to the future is essential to E/LfS.

To apply the inner, outer, forward orientations to the data in this study, each orientation has been reframed to encompass the whole process of learning, change and sustaining praxis development in the context of role and connection (inner), developing pedagogical praxis (outer) and sustaining collaboration and collective action (forward). The extended orientations ensure alignment with my sub-research questions to support a proposed future development model for in-service AE teachers. Figure 6, below, illustrates how I have redesigned and extended the dimensions.

Figure 6: How the inner, outer, forward model is extended in this study

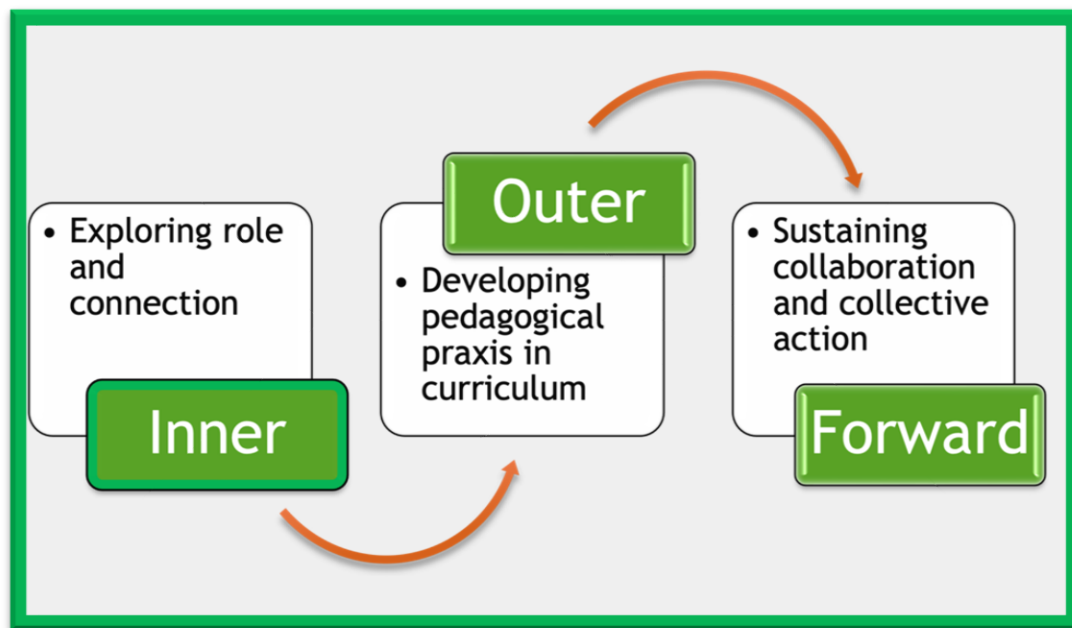


Figure 6 How the inner, outer, forward model is extended in this study

Extending the inner, outer, forward model in this way means synthesising 3 new dimensions to the forward orientation, which then similarly extends Mezirow's original ten phases of transformative learning. The new dimensions will be identified by the numbers +1, +2 and +3:

+1 recognising external barriers to reintegration

+2 recognising what is required to sustain transformation

+3 enabling a space to dream of possibilities

Extending the transformative learning stages in this way is an original contribution to knowledge in this thesis. Table 4 illustrates this.

Table 4: Comparing the transformative learning models used in the research

No.	Mezirow 10 phases of TL	Weinberg et al (2020)	Extended dimensions for in-service AE teachers E/LfS PD
1	A disorienting dilemma	Inner	Inner
2	A self-examination with feelings of guilt and shame	Inner	Inner
3	A critical assessment of epistemic, socio-cultural and psychic assumptions	Inner	Inner
4	Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change	Inner	Inner
5	Exploration of options for new roles, relationships and actions	Outer	Inner
6	Planning a course of action	Outer	Outer
7	Acquisition of knowledge and skills for implementing one's plans	Outer	Outer
8	Provisional trying of new roles	Outer	Outer
9	Building of competence and self confidence in new roles and relationships	Outer	Outer
10	A reintegration into one's life on the basis of the conditions dictated by one's perspective	Forward	Forward
+1	N/A	N/A	A recognition of the external barriers to reintegration (Forward)
+2	N/A	N/A	A recognition of what is required to sustain and maintaining the perspective shift (learning) (Forward)
+3	N/A	N/A	A space to dream of possibilities (Forward)

Table 5: The research questions mapped to Farrell's styles of reflection and the extended inner, outer, forward model

Research sub questions	Reflection in PD (Farrell 2012)	Research sections	Research question in focus groups	Relationship to the Weinberg et al. (2020)TLT model
What are the perceptions of adult educators of the current challenges, globally and locally, in their E/LfS praxis?	Reflection-in-action	Learning that took place on the programme	What are the challenges? What is your learning?	Inner
What learning and praxis development can be identified by adult educators as a result of engaging in E/LfS projects?	Reflection-on-action	Action that takes place as a result of participation	What has changed in you/your praxis?	Outer
What could a future-oriented imagining of supporting in service praxis development look like?	Reflection-for-action	Learning to support future praxis	What are the possibilities for the future?	Forward

Table 5: The research questions mapped to Farrell's styles of reflection and the extended inner, outer, forward model

3.7 The global and local teacher development projects participating in this research

3.7.1 People's Future Lab project (PFL)

The PFL was grounded in an international/global perspective through the contributions of international adult educators. The international participants were all part of a two-year project from 2021–2023 linking 11 folk high schools in Denmark with 11 ‘inspired’ folk high schools across the world.

Recognising that climate challenges are transnational and must be solved by global cooperation, the PFL project was developed by The Association of Folk High Schools in Denmark (also known as FFD). The objectives were to strengthen and develop the folk high schools' contribution to the sustainable transition of societies, strengthen participants' pedagogical praxis, their global connections, and, through the engagement of those involved, invigorate folk high schools' role in the sustainable transition. These translated into a desire to:

1. Strengthen pedagogy within sustainable and global education
2. Strengthen the global folk high school movement
3. Strengthen people's engagement in the sustainable transition of societies

The People's Lab project involved all of the educators in five online sessions from August 2021 to March 2022. The sessions covered:

- People's Education: In search of common ground and a clear vision
- Sustainable Education: What is our vision for sustainable education?
- Global Education: How do intercultural meetings create global learning?
- Action learning: How do we engage the youth to create change?
- Lessons learnt

The project culminated in a three-day camp and festival in Denmark in May 2023 involving thirty of the project educators. Alongside educators from the 11 Danish folk high schools, participants were from organisations with some link to or were part of the international folk high school movement, including from Tanzania, India, Japan, England, USA, Mexico, the Faroe Islands, Palestine and Poland. A total of twenty participants attended one of the two focus groups where I collected the data for this research.

3.7.2 Green Changemakers project

The second project, GC, is a West Midlands-based project in England. Following the publication of ten regional Local Skills Improvement Plans (LSIPs) in 2022, DfE released funding to support the LSIP recommendations. Fircroft College is leading one of six LSIP projects in the West Midlands on wider green skills. Part of this project was teacher praxis development for in-service AFE educators in the West Midlands. The purpose of the project was to enable educators to develop both their own pedagogy and curriculum content in E/LfS and to take their praxis back into their home colleges and classrooms.

The project involved 40 adult educators from 17 colleges participating in a 50-hour programme, from November 2023 to March 2024. The programme used the AimHi Earth (2023) 15 green skills as a starting point and worked with transformative pedagogical practices, including the thinking environment (Kline, 1999).

The programme outcomes were to:

- Self-identify and extend personal wider green skills skillset

- Practise implementing pause and processing time using the Thinking Environment
- Complete and update an influence analysis
- Identify and practise strategies for challenging and influential conversations
- Identify changemaking strategies around:
 - nature thinking
 - systems thinking
 - people thinking
 - technical thinking
- Contribute to amplifying green changemaking work
- Contribute to developing a virtual green skills tutor hub

3.8 Getting together: The opportunity

3.8.1 How was I involved with the projects and how did the projects become involved in my research?

Over the course of my Ed Doc studies, I have been professionally involved in these two AE teacher professional development projects, framed through the lens of E/LfS. Each project, for a different reason, gave a rare glimpse into the possibilities for adult educators to engage in spaces for learning and reflection which are specifically designed for them, by people like them. The reflections on the learning, actions and future dreams of possibilities of the participants in these two projects, one global project and one local (to the West Midlands), gave me a golden opportunity and formed the basis of the data for my research.

Opportunities for in-service adult educators to engage in sustainability development programmes that move beyond a transmissive approach are rare in England.

Through my professional work as Principal of a college based on Folk High School (FHS) philosophies and the work of the college on sustainability, I was involved in both projects.

My involvement in each of the projects was different. In the PFL project, alongside other teachers from Fircroft College, I took part in online training modules and delivered a pedagogical workshop for teachers as part of a face-to-face camp and festival in Denmark. In the GC programme, I was not involved as a participant. Instead, I was involved in designing the overarching programme and delivering two sessions on aspects of transformative learning.

My involvement in both projects gave me access to project participants and enabled me to get permission to hold six focus groups as the projects drew to a close. I was able to get to know the participants and develop a level of trust where they were willing to engage with my research and participate in focus groups, where I would collect my data.

While both projects shared a focus on Education/Learning for Sustainability (E/LfS), their participation and response profiles differed significantly. The PFL project provided a global perspective, involving 20 educators (out of a possible 30 present at the final camp) from Denmark, Mexico, India, Poland, England, Kenya, Tanzania, and the USA. Notably, for 17 of these 20 participants, English was an additional language, necessitating an ethical commitment to "no tidying up" of transcripts to

preserve their authentic voices. In contrast, the GC project was localised to the UK West Midlands, with a 100% participation rate involving 40 adult educators from 17 different FE colleges. These two cohorts combined to provide a unique dataset of 60 voices from 41 institutions, bridging the gap between international folk education traditions and the highly regulated English Further Education sector.

3.8.2 How did the projects' participants become involved in my research?

The projects involved adult educators who taught across all curriculum areas, placed transformative learning pedagogies at the heart of their delivery and developed constellations of practice between participants. Mycroft and Sidebottom (2018: 1) argue that in a “constellation of praxis, students become tutors and tutors, students, graduates and an international community of critical friends engage, disengage and re-engage in task-oriented constellations, which are progressive, campaigning and theoretical.” Again, such approaches are rare in educator development projects, but these aims were realised in the projects.

All participants in the global and local projects were in-service teachers working with adults aged 19+. The intention of involving these two projects is to position, at the heart of this research, global and local reflections and perspectives of in-service teachers in AE. All participants in this research were part of either the PFL or GC teacher development projects. The additional opportunity to be part of this research was offered on a voluntary basis at the end of both projects. The sample was therefore opportune and depended on who wanted to take part in the focus groups. All focus groups were conducted in English, though for the majority of PFL teachers, English is an additional language. In framing this research within a sustainable

paradigm, the focus groups took place where the participants were situated, ensuring no additional travel.

The research aims were fully described to participants who had opportunities to discuss and understand them. The required consent paperwork was completed before the focus groups took place. All participants were already known to me through my involvement in their respective projects. I hoped this meant the relationships I have developed through the projects helped participants to understand the research and have a level of trust in me to encourage their participation. The two projects provided an interesting diversity of participants, which will add to the richness of the research findings.

The PFL project presented an almost unique opportunity to hear the voices of educators from across the globe. These educators work with the thinking and practices of the folk high school, a very different philosophy and model of education from most mainstream (adult) education sectors. The GC project, though local to the West Midlands, included educators from across all areas and curricula within FE colleges, where most adult education is now delivered in England. Like many of the folk high school teachers in the PFL project, the AFE teachers from the West Midlands have had previous careers and different professional experiences, some in specific vocational areas.

3.8.3 Who is involved in the People's Future Lab folk high schools partnerships and where are they located?

The 11 partnerships between Danish folk high schools and the global folk high school-like institutions were:

1. Newala Folk Development College, Tanzania, and Gerlev Folk High School, Denmark
2. Mitraniketan Peoples College, India, and The Rythmical Folk High School, Denmark
3. Føroya Fólkaháskúli, Faroe Islands, and Vallekilde Folk High School, Denmark
4. Cheptigit, Kenya, and Brenderup Folk High School, Denmark
5. Dar Al-Kalima University of Arts and Culture, Palestine, and Silkeborg Folk High School, Denmark
6. Highlander Research & Education Center, USA, and Brandbjerg Folk High School, Denmark
7. Federal Institute of Amazonas, Brazil, and Ry Folk High School, Denmark
8. The Ecological Folk High School, Poland, and Egmont Folk High School, Denmark
9. Change Makers College, Japan, and Nordfyns Folk High School, Denmark
10. Fircroft College of Adult Education, England, and International People's College, Denmark
11. Unitierra, Mexico, and Krogerup Folk High School, Denmark

3.8.4 Who is involved in the West Midlands Green Changemakers colleges and where are they located?

1. North Warwickshire and South Leicestershire College
2. Dudley College
3. Fircroft College
4. Halesowen College
5. Birmingham Metropolitan College
6. South Staffordshire College
7. City of Wolverhampton College
8. Coventry College
9. Walsall College
10. Sandwell College

11. University of Wolverhampton
12. Telford College
13. Solihull College and University Centre
14. Queen Alexander College
15. University College Birmingham
16. South and City College
17. Heart of Worcester College
18. Transform Staffordshire
19. Coventry Adult Education Service
20. Weston College

Table 6 An overview of the projects' timelines as they relate to the timeframe of this research.

Timeline	Peoples Future Lab (PFL) activities	Green Changemakers (GC) activities	Research opportunities/ moments	Research participants
2021	PFL project launch August online module 1			
2022	Jan-April: online modules 3-5 Seminar in Denmark Partnerships with schools	Local Skills improvement plans published		
2023	May camp and festival in Denmark	Sept- West Midlands green skills project start Nov: green changemakers launch	2 x focus groups (PFL)	20 participants/ group – (Denmark, Mexico, India, Poland, England, Kenya,

Timeline	Peoples Future Lab (PFL) activities	Green Changemakers (GC) activities	Research opportunities/ moments	Research participants
				Tanzania, and the USA
2024		Jan-March - completion of four GC programmes	4 x focus groups (GC)	40 participants over four groups – all West Midlands

Table 6: provides an overview of the projects' timelines as they relate to the timeframe of this research

3.9 Data collection—focus groups

In seeking to understand the learning, change in E/LfS praxis and possibilities for future praxis that might have resulted from the teacher development projects, my methodological choices are informed by the process of TLT.

Data collection was in the form of six focus groups. Focus groups are a dialogical research method and a common data collection method which "engages a small number of people in an informal group discussion focused on a particular topic" (Onwuegbuzie et al., 2009: 2). Krueger and Casey (2000) say another advantage of the focus group is its 'socially oriented' environment.

I chose the focus group as the best method for this research as it enabled the collection of data from many participants at the same time. I ruled out individual interviews as an alternative in recognition of the time burden such a request would

place on very busy teachers as well as the substantial geographical and time differences involved in the PFL project which would have increased the cost and carbon footprint of the research as well as potentially significantly reducing the number of participants willing to be involved.

Two focus groups took place during the final part of the PFL project and four during the last GC sessions. This meets the criteria in the GRFfE, which emphasises the importance of the research taking place where the participants are, so being mindful of the cost to participants and the environment of resources used.

PFL project data collection took place during the three-day camp and festival in May 2023. GC project data collection took place in March 2024. Each focus group lasted 60-90 minutes. Participants in the focus groups were asked to consider the following questions in thinking rounds:

- What have you learnt and what are the challenges?
- What (if anything) has changed in you, your pedagogical practice or curriculum content?
- What do you think is possible in the future?

Each question in the focus groups comprised a round, inviting participants to reflect on the question, knowing that they could take their time to pause and reflect without interruption from me or fellow participants and that they could choose not to participate in any round. It was important, given that English is an additional language for most PFL participants, that the questions were clear to understand and answer.

I described the format and questions I would ask at the start of each round and wrote the questions on a board. I recorded the focus groups using a microphone and saved the recordings as voice notes on my phone.

As described throughout my research, it has been vital that I be highly cognisant of the power relations in my role as both Principal and researcher. My research values/ethics of equity and inclusion, collaboration and solidarity were very important in the choices I made in method and creating an environment in which all participants would feel equal and comfortable reflecting on and sharing their responses to the research questions. I therefore facilitated the focus groups using thinking environment principles, based on the work of Nancy Klein (2002). In a thinking environment, “space is provided for individuals to be listened to with respect and genuine attention and to speak without interruption” (Mycroft and Sidebottom, 2018: 4). Thinking environment pedagogies were familiar to all the participants as they were used in their projects. These principles were used to create a space where the quality of thinking was maximised. One of the key principles of the thinking environment is equality – the leaving of ‘role, rank and ego at the door’ (Mycroft and Sidebottom, 2018: 6).

Aboytes and Barth (2020: 1003) found that “one of the most often mentioned conditions for fruitful transformative learning processes is providing time and space for reflection”. Similarly, Taylor (2000: 366) says that “once space is created for transformative learning, ways of listening and speaking within that space become important”. This was a common theme emerging from the focus group in terms of participants’ learning. Trust is an important value within the context of this research,

and I hoped that both the relationships established with participants, the research method and using thinking environment principles would support this. Palmer (2004: 114) follows a simple rule when he facilitates circles of trust: “No fixing, no saying, no advising, no setting each other straight”.

The focus group participation rate was positive. Twenty out of a possible thirty educators who were present at the PFL camp and festival agreed to take part. The remaining ten were unfortunately busy with student workshops at the camp. Those who took part came from Denmark, Mexico, India, Poland, England, Kenya, Tanzania and the USA. All participants in the GC project took part in the focus groups and were from the West Midlands.

Smith and Duckworth (2022:31), writing on the context of AFE argue that research participants act as partners in the meaning making, and further, “it is vital to carry out the research in this context”. It might be for example that PFL participants would be more open to transformative pedagogical approaches for their own learning and praxis because of the schools that they teach in, so deeper levels of learning and changes to practice could be achieved. Conversely, transformative learning pedagogies are not common in the AFE sector, where the focus is very much on qualifications, assessment and achievement. It does not, however, necessarily follow that transformation does not happen to adult FE students, and pockets of explicit transformative pedagogy do exist. This will be tested in the data analysis and findings in Chapter 4.

3.10 Reflective thematic analysis method

Thematic analysis (TA) is a common method for the analysis of qualitative data, and there is a plurality of frameworks/methods available, which Braun and Clarke (2022) refer to as a family of methods. Among this family of TA methods is Reflective Thematic Analysis (RTA). This method is designed to “... contribute to the pre-existing body of knowledge by providing rich, contextualised, creative, and thus original research undertaken in the spirit of curiosity and reflexivity” (Devine, 2021: n.p.).

RTA has a strong correlation and alignment to the core principles of transformative learning and the sustainable/green research paradigm I use and aligns well to the dialogical data collection method of focus groups and the critical interrogation of reflection-in-action, reflection-on-action and reflection-for-action, which are central to this research. RTA methods are about meaning and meaning-making that is “context bound, positioned and situated” (Braun and Clarke, 2013: 21).

My rationale for deciding to use the Braun and Clarke (2022) approach to RTA as my preferred framework was based on several factors including their view of qualitative research “as creative, reflexive and subjective” (Braun and Clarke, 2019: 590) and their positioning of the researcher and their subjectivity as a resource central to the research as opposed to being “a potential threat to knowledge production” (Braun and Clarke, 2013:21).

3.11 Developing the RTA analytical framework for this research

My research sits within what Braun and Clarke (2024: 11) would describe as the “artfully interpretive (Big Q) spectrum”. By which, they intentionally highlight the importance of the researchers’ involvement in constructing themes in RTA: “At the artfully interpretive end of the spectrum, qualitative research is understood as a creative, reflexive and subjective process, where themes are actively constructed by the researcher rather than discovered in the data” (Braun and Clarke, 2019: 21-23). This approach explicitly recognises and positions my own entanglement with the PFL and GC projects as a strength and an opportunity.

3.11.1 Conscious choices

Braun and Clarke (2022: 58) intend their approach to offer flexibility, but in doing so, “the researcher [*has*] to articulate the assumptions that informed their approach and how exactly they enacted it.” They identify 4 RTA domains: orientation to data, focus of meaning, the qualitative framework and the theoretical framework. Within these domains, researchers have to make choices that reflect their values and positionality, in addition to the relevance and applicability to the research question. The choices are:

- i. Orientation to the data: inductive/deductive
- ii. Focus of meaning: semantic/latent
- iii. Qualitative framework: experiential/critical
- iv. Theoretical framework—realist, essentialist/relativist, constructionist

Using these four domains, a deductive, latent, critical and relativist constructionist approach will be used to analyse the data from the focus groups in this research. The approach is summarised in Table 7.

Table 7: How I will use the RTA domains in this research

Domain	Analysis	‘What can I do? research’ approach	How I have used the RTA domains in this research
Orientation to the data	Inductive /deductive	Deductive	Using transformative learning as a lens to extract meaning from the data.
Focus of meaning	Semantic/ latent	Latent	Exploring the underlying, covert, and often implicit meaning of the data through the voices of the participants and the process of theming reflections.
Qualitative framework	Experiential/ critical	Critical	Organising participants’ contributions around their E/LfS praxis.
Theoretical framework	Realist, essentialist/ relativist, constructionist	Relativist, constructionist	Abstracting meaning from what participants said. This sense-making may come from the researcher, and theory-seeking connections.

Table 7: How the RTA domains are used to provide an analytical framework for this research

Deductive analysis of the data will use the theoretical or conceptual framework of transformative learning as a lens to extract meaning from the data.

Latent analysis will focus on exploring the underlying, covert, and often implicit meaning of the data through the voices of the participants and the process of theming reflections.

Critical analysis will focus on specific topics or issues, that participants’ contributions will be organised around, e.g. development of their E/LfS praxis.

Relativist constructionist analysis will involve attempting:

to understand the social construction of meaning articulated by the participants. There is no objective reality to be mined from the data because reality is a manifestation of individuals' and societies' sense-making. Therefore, the act and products of this sense-making are what come under scrutiny in the relativist, constructionist approach. (Braun and Clarke, 2022:114)

Braun and Clarke (2022) highlight the deductive, latent, critical and relativist constructionist domains tend to group together. For the most part, this is what they will do in my data analysis. The domains are not intended to be rigid, and some elements will likely be multi-dimensional. For example, in the qualitative framework, analysis will focus on the participants' voices through reflection. In the latent analysis, the extended inner, outer, forward model of transformative learning in professional development will be used to identify meaning in the data.

All research participants in this 'What can I do?' research were actively involved in their praxis development around E/LfS, so there is an implicit understanding that the impact of climate and environmental crises is worthy of our attention as educators.

3.11.2 The process for data analysis

Six recursive phases (familiarisation; coding; generating initial themes; reviewing and developing themes; refining, defining and naming themes; and writing up) provide a structure for the RTA data analysis process (Braun and Clarke, 2006: 87-93):

3.11.2.1 Familiarisation: Questioning and querying

Familiarisation with the data took place over an extended period because the projects had different timescales. This stage began with transcribing PFL focus group

recordings over the summer of 2023 and GC recordings through the summer of 2024. It took considerable time and yielded more than 50,000 words of data.

3.11.2.2 *Coding and theme development*

I coded over an extended period of study leave from work, which meant I could immerse myself in the data. This phase of the analysis also brought me a sense of joy and reconnection when I heard the voices of the participants again, particularly in the PFL project, as I have been developing these relationships with some of the participants since first meeting them at the Global Folk High School Summit in 2019.

Braun and Clarke (2006: 82) describe how “the coding process requires a continual bending back on oneself—questioning and querying the assumptions we are making in interpreting and coding the data” and this was certainly true of my experience.

Transcription was a slow and thoughtful process, which enabled me to reflect on my own research praxis about the need for space and time and adopting a slow ontology (Ulmer 2017).

I read transcriptions several times. Digitally and on paper. Line by line. I wrote codes I read again. I coded again. I recorded each step in coding and theme development. In the initial analysis, I noted 74 different codes in the GC group and 54 in the PFL group. According to Braun and Clarke (2021: 592) “codes are understood to represent the researcher [*sic*] interpretations of patterns of meaning across the dataset”.

3.11.2.3 *Generating initial themes and renewing and developing themes*

Braun and Clarke (2021: 593) conceptualise themes as “patterns of shared meaning, or united by a core concept”. After coding, I looked for larger patterns or themes (the 3rd phase) and then again (the 4th phase) developed themes from these larger patterns using a deductive analysis applying the extended inner, outer, forward model (see Table 8 below).

Table 8: Theme development using the extended inner, outer, forward model

No.	Mezirow 10 phases of TL	Weinberg et al. (2020)	What can I do? extended model
1	A disorienting dilemma	Inner	Inner
2	A self-examination with feelings of guilt and shame	Inner	Inner
3	A critical assessment of epistemic, socio-cultural and psychic assumptions	Inner	Inner
4	Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change	Inner	Inner
5	Exploration of options for new roles, relationships and actions	Outer	Inner
6	Planning a course of action	Outer	Outer
7	Acquisition of knowledge and skills for implementing one's plans	Outer	Outer

No.	Mezirow 10 phases of TL	Weinberg et al. (2020)	What can I do? extended model
8	Provisional trying of new roles	Outer	Outer
9	Building of competence and self confidence in new roles and relationships	Outer	Outer
10	A reintegration into one's life on the basis of the conditions dictated by one's perspective	Forward	Forward
+1	N/A	N/A	A recognition of the external barriers to reintegration Forward
+2	N/A	N/A	A recognition of what is required to sustain and maintaining the perspective shift (learning) Forward
+3	N/A	N/A	A space to dream of possibilities Forward

Table 8: Theme development using the extended inner, outer, forward model

Thirty-two themes were developed in these third and fourth phases (generating initial themes and reviewing and developing themes). Whilst some differences in reflections were noted, there was much alignment. I was also surprised by how aligned the emerging themes were with the extended inner, outer, forward model. Although I noticed this during the focus groups, becoming immersed in the data clarified it, and will be discussed in Chapter 4.

Table 9: Theme development in the 3rd and 4th phases

Themes	In Peoples Future Lab	In Green Changemakers
INNER themes (8)		
Disorienting dilemmas – impetus for learning	Yes	Yes
Reflection	Yes	Yes
Emotional responses	Yes	Yes
Mindset change	Yes	Yes
Mindset change +influencing others	Yes	Yes
Prof and personal blurring	Yes	Yes
Identity as a teacher	Yes	Yes
Activist/changemakers	Yes	Yes
OUTER themes (12)		
Green skills	No	Yes
Change in pedagogical practice	Yes	Yes
Dialogical practice (non -hierarchical)	Yes	Yes
Hope using situated knowledges of students	Yes	Yes
Using theory	Yes	Yes
Curriculum development	Yes + examples of impact	Yes +examples of impact
Beyond curriculum (rest of the organisation)	No	Yes
Green spaces as pedagogy	No	Yes

Themes	In Peoples Future Lab	In Green Changemakers
Rejection of embedding	No	Yes
Conditions of learning	Yes	Yes
Students	Yes	Yes
The classroom and what is possible	Yes	Yes
FORWARD themes (12)		
Power and hierarchy	Yes	Yes
Challenges to current thinking	Yes	Yes
Good examples from the sector	No	Yes
Connections with others	Yes	Yes
Sharing ideas and learning	Yes	Yes
Working with others	Yes	Yes
Influencing others	Yes	Yes
Working with communities	Yes	Yes
Caring for ourselves as teachers	Yes	Yes
Networks	Yes	Yes
What is needed to sustain us/this?	Yes	Yes
Dreams and possibilities	Yes	Yes

Table 9: Theme development in the 3rd and 4th phases

3.11.2.4 *Refining, defining and naming themes*

Refining and defining the themes in phase (v) resulted in the 21 themes in the finalised analytical framework, listed in Table 9. Eleven themes were 'lost' in this refining phase as it became clear that some were too closely connected to other, more prominent themes, and others moved between the inner, outer and forward orientations. For example, the data which covered praxis outside the classroom moved between the inner orientation in the activist/changemaker role and the forward orientation in the sense of what is needed to change in the English AFE system.

The next step in this phase involved creating a document with the theme titles against which I mapped the direct quotes and voices of the participants as relevant to that theme. I did not seek to ensure a balance between the voices from the two projects, as the analysis is not intended as a comparator between the projects. The process of coding and theme development was intended to have descriptive and interpretive elements at this stage. The voices of the teachers are the focus of this research, and it was important to give them due regard through the different stages. The interpretive element was, however, important for enabling me to draw on my own subjectivity to consider less articulated elements which may still be pertinent to the analysis of the data in the context of the theoretical framework. It also helped me to develop some of the reflections and locate them within a particular project. I used the notes function on my phone as a form of reflective journal, which allowed me to return frequently to those reflections.

I was also mindful of the language used by the participants in the research for whom English was an additional language. I felt it was important to be sure there was 'no

tidying up' of the data and that the quotes and reflections were represented as they were articulated in the focus group even if this meant a slightly nuanced form of English was recorded in the reflections from the PFL project in particular (although Brummie/Black Country accents also posed a bit of a challenge).

Table 10: Analytical framework: The final themes

Inner (5)	Outer (10)	Forward (6)
• Disorienting dilemmas and Multiple shared discontent • Mindset change • Professional/personal blurring of learning • The role of the teacher • Teacher as activist/changemaker	• Building confidence and competence • A pedagogy for just transitions • Slowing down and creating space • Teacher—student dynamic • Teaching hopefully • Dialogical practices • Student engagement • Using the situated knowledges of students • Moving student to actions • Universalisms versus particularisms • Importance of context and place-based pedagogies	• Need for structural/systems change in AFE in UK • Supporting well-being – recognising the emotional load of teaching • Connections with other teachers and building relationships • Getting different perspectives • Developing local community partnership • Adaptation and adaptability

Table 10: Analytical framework: The final themes

Tables 11, 12 and 13 below show how the final themes relate back to the extended inner, outer, forward model and the three sub-research questions.

Table 11: Context of inner orientation: reflection-in-action

No.	Mezirow TL phases	Extended model	Themes from the data
1	A disorienting dilemma	Inner	Disorienting dilemmas and multiple shared discontent
2	A self-examination with feelings of guilt and shame	Inner	Mindset change and influencing others
3	A critical assessment of epistemic, socio-cultural and psychic assumptions	Inner	Blurring of professional and personal learning
4	Recognition that one's discontent and the process of transformation are shared and that others have negotiated a similar change	Inner	The role of the teacher
5	Exploration of options for new roles, relationships and actions	Inner	Teacher activist/ changemaker

Table11: Context of inner orientation: reflection-in-action

Table 12: Context of outer orientation: reflection-on-action

No.	Mezirow TL phases	Extended model	Themes from the data
6	Planning a course of action	Outer	Finding hope and teaching hopefully
7	Acquisition of knowledge and skills for implementing one's plans	Outer	- Pedagogical practice - Dialogical methods - Curriculum development
8	Provisional trying of new roles	Outer	Same as above- these two phases are inter-related in this study
9	Building of competence and self confidence in new roles and relationships	Outer	- Developing confidence - Student engagement - Using the situated knowledges of students
10	A reintegration into one's life on the basis of the conditions dictated by one's perspective	Outer	- Moving students to action - Context and place - Universalisms and language

*Table 12: Context of outer orientation: reflection-on-action***Table 13: Context of the forward orientation: reflection-for-action**

No.	Mezirow TL phases	Extended model	Themes from the data
+1	A recognition of barriers to reintegration	Forward	Power and hierarchy, barriers to reintegration
+2	A recognition of what is required to sustain and maintain the perspective shift (learning and outcomes)	Forward	- Time and space - Caring for ourselves as teachers

No.	Mezirow TL phases	Extended model	Themes from the data
			• What is required to sustain • Building connections with others • Networks and movements
+3	A space to dream of possibilities	Forward	• Thinking about the future • Space for values • A quandary • Adaptation • Our great work

Table 13: Context of the forward orientation: reflection-for-action

3.11.2.5 Writing up

As in the data analysis phases my subjectivity (aligned to my values and ethics as a researcher) was also a resource in this writing-up phase. It enabled me to listen and respond with curiosity and respect to the reflections of each participant.

I was engaged in an ongoing consideration of ethics and reflexivity throughout data collection and analysis. It is important to me, as well as the chosen process, that the voices of teachers wove their story on the inner, outer, forward theoretical framework. This meant that not everything that was said in the data could be represented in the analysis. However, more from their stories will be explored and shared in future in further papers, conference submissions and think pieces/blogs.

3.12 Ethical considerations

Ethical approval was obtained before the focus groups took place with the PFL project. After the original application, amendments were approved to include the GC project, (again using focus groups as the method of data collection and with a revision to the research title).

Earlier in this chapter, I highlighted how reflection and reflexivity are essential for responsible and ethical research practice. Yet some argue against its use. Objections include a lack of time (Copeland et al., 1993) and that reflexivity can overshadow the research itself, creating tensions between credibility and vulnerability, and raising concerns about excessive self-focus (Denniston, 2023). Though spaces for reflection may seem a luxury, as Dewey's work illustrates, experience alone does not lead to learning; "it is reflection on experience that enables growth" (Dewey, 1933: 78).

Reflexivity has ensured my own positionality is open in this research, with respect to my involvement in the PFL and GC projects and in terms of power and hierarchy. This chapter has outlined my commitment to and the steps I have taken to keep my ethics 'live' and counter the risk of ethical conflicts.

The positioning of this research within a green/sustainable framework has been an attempt to self-reflect on different aspects of the research process. Although this is my first attempt, it demonstrates my wider ethical commitment to considering sustainability in its widest sense.

3.13 Conclusion

In this chapter, I described the intended research methodology for this study, considering each part of the research process within a green/sustainable framework. Using the GRFfE, I set out the research questions; methods used, and theoretical underpinnings of the study and described the participants and projects involved.

I also described my rationale for selecting RTA and how I then used the Braun and Clarke (2006; 2013; 2019; 2021; 2022) RTA approach to develop the analytical framework and analyse the data. Finally, I contextualised the ethical considerations and the limitations of this study. The next chapter, Chapter 4, will present the data analysis and findings.

Chapter 4: Data analysis

We need to create the space for ourselves that we create in our own classrooms. (PFL project participant)

4.1 Introduction

The strategies and conferences of international organisations, such as UNESCO, expound the possibilities for AE and its teachers to support a sustainable and just transition. Although globally governments may or may not follow suit to varying degrees, this study shows that the reality on the AE ground is somewhat different.

Chapters 1 and 2 set the scene of stark realities on the state of AE for AE/LfS and its educators (globally and locally). The literature review examined in detail how, except for a few pockets of government-level support (for example, the folk high schools in the Nordic countries), AE is globally underfunded and undervalued. Despite the long and unique history of AE for social justice, the sector is now barely recognised and is poorly positioned, including compared with other education sectors, in its potential to enable millions more people to play their part in contributing to a sustainable future. This compounds the existing position of the sector's educators and teachers, whose professional development is neglected in general and specifically in their E/LfS praxis.

The RTA framework developed in chapter 3, provides the structure for analysing what the teachers in both the global and local sustainability projects tell us about what they perceived supported the development of their praxis through the lens of the three Weinberg et al. (2020) transformative learning orientations (inner, outer and forward).

Chapter 3 outlined how the Weinberg et al. (2020) inner, outer and forward orientations model of transformative learning and the Mezirow ten stages of transformative learning (1990), provide the theoretical basis for this research. They have been reframed and extended specifically to incorporate E/LfS and thereby provide a framework to collect and analyse the data for this project in relation to the research question:

‘How can adult education in-service teachers be supported to develop their praxis in education/learning for sustainability?’

4.2. Key findings

In the inner orientation, the data reveals:

- Disorienting dilemmas felt by most of the participants
- Shared multiple discontent in terms of the current challenges in E/LfS praxis
- Mindset change that occurred through the engagement in the PFL and GC
- Participants’ perceptions of their roles as adult educators and E/LfS activists

In the outer orientation, the data identifies changes that were already occurring to participants’ praxis by the end of the projects.

In an extension and departure from the Mezirow (1990) and Weinberg et al. (2021) models, reflections in the forward orientation relate to supporting participants’ future praxis development.

Reflections from the projects include several similarities and some marked differences, which will be discussed where relevant. However, it is not my intention to offer a deficit analysis or to make judgements about the projects or individuals. Rather, this analysis seeks to openly represent, hear and understand the reflections of teachers/educators on the global and local AFE frontlines.

4.3 Presenting the data analysis

Table 14 shows how the three focus group questions relate to the three research sub-questions and the transformative learning models within this research's theoretical framework, i.e., reflective styles (Farrell, 2012), and the extended inner, outer, and forward (Weinberg et al. 2020) models.

Table 14: How the focus group questions relate to the research questions and TLT models

Focus group question	Research sub-question	Reflection style in PD (Farrell, 2012)	Research section	TLT orientation (Weinberg et al., 2020)
1) What are the challenges for you? What have you learnt from the project?	1) What are the perceptions of the current challenges for adult educators, globally and locally, in their E/LfS praxis?	Reflection-in-action	Learning that took place on programme	Role in action-inner
2) What has changed in you/your praxis?	2) What learning and praxis development can be identified by adult educators as a result of engaging in	Reflection-on-action	Action that takes place as a result of participation	Developing praxis in curriculum-outer

	global/local Transformative Learning E/LfS development projects?			
3) What are the possibilities for the future?	3) What could a future orientated reimagining of supporting in-service adult educator praxis development in E/LfS look like?	Reflection-for-action	Learning to support future praxis	Sustaining collaboration and collective action-forward

Table14: How the focus group questions relate to the research questions and TLT models

4.4 The day job is the reality

Hearing and listening closely to the voices of the teacher participants share their (and my own) versions of reality by reflecting on their learning and the challenges, dreams and realities of their day jobs, that's the reality that is being shared, explored and analysed.

The perceptions and reflections of participants in the PFL and GC projects captured in the focus groups are shared in detail in this chapter. Educators' words will, when quoted, be acknowledged by the respective project abbreviation (PFL or GC) to denote which project they were involved in. I have intentionally not included any further identifiers such as specific roles or geographical locations. This is for a number of reasons. Firstly, the research was designed as a collective exploration of the adult education frontline, not a comparative study between specific institutions, roles, or countries. Adding specific identifiers might distract the reader by encouraging comparisons that were outside the research scope. Secondly and most

importantly, maintaining anonymity was critical for building trust with the participants. There are several examples in the data below where participants share views which could be viewed as subversive and some recount experiences of being ridiculed in their own organisations. Providing further identifiers could mean that these individuals can be identified. This was particularly so in the global organisations involved in the PFL project, where educational jeopardy, both at an institutional and personal level is a real and lived experience. So, omitting further identifiers was necessary to safeguard those engaging in activist orientated dialogue in the focus groups. Finally, this research centres the collective voice of adult educators globally and locally as can be seen in the word cloud below.

For most PFL project teachers (17/20), English is an additional language. All participants' words are presented as they were articulated and transcribed without assumed punctuation, in-quote tidying-up or flagging of assumed grammatical, translation, or local dialect errors. This is intentionally designed as part of my ethical practice to respect and protect the integrity and equality of all participants' voices and perceptions.

[illegible]

4.5 Reflection can be hard

I think a lot of a lot of things changed, but I still feel that I am in the process. So, in a way, it's, it's happening ... and I don't want to sum up this process right now. (PFL)

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Of course, what they are describing and seeking to ‘explain’—not being ready to reflect, still being at the beginning or part-way into a process, not being able to disentangle new from past learning and just the context of life—is exactly the messy, non-linear, chaotic thing that is transformative learning in the literature:

This was a common theme as Mezirow (1991) and Calleja (2014) remind us, transformative learning is a non-linear, iterative process in which learners may revisit earlier phases as their understanding evolves:

So it also reminds me that sometimes you can think you have like.
Whoa! I got this epiphany but one and a half years ago I was writing
the same. (PFL)

This reflects some of the complexities of the educator’s role (Kaplan et al., 2015) and of emerging E/LfS praxis, which requires pause and reflection on the part of the teacher—something that is certainly uncommon in most current adult educators’ PD opportunities in England.

I’ve just learnt to think instead of just acting, so the whole thinking
process; critical thinking, cathedral thinking that is something that is
ongoing. (GC)

Chapters 2 and 3 set out the centrality of the reflection/reflexivity continuum for this research:

... the process of critically assessing the content, process or
premise(s) of our efforts to interpret and give meaning to an
experience ... [reflection] ... is the “central dynamic in intentional
learning, as the function of reflection makes enlightened action
possible. Mezirow (1991: 103)

Did I choose the wrong research method to ask participants to reflect on their praxis development? Did the PFL and GC projects' praxis development not allow enough time and space for participants to pause and reflect? Should their development programmes have built-in opportunities to discuss reflection styles, and a reminder that if it is hard to reflect on your learning, that it is OK. In fact, it's even a good thing sometimes because that's very often exactly how transformative learning works.

Could it even possibly be that, as researchers and theorists, when we no longer work on the frontline of AE day after day, they/we make reflection sound too easy, too safe. It isn't. Not always. Not for everyone. Not even when you are a teacher who regularly asks their students to reflect on their learning:

It's actually quite hard for our students to answer that question, and also, I now have to. (PFL)

And, if it were that easy, would it/could it be the powerful TLT tool that it has become in education theory and practice?

4.6 Context of inner orientation—reflection-in-action

In this section of the chapter, the focus is on the first research sub-question: 'What are the perceptions of the current challenges and dilemmas for adult educators, both globally and locally, in their E/LfS praxis? (inner orientation).

Figure 8: The inner orientation —exploring role and connection

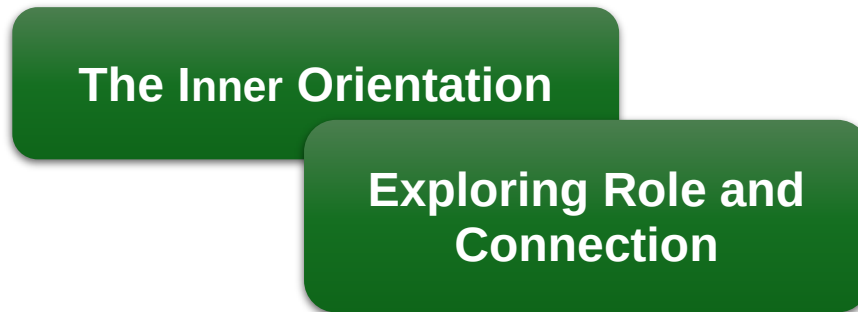


Figure 8: the inner orientation—exploring role and connection

The analysis below gives us a picture of participants' perceptions of current challenges in E/LfS.

Five sub-themes, within the context of the inner orientation (Weinberg et al., 2020) and reflection-in-action (Farrell, 2012), emerged through the RTA process. The themes relate closely to phases 1-5 of Mezirow (YEAR) ten phases of transformative learning and all form elements of the extended inner orientation. Table 15 below illustrates how the themes correlate to phases 1-5 of Mezirow's ten phases of transformative learning.

Table 15: Emergent sub-themes in the inner orientation mapped to Mezirow’s phases of transformative learning

new sub-themes identified in the inner orientation through RTA analysis with the relevant sub-section numbers in this chapter	Mezirow transformative learning phases 1-5 TL
Disorienting dilemmas – and multiple shared discontent	1. A disorienting dilemma
Mindset change and influencing others	2. A self-examination with feelings of guilt and shame
Blurring of professional and personal learning and impacts	3. A critical assessment of epistemic, socio-cultural and psychic assumptions
The role of the teacher	4. Recognition that ones’ discontent and the process of transformation are shared and that others have negotiated a similar change
Teacher as activist/changemaker	5.Exploration of options for new roles, relationships and actions

Table 15: Emergent sub-themes in the inner orientation mapped to Mezirow’s phases 1-5 of transformative learning

As explored in Chapter 2, the concept of inner sustainability is fairly new and has been described as a focus on our ‘inner calibration’ (Dietrichsen, 2021) and internal dimensions that are a deep leverage point for change, which, although they can be more difficult to influence, ultimately lead to more substantial change.

4.7 Inner orientation themes

4.7.1 Disorientating (multiple shared) dilemmas

Analysis of the data revealed evidence that what TLT describes as disorienting dilemmas were widespread among participants globally and locally. For some participants, even at the end of their programme, more questions were raised than answered. Such dilemmas are identified in the literature as often being an initial

motivator and/or starting point in the process of transformative learning: “an experience that challenges a person's fundamental beliefs, assumptions, or worldview, prompting a critical re-evaluation of how they make sense of their life” (Mezirow, 1991: 6-7). Teachers gave a wide range of reasons for participating in the projects ranging from anticipating future change to concern for the future of their own families:

... the fact that something like that is going to come to the curriculum and the earlier we can start to think about implementing it and what that looks like the better. (GC)

Since being here, you know initially my goal was, ‘what’s the future look like for my grandchildren? What’s the future look like for future generations? (GC)

For many, the dilemma was about stepping into the unknown and for others the sheer scale of the challenge: what Lange (2024: 251) describes as pedagogical entry points or an impetus for learning, highlighting that they can “... appear to solve a pressing problem or meet an immediate need.”

At first it was really daunting because I thought how on earth do we find a way of addressing all of this? I just couldn’t see how it was going to happen. (GC)

Disorienting dilemmas were clearer for some participants than others:

trying to change, find a practice, a pedagogical practice that can help in that is tough because it's for me it's a sign of hopelessness, I'm trying to figure that out. (PFL)

For teachers working in countries already most affected by climate and environmental emergencies, such as India and Mexico, their dilemmas, particularly in terms of the scale of their challenge, were especially evident:

Well, I think I've learned that it's very tough, and it's a struggle from this kind of part of a world, like teachers to communicate sustainability and to achieve transformation. And the scale is the same as the biggest problem humanity has ever faced. (PFL)

Some educators described their dilemmas through self-examination of their emotions and emotional responses to their learning. Whilst Mezirow (1991: 168) describes these emotional responses as feelings of “guilt and shame”, the teachers in this study expressed them in different terms:

I've learnt the value of not being overwhelmed ... so coming into it on day one thinking, 'what's this about? How's it gonna and thinking, 'I don't belong here, this isn't for me. (GC)

I've learnt so much holistically that I didn't realise that I did actually have this in me, and I think that's... that's why I've been so upset. (GC)

Feeling this depth of emotion in PD seemed to be a new experience for many participants, perhaps reflecting a more transmissive approach in previous PD. Dealing with the emotional and embodied nature of transformative learning requires deeper engagement on the part of the learner and a very skilled teacher/facilitator delivering the PD.

In articulating the dilemmas which characterise the current challenges in E/LfS this research shows that it is likely that multiple, shared discontent amongst the participants will emerge.

It was clear from the data that, despite the distinctiveness of place and context and the variety of educational organisations, educators described clear similarities and universalisms. For example, in the English settings, multiple organisation level

dilemmas were a shared discontent, frequently expressed in terms of being/feeling overwhelmed within their education settings.

Well I'll speak for my own organisation - the sustainability group are absolutely overwhelmed. I don't think they know where to start other than the estates department because they've got something physical to work with. But everybody else, they are absolutely overwhelmed. (GC)

A clear difference between the projects was that no PFL participants described organisation-level discontents.

Hhøjskoler (the Danish folk high schools) are widely regarded as a cultural institution that embodies democratic participation, collective learning, and personal development, offering non-formal, residential education rooted in community life and civic identity. FHS were recently selected as Denmark's nomination to the UNESCO list of Intangible Cultural Heritage. By contrast, adult education in the UK has experienced decades of fragmentation, funding cuts, and shifting policy priorities, resulting in a sector that is often undervalued and invisible. Whilst both traditions share commitments to social justice and purpose through widening participation, personal development and community engagement, the Danish model benefits from a coherent national narrative that positions FHS as integral to cultural heritage and democratic life. This may be evidence of how differing political and cultural contexts shape the status, visibility, and value of AE institutions across countries and the different challenges educators experience as a result.

In terms of participants' pedagogical impetus and starting points, the data revealed high levels of multiple and shared discontent across both projects. Weinberg et al. (2020: 1774) describe shared discontent as something which "can emerge when an

individual realises others are grappling with similar dilemmas or feelings of discontent.” In the PFL project, these reflections also demonstrated that, despite very different contexts, participants shared similar pedagogical challenges:

It really reflects a lot of universal difficulties of the teachers being teachers elsewhere. (PFL)

Despite clear differences at national, sector and institutional levels, at the teacher level, particularly in the global project, people saw and recognised the shared nature of their starting point dilemmas. This was important to the shared learning the PFL project promoted.

Whilst many experienced similar, shared disorienting dilemmas within the projects, there is some evidence that this was not the case for teachers elsewhere in their institutions. Sadly, in both projects, there were participants whose engagement in E/LfS PD was met with ridicule from colleagues in their workplaces. One PFL participant recounted how they were described as “hysterical the last time I broached this subject in my school.” And another that:

They’ve taken mickey out of me basically - ‘are you going green-hugging today’, ‘are you going tree-hugging today’, ‘are you going singing today. (GC)

These findings suggest that when designing and delivering E/LfS PrD it is important to anticipate widespread feelings of being overwhelmed by the size/scale and enormity of the challenge, and address and mitigate negative responses from others.

TL is an emotional process for many (Mezirow, 1991). Anger, frustration, worry and anxiety were all described in the focus groups. An embracing of the uncomfortable within TL might even be described as particularly acute when the focus is E/LfS.

Whilst a shared experience of their starting points was common, the experience of some educators showed that ridicule, from other teachers in their organisations, could be a worrying unintended consequence of participating in such PD.

4.7.2 Mindset change and influencing others

4.7.2.1 Mindset change

The emergence of TLT as a pedagogical process well-suited to E/LfS was described in Chapter 2. Walter (2009: 18), for example, argues that TLT and the pedagogies that emerge from it are well-suited for sustainability education with the potential to promote “collective conscientization, praxis and action for social learning”. A crucial element in the process of TL and ESD, is a change in mindset, or ‘perspective transformation’. This was a universal reflection by participants and ‘mindset’ was the specific language they used to describe the change in themselves:

My mindset change is sort of, the big thing really? And that’s come about from the learning that I’ve undertaken... you know, in many different areas. (GC)

What’s changed in me? Again - mindset. Absolutely. Improved self... sort of belief as well. To take ownership a bit more. (GC)

I think I’ve changed a lot in terms of ... the conviction in the way that I see things. (GC).

This research reveals that when a transformative learning approach is taken to PrD there are definite possibilities of positive changes in participants’ ‘sustainability mindsets’ This was a widespread perception in both projects. Some teachers reflected on their change of mindset as overcoming barriers they’d previously seen as a challenge:

things that I thought were barriers were perhaps barriers in mindset rather than reality so I've learnt to push on some of those barriers. (GC)

Because I think I've, in a way, blindly went along and um... grumbled a lot about the power, about the systems and I feel refreshed and more enabled through doing this course to change things up and have a different view. (GC)

Such perspective transformation (overcoming barriers, changing viewpoints and helping to identify next steps). is a key element of inner sustainability. It is not clear if this could be articulated to participants before beginning a PrD programme, but it will be helpful to designers and facilitators of future programmes to expect it as an outcome.

4.7.2.2 *Influencing others*

In addition to mindset change being described as core to developing inner sustainability, the data also included the linking of participants' internal change with external change possibilities by influencing others.

Within TLT, to influence others, one must engage in rational discourse, which involves a "process of discussion and debate where individuals test the validity of their own and others' ideas" (Mezirow, 1991: 74-78). This is, however, rather a different take compared to some of the teachers' approaches, which came closer to forcing ideas on others in the workspace:

Just this idea that actually how do you, the how do you influence change in others? I think this idea that... I was probably slightly caught up in this idea that you rattle sticks at people or you poke them or you agitate them to change. (GC)

The changes in some participants' mindsets were more about realising the limits of their influence on others and of their role:

And quite fundamentally, the idea that I can't fix everything, that's a big deal for me. I don't have an influence directly on our pedagogical practice, I don't have an influence directly on what our curriculum looks like. I can't fix that. But I can help people, point them in the right direction, open up the idea of the green skills to them, open up the idea of what were collaborated on to them. (GC)

I think one of the things this PD course has let me do, ironically, is help me realise that I can't change the world? I think I might be able to change the careers department - that's a reasonable ask for one person, to be able to change the careers department, I could probably do that in about two years. (GC)

In a sense, this data seemed to indicate some teachers' own inner sustainability was now reoriented or recalibrated to new possibilities around purpose, role, intention and responsibility.

Changes in mindset are a fundamental starting point in the transformative learning process and a key factor in the development of sustainable knowledge and behaviours in the context of climate and environmental factors: a fundamental reason why TLT is increasingly used in thinking about E/LfS. This means that if any rethinking of the support and development for the teachers of adult learners is to be transformative, PD opportunities need to facilitate teachers to be able to see themselves and be treated as adult learners—a distinct duality. Further it requires a learning process that is multi levelled, in which “the new ‘meaning making’ of the teachers facilitates the new ‘meaning making’ of others” (Lange, 2004: 128).

Centering adult educators as adult learners means that context becomes paramount. Acknowledging their needs and ways of learning will be on a spectrum of difference,

and that they will have a vast range of knowledge, skills and competencies depending on their life and teaching experiences. This would mark a significant shift in the approach to adult educators' praxis development and affords "an opportunity to promote sustainability and wellbeing more broadly for students, educators, and the system itself" (Weinberg et al., 2020: 1774).

4.7.3 Blurring professional and personal learning

An unusual outcome linked to the findings around changing mindsets, deep learning (and different to the PD most participants would have experienced in the past) is a blurring of professional and personal learning, as the process of transformative learning results in a distinct shift towards developing inner sustainability. This relates closely to the "Awareness, insight, connection, purpose and agency which then enables the development of pro-social and pro-environmental attitudes and behaviours." (Wamsler et al., 2021: 848)

The reconfiguration of inner sustainability was described by some as changes to daily habits and lifestyles, including raising questions on consumption:

I have never really thought about how I'm like, 'I want that single-use plastic bottle of water' because I'm in the car and I'm driving a hundred-thousand miles you know... I need it, you know? I've never really thought about sustainability and the impact I have personally.
(GC)

Weinberg et al. (2020) reported similar findings where reflection on their 'own daily habits and lifestyles' was a common disorienting dilemma among their study participants. Fischer and Mandell (2021: 3) argue that "if transformational learning for a sustainable transition is to work, it must be facilitated and nurtured by people with high levels of personal awareness. In short, educators need to educate themselves".

Changes in inner sustainability for others was more about questioning and then changing their views on their own purpose and values. The data also demonstrated that a change in mindset was sometimes directly linked to the blurring of the personal and the professional, and action to change, which is uncommon in most in-service teacher development programmes.

I was one of those people that thought it over there a little bit, and yes, I can recycle. Yes, I can do those kinds of things. But actually, now it's what can really happen in in my own life and within learner's lives, and in terms of practice I think it's absolutely revolutionized the way I deliver the way I see my purpose within our workplace. (PFL)

for me it's caused a kind of provocation on different levels of my life from personal to family to professional. That kind of provocation is just... it's allowing me to kind of give second thought to things that I do at all of these levels. (GC)

It is uncomfortable to hear and think about how participants in the projects grapple with disorienting dilemmas and multiple shared discontent, and the degree of emotional impact for some, but when a TL approach is applied, it can lead to significant perspective shifts and mindset change. PD in E/LfS, and the facilitators designing them must therefore employ transformative pedagogies to reach this level of impact. In short, building on the argument of Fischer and Mandell (2021) above, the educators of the educators also need to educate themselves.

Realising that their inner sustainability can and has already begun to develop in terms of awareness and insights led many of the participants in this study to change their sense of purpose in their professional and personal lives.

The blurring of learning was also found in the context of nature connectedness. As outlined in the literature review, current research on nature connectedness largely overlooks AFE teachers. While school-based and pre-service teacher populations are well studied, AFE educators remain absent in the literature. This gap limits our understanding of if or how nature connectedness is perceived and enacted in adult learning environments. A common starting point in the focus groups in answering the first question was what can be framed as 'nature connectivity'. Many described this as needing to make a connection to climate and sustainable education. The data in this study suggests that nature connectedness is a critical part of the transformative process for teachers as well as their students. It should be explored within PrD, before any consideration of pedagogical and curriculum praxis and highlighted within any E/LfS PrD offer.

4.7.4 The role of the adult educator in E/LfS

As teachers developed their inner sustainability within the projects, it revealed some insights into the implications for the adult educator's role in E/LfS. In particular, how the inner ecosystem is then connected to the external ecosystem through the development of purpose, intentions and professional praxis, and into what is required of the teacher in E/LfS, and the challenges for the adult educator in these complex times.

The reflections from the educators in the study revealed some considerations for a reimagining of PrD, in terms of role, particularly when framed through an activist/changemaker lens, discussed below.

Firstly, it's important to remind ourselves that "there are some teachers for whom this will not ever resonate, just as there are within the general population" (Bostrum et al., 2018: 12). A more widespread rollout of PD and support for adult educators in E/LfS would need to recognise this. Secondly, in-service teachers come to PD with ready-formed identities through their professional careers and experiences to date, which means there will need to be a differentiation in how this is thought about for in-service teachers as opposed to new teachers in ITT.

Whilst roles will need to be addressed in E/LfS PD, so may the lack of a unified identity. As, Merriam and Brockett (cited in Zagir and Dorner, 2021: 44), note adult learning professionals "lack a unified identity due to the diversity and heterogeneity of the field of adult learning and education." This lack of a unified identity featured in the data. Reflections and perceptions on the role of teacher/educators in E/LfS, ranged from questioning the traditional teacher as expert relationship (which is often a feature in teaching sustainability, where uncertainty is common) to those (particularly in the PFL project) who completely rejected the term 'teacher', insisting that especially in relation to partners' [geographical] places and the context of the climate and environmental crises: "We are all students now." (PFL)

There were several nuances around roles, for example, as teacher, as facilitator, teacher relationships with students, our purpose as teachers, and increased responsibilities:

I became a folk high school teacher back in 2017, and actually for 2 years I didn't really know what that was. I experienced it, and you know, in Denmark they often say you, you can't describe it. You just have to live it, and so I lived it, and I still didn't quite know. But the summit in 2019 really blew my mind. It changed everything for me, and

I had a aha moment where I realised this is what we are doing, and I was hooked. (PFL)

An educator from one of the international schools had a similar revelation:

I never saw myself as a teacher. If I am honest, and even when I joined my school some years ago, I was a bit sceptical. I didn't take seriously like the responsibility like it was too much for me. (PFL)

This reflects a distinctive feature of the schools that participated in the PFL project. Though inspired by the Danish Folk High schools, each of the international partner schools had a very different context, often operating outside of mainstream (adult) education, in activism-oriented organisations where educational jeopardy was a lived reality, and in some of the teachers seeing their teaching role as secondary to their activist role.

The internal confusion, and sometimes outright rejection of the identity of 'teacher' was also visible in the reflections that positioned the teacher as a facilitator rather than an expert. Reflecting Freire, one person said:

I don't want to see them like empty bottles, of course, and I respect them much of their evolution. So, I was comfortable with the idea that we are learning together, as we say in the school and that is why we don't have teachers and students. And that also covered this true responsibility that I have still as a facilitator. Even if I don't want to call myself a teacher. (PFL)

Multiple reflections highlighted distinctive aspects of the role of the adult educator.

Disruption of the role of the educator in adult education can be traced back through Knowles (1980, 1984) work on Andragogy and Clover's (1999) three dimensions adult educators can assume, as co-learner, educator activist and reflective

practitioner. These are however, rarely explicitly explored or articulated in today's PrD offer, as can be seen in the competency frameworks discussed in the literature review, such as the ETF 'Professional Standards for Teachers and Trainers in Education and Training – England' (ETF, 2022). It does though highlight how AE in the UK, with a tradition in social purpose and critical/popular education roots, has always challenged the binary of 'teacher as 'expert' (Tuckett, 2015).

This research found that the disruption of hierarchies and roles of teacher/student can however, become very challenging for in-service teachers who might be used to being 'experts' in their subject areas. When teaching about sustainability, there are always elements of uncertainty and having all the answers is significantly reduced.

For one teacher, this meant,

teacher doesn't have the answers so instead creates the environment and conditions in which the students and teacher can share – give opinions, look at what the reality is in the manner in which they share their own perspective. (PFL)

reflecting a shift in the 'traditional' relationship between the teacher and the student and that this is an ongoing process of shift and change depending on each group of students:

What I have learnt is the teacher embarks on creating relationships with students on a learner to learner basis. (PFL)

It was also often described as being about shared teacher-student learning and opinions with many reflections about being honest as teachers about their personal positionality within the area of sustainability: a challenge to the current UK DfE guidance which states that social and environmental justice topics frequently intersect with political debate, meaning, "teachers must approach them with care"

(DfE, 2022: n.p.). While these issues can and should be explored in the classroom, they must be taught impartially, without promoting activism or endorsing partisan viewpoints. Teachers, according to this guidance are expected to present a balanced range of perspectives so that students can develop their own informed opinions, and they should avoid expressing personal political beliefs during lessons. This was not the positionality of many of the teachers in this research, particularly PFL project participants, who tended to express a more nuanced, reflexive and thought-through approach, as professional educators who know and understand their students:

It's important I am honest about my position in the room and also honest about my power in the room to actually position myself and be clear about my starting point that I am talking and it is also a way to avoid non-nuanced classroom. I think another colleague said not brainwashing it's important not to impose but I would rather propose - to propose a set of ideas or to propose an analytical angle but not to impose ideas. (PFL)

Which resulted in them thinking more deeply about their widened responsibilities and commitment as teachers.

now I'm aware of stuff I wasn't aware of before I feel I have a personal responsibility now to read, to find out, to explore some stuff for myself so that I feel I can contribute much more knowledgeably. (GC)

This renewed, reconfigured sense of their responsibility as teachers working within E/LfS was evident in both projects and is confluent with the “exploring options for new roles, relationships and action” stage of transformative learning (Mezirow 2000: 22). It also seems to be directly related to their own inner sustainability and opened up reflections on educator activism and the educator as an activist themselves.

4.7.5 Teacher as changemaker/activist

The UN (2015: 14) RALE guidance, sets out an expectation that adult educators will, “act as change agents and advocates, facilitating individual, communal and societal transformation”. However, there was little research found in the literature review to test this assumption. Cranton (2006) says,

It's not surprising that adult educators doubt, question and revise their roles constantly. Literature bombards us with what we are supposed to be: experts, resource people, facilitators, councillors, mentors, models, reformers and activists. (2006: 101)

Phase five of the Mezirow TLT model is about ‘reviewing options for new roles’. One other TLT ESD study was identified in the literature review for potential comparison of findings: research by Weinberg et al. (2020). Whilst the activist role was not the focus of the research, as pre-service teachers (PSTs) their research participants were exploring a new role. Weinberg et al. report that it was rare for the PSTs to reflect on a potential role as agents of change. They note that when the “PST’s thought of themselves as agents of change towards sustainable futures, they most readily thought of potential actions they could take in their daily lives. ...[and] ...The PST’s envisioned their agentic capabilities as educators less commonly” (Weinberg et al., 2021: 1778).

There is insufficient evidence to make any detailed comparison or draw any conclusions as to what degree the difference in findings between the PSTs research and the study being reported in this thesis that might be important for E/LfS. It may, for example, simply be that the difference is accounted for by the context of experience – the different perspectives of pre-service and in-service teachers.

In this research practitioners were all experienced in-service teachers, with formed identities as a 'teacher' so in the focus groups they were mostly reflecting on their existing role identities as teachers/educators within E/LfS. Some reflected on challenges and changes to that identity as a result of being involved in the PFL and GC projects as illustrated in many of the quotations above. Some reported now viewing their current and future role identity through a different lens, one that opens up new possibilities, including possibly as changemaker or activist.

I think I've massively learnt that if we empower ourselves to be changemakers - and I think that's been the main thing for me. (GC)

As someone who can make a difference:

it's been about realising that it's possible to affect change. When you're stuck in the middle of it, it can feel like you have very little power of any sort and then understanding what counts and it's actually really important is a complete eye opener. I think that's the main thing I've taken from it. We can actually have influence, you don't realise it in day-today life but you can... it is possible to make a difference really to a surprising extent. (GC)

For others the significant challenge to their teacher role was the idea of teachers as activists/agents of change or changemakers:

I was very intimidated by the term 'changemaker' before. Anyone who knows anything about me knows I like to do things thoroughly, I don't want to take on any task if I can't see I'm gonna do it fully. I was very intimidated by that so... I am on a journey now, I have not got there yet but I feel much more comfortable owning that term 'changemaker' now than I did before. That's the big shift in me. (GC)

Both projects had an implicit and explicit ambition of developing teachers as activists/changemakers. The language used was different and sometimes interchangeable, but the sentiments and intended outcomes were the same.

It's not always a term I think of applying to myself, but it is a term that I think about education and the way I do things so for me, it's about

caring about what I do, caring about what I teach and particularly about the students I'm teaching. (PFL)

For the English PFL participants, their perspective tended to be around how the activist/changemaker role relates directly to their own values, beliefs and views of the world. They acknowledged their sector-specific challenges, which included funding, a lack of knowledge among educators and a desire for clarity of purpose for themselves, their organisations and the sector as a whole.

Community learning has so many strands, it can be about social justice but it's not utilised as much as it should be. (PFL)

A lot of people I work with don't have a broad view of what social justice is. Its purpose is looked at as getting people a job which is the govts agenda. (PFL)

An ongoing challenge for teachers in E/LfS in this study, experiencing an inner and outer recalibration of their sustainability, brought the political aspects of education, and their own activism, to the fore. Fleming (2022:13) cites Mezirow, as viewing "openness about one's agendas as a teacher as a clear form of directness". For one UK participant in the PFL study, this meant, "without getting sacked, to work against the system quite often to be subversive in a good way" (PFL). Being explicit or not, about the political nature of education, teaching and being a teacher was a strong theme emerging in the data as were the possible tensions between different aspects of their roles:

I also think that being an activist is not at all in conflict with being an educator – of course there are tricky parts we all need to know how to handle. (PFL)

Education is always political" (PFL). Others said that they were "happy to share my politics with learners. (PFL)

The activism should be acknowledged as part of our work and maybe talk about – acknowledge the political aspects of education and the values that are involved in educating. (PFL)

For those seeking to take on an explicit educator activist role, the students and the context within which the teachers were working were the determining factors in what activism would mean:

You have to be fair, precise and rigorous with the information with the methodologies with the students, you have plan ahead, you have to be flexible, you have to stay aware of the harsh realities that surround the particular place and people that we are working with. (PFL)

Highlighting again the importance of context, for an international teacher, working in a country with a mass mobilisation against its current right- wing political regime, their activism was extremely political:

activism becomes a logical and obvious and immediate step after education. We see a lot of that in our country, we draw a lot of experience from teachers' unions, from collectives from indigenous communities. (PFL)

Moving to action, through the exploration of new roles, relationships and actions, is a key phase in transformative learning. Sipsos et al. (2008) transformative learning model centres moving to action around the complex interactions and inter-relationships between head, heart, and hand orientations, for example,

always influencing our communities and our society and that brings us in a position where we have to kind of make clear what we want to change and how we want to do it and we need to express that as well in the classroom. (PFL)

The data in this study aligns with Sipos et al. (2008) head, heart. hand TLT model which highlights both the complexity and inter-relations of the move to action, with the knowledge, values and behaviours required by adult educators in E/LfS. The data above illustrates how the development of our inner sustainability requires a

simultaneous consideration of, and a connection to, purpose at an organisational and sector level. This can impact how educators see their roles and responsibilities, particularly within their own specific contexts and within E/LfS itself.

This section of the analysis of the reflections of the teachers has been framed around the inner orientation, reflecting the first five phases of Mezirow's (2000) transformative learning theory and the development of inner sustainability. It firstly revealed the universality and commonality of disorienting dilemmas faced by the majority of the teachers in the study, which include many teachers feeling overwhelmed by the scale of the climate and environmental crises, even if, as many acknowledge, they still have a lot to learn. They also acknowledged, through the collective nature of the project delivery, that these dilemmas were shared and multiple within the teaching community globally and locally. For those working in England, this also included multiple and shared dilemmas or challenges at an organisational level, which are often in flux.

4.8 Conclusions: the context of the inner orientation

Some participants in the research were challenged by the centrality of reflection in the research method. Owens and Leggett (2012) suggest viewing reflection as a muscle that increases in strength the more teachers use it. For many educators, their project created a blurring between professional and personal learning. This was very specific to learning about aspects of sustainability and could be seen to add to the dilemmas people cited. It did, however, also give some teachers the impetus to acknowledge this in their classroom practice and their work with their students. There

were many reflections on the mindset changes they experienced as a consequence of being involved in these teacher development projects.

For the majority of participants, their involvement in their project led to a reflection of, connection with and reconnection to their own perceptions of their roles as teachers. Reflecting on both their own purpose and values, and their impact in their classrooms was also common. There was a spectrum of reflections on their roles as teacher activists/changemakers. Some embraced it, whilst others found this more problematic. We can conclude that generally, this is not universally understood or considered to be part of a teaching role in AFE, particularly in the UK. There were, however, different elements of teacher activism/changemaking identified by the teachers, including the importance of students and context. And for some there was also an element of subversion in this role. For others, it was a natural extension of inspiring students and being advocates for students and their communities. An important link, made by many of the teachers, was the role of teacher activist/changemaker in supporting student action and helping them to consider the question, “What can I do?”

4.9 Context of the outer orientation—reflection-on-action

This section of Chapter four focuses on the context of the outer orientation (Weinberg et al. 2020) and corresponds to the reflection style level Farrell (2012) calls ‘reflection-on-action’. Data analysis and findings relates specifically to teachers’ reflections in response to the second focus group question:

What has changed in you/your praxis? This question will help to answer the following research sub-question:

What learning and praxis development can be identified by adult educators as a result of engaging in global/local TL E/LfS development projects? (outer orientation)

It is about the outcomes for educators in the development of their pedagogical praxis in curriculum as a consequence of participating in either the PFL or GC project.

Figure 9: The outer orientation in the focus groups is about developing pedagogical praxis in the curriculum.

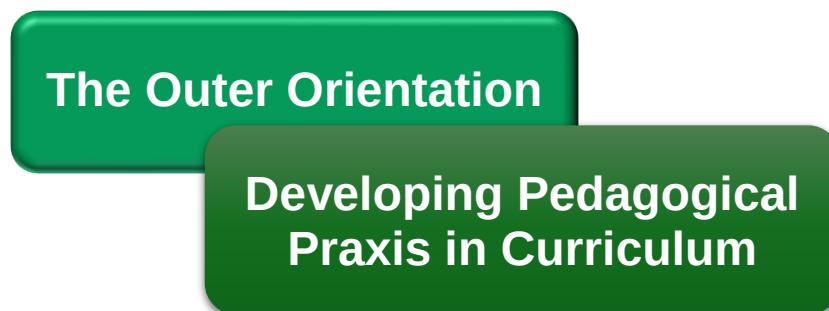


Figure 7: The outer orientation in the focus group reflections are about developing pedagogical praxis in curriculum

Data analysis from the focus groups reveals how the projects supported what I describe as ‘pedagogical porosity’ a new pedagogical concept developed out of and because of this research. The focus in this section is on developing pedagogical praxis in curriculum outcomes. The data captures equivalent points in time, at the end of each project.

4.10 Pedagogical porosity

Whilst delivering a workshop as part of the final PFL camp and festival, several different activities were taking place in the building. The room next to the pedagogical workshop had a group of students creating music from sounds they had recorded in nature during the camp. There was a moment where the music and the dialogue in the workshops merged and framed each other beautifully. I propose developing the term pedagogical porosity to capture this concept of pedagogical open space being encouraged to allow the learning to seep through individual and collective teacher praxis and practice. This experimentation and development of practice was built on the foundations of participants' confidence and competences and data from the focus groups reveals how the projects had been developing and supporting pedagogical porosity.

4.11 Outer orientation themes

Within the context of the outer orientation (Weinberg et al., 2020) and reflection-on-action (Farrell, 2012), the RTA process identified ten emerging sub-themes. These relate closely to phases 6-10 of Mezirow (2000) ten phases of transformative learning, which all form elements of the extended outer orientation. Table 16 below illustrates how these sub-themes correlate to phases 6-10 of the ten phases of transformative learning.

Table 16: Emergent sub-themes in the outer orientation mapped to Mezirow (2000) transformative learning phases 6-10

new sub-themes identified in the outer orientation through RTA (Section numbers and links in brackets)	Mezirow (2000) transformative learning phase 6-10
Finding hope and teaching hopefully	6. Planning a course of action
Changes in pedagogical practice Dialogical methods Curriculum development in E/LfS	7. Acquisition of knowledge and skills for implementing one's plans
The themes are the same as the above as they were inter-related across stages 7 and 8	8. Provisional trying of new roles
Developing confidence Student engagement Using the situated knowledges of students	9. Building of competence and self confidence in new roles and relationships
Moving students to action Context and place Universalisms and language	10. A reintegration into one's life on the basis of the conditions dictated by one's perspective

Table 16: Ten emergent sub-themes identified in the outer orientation through RTA

The development of inner sustainability, outlined in section 4.7.5. revealed connections teachers made between purpose and values and responsibilities within their classrooms and their E/LfS pedagogical praxis. The literature review examined a range of perspectives on purpose, values and pedagogy in AFE: from DfE (2025) guidance which views the purpose of AFE as employability (and the link between pedagogy and values as implicit); to Duckworth and Smith (2022) who see AFE as a transformative space for social justice and explicitly stress the importance of values such as equity, hope and social justice in pedagogical praxis, challenging dominant paradigms. Only the work of Mulà and Tilbury (2023) viewed the purpose of education as a driver for sustainable transitions and pedagogy as a lever for systemic change—what Wamsler et al. (2021) call, a deep leverage point for change. In this context, values must be linked to taking action.

Figure 10: The relationship between purpose, values and pedagogy

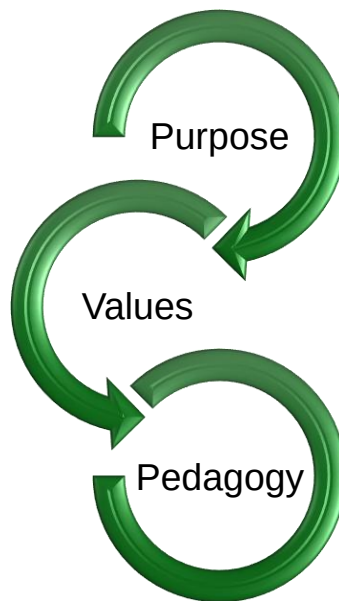


Figure 8: The relationship between purpose, values and pedagogy

4.11.1 Finding hope and teaching hopefully

The increasing levels of eco-anxiety experienced by young people (Hickman et al., 2021) and the possibility that ‘teaching hopefully’ is the antidote (Verlie et al., 2021), were identified in the literature review as key ideas emerging in the field. One session in each of the projects explored how to ‘teach hopefully’ (Freire 1998a), recognising increasing eco-anxiety at one end of the student spectrum and apathy/lack of interest at the other end.

A clear and unexpected sub-theme to emerge in the data analysis was an increase in hopefulness within the educators themselves. This was particularly evident for UK-based participants in both projects.

What I've learned is that there is still room in the British education for something that is not an exam factory, which is what I felt before, and I

think I'd kind of lost hope that education was just about sort of training people to pass exams, and that was the all of it. So, I've learnt that there is space for a different approach. (PFL)

What's changed for me is that I feel more hopeful about that, and about creating opportunities to create, that the themes that are emerging are kind of a bit more beyond classroom. (GC)

So there's quite a lot of learning about myself, my values ... the way I operate. But also, you know, having a sense of hope. (GC)

These reflections again highlight the close link for educators between purpose, values and pedagogy. This finding also adds further insights into the challenges experienced by some UK AFE educators, where pedagogies of hope, that are directly linked to purpose are challenging (Smith and Duckworth, 2022).

4.11.2 Changes in pedagogical practice

Many of the teachers reflected on the changes they had made to their own pedagogical praxis as a result of the development projects and how they now actively encouraged pedagogical porosity. They gave wide ranging examples of these changes in pedagogical practice reflecting the array of different education organisations, characteristics of the students, areas of expertise and subject knowledge as well as place and context. Some educators could clearly point to change that had occurred or that they could now see was needed:

something has changed in me, and it has been in pedagogical practice. I shall use simple methods so that everybody can understand. (PFL)

What are the pedagogy methods which we can adopt so that they are based on the current global changes, how we can update our content, how we can develop, strengthen our pedagogy? (PFL)

Some started small others went for bigger change:

I've been doing a little bit, like thinking of just asking them how they are, not necessarily what's your name, where do you come from blah blah blah. So, it's just asking them about them and how they feel about being on the course... because it's very short courses I've been doing. How they feel about... what's your barriers about being here... (GC)

I've looked at my own pedagogy approach - the art of teaching if you like - in the classroom. I've developed something called, 'The Green Skills Zone'; it's a time zone within a lesson. I have a green background slide with the task or the research or activity on that, that green slide is the green skills zone - I then have to shut up, completely, until that task is finished. They're working independently and quietly. It's a big change. (GC)

Regardless of whether the changes were big or small, reflections led towards the recurring theme of thinking about slowing down and trying to create more space and pause within their classrooms.

So, there's not cognitive overload and we're not just bashing the work out and overloading stuff. Take your time with it, have a little break, go for a walk... just do something different. That's probably what's changed the most, is knowing that we might have... an ability to create a bit more space to breathe. I notice the difference when I've done that. (GC)

The dynamics in the room, you've always got to deliver the knowledge but I would probably say that in the short time I've been here - my practice has probably, the ratio of me speaking to them even, has changed a lot. (GC)

giving them that time to breathe, giving them that time to speak, giving them that ownership of their own view is all so empowering that actually they've got ownership over what they're actually being taught - that's self-empowering, I think it is. For me, it makes my life easy and it makes me want to do it all even more and I think once you've got that vibe going in the class and you've got that feeling and everyone's feeling it and you can feel that buzz. (GC)

A significant number of teachers reflected how the dynamics of the teacher/student relationships were now different, better, in their pedagogy.

perhaps not so much teacher-led in the classroom, building students skills and making them independent, making them... developing personal skills... and I think it's having the bravery to kind of, let it go - in terms of once you've delivered the knowledge, let them apply it while working with them. (GC)

Although the focus groups took place at the end of the projects, participants still pointed to fairly significant changes to their pedagogical praxis as a consequence of the reflexive spaces and their own transformational pedagogical experiences during the projects. In the GC group, a number of the teachers talked of slowing down and giving students more space. This is probably quite the challenge within the UK AFE sector, which is generally focused on exams and time-limited qualifications, whereas this is not the case in the FHS. This was also reflected in the pedagogical methods they highlighted, particularly dialogical methods.

4.11.3 Dialogical methods

Dialogical pedagogical methods formed the basis for PrD delivery within both the PFL and GC projects. Dialogical methods are used extensively in transformative pedagogical praxis in AE as they facilitate transformation through exposure to different and diverse perspectives, encourage critical reflection, support the process of being influenced by and of influencing others, facilitate collective problem solving and inspire compassion through empathy and understanding. It is through dialogue that “plans are formulated and praxis or informed action can take place” (Freire, 1998a: 96).

We are required to enable dialogue – dialogue which enables the creation of an atmosphere where the equal sharing of knowledge and opinions is required. (PFL)

Data analysis identifies how, involvement in the projects, inspired change and raised questions for educators about exploring the possibilities of how they could use dialogical methods to create environments conducive to transformative learning about sustainability and just transitions and to consider new pedagogical methods.

enabling learning gives students an atmosphere to express what they think is to be shared, treating them not like empty bottles that need to be just filled in, but providing the conducive atmosphere in which dialogue is enhanced. (PFL)

Some interesting scepticism also featured in the data around dialogical methods (and in a similar vein in the data analysis on the sub-theme of student engagement) illustrated in the following two examples:

Dialogue demands that an educator and the students are in the same level. Do we elevate students to the levels that will enhance equality in in dialogue, or we go down to the levels that we think our students will be in a position to come up with what they express to be shared? (PFL)

learning those strategies ... sharing ideas and information – that communicative practice - it'll be interesting to see how those can be used in ... an FE environment. (GC)

Modelling the changes in their pedagogical praxis will have taken place during the timeframes of being involved in the projects. This means teachers reflections only give a glimpse into early changes they made. Though a focus on dialogical methods to support E/LfS pedagogy was a common experience of the projects, there was still some exploration required by some of the teachers to see what was possible in terms of their own contexts and classrooms.

4.11.4 Curriculum development in E/LfS

In the context of the outer orientation and a move to action, Griswold (2016: 121) suggests beginning by “simply making space in our curricula for exploring the connections between ourselves and the environment”. Several educators from both projects described quite significant changes and development in their curriculum offer. In the PFL project in particular where teachers have high levels of autonomy in what they teach, they described a move away from offering sustainability as a discrete subject.

It is difficult to make them choose it as a subject when there are other choices, but once it's for everybody in the school, they can relax and engage and that's some strong learning. So what have we changed? We have changed it so that it is not always a subject by itself. but it is a series of mornings for everybody to be part of that has helped us a lot in the work. (PFL)

Another folk school faced similar challenges in delivering the subject,

At times when we have embedded it in delivery, or when we've created tasks, it's always felt a little bit on the outside, or it's always felt like an add on to their learning and so we have started to make it more within the learning. (PFL)

Similarly, where teachers had more responsibility for the curriculum in a college, they were already seeing the impact of the changes they had made,

it's about how I can really change our curriculum in a way that works because there's no point just throwing things in which we did at the beginning, because they won't recruit. People won't be interested. People won't understand. Whereas now we've got this really evolving curriculum. (PFL)

In some parts of the globe, including the West Midlands, funding for adult and further education can be very prescriptive and therefore quite restrictive in terms of

curriculum offer and content. One educator was seeing a way around this as they described how

I'm starting to learn how to use the other side of our funding, and what we have there to be able to make it more creative, whereas now we've got this really dynamic curriculum that is, using all of the knowledge from everyone. (PFL)

Among UK educators, for whom teacher autonomy in relation to the curriculum is limited, there was more scepticism about the possibilities for curriculum development, even if the need for change is urgent.

I think the curriculum is very inefficient as far as what we are doing is concerned to address it. So I'd like to see that change. (GC)

it needs to happen quite quick. And if it's not going to... then it's just a question of people like us changing the practice, making cross-curriculum things which I think is important. New sort of thinking can emerge and it's a sort of extracurricular thing. (GC)

Overall, most educators were committed to including some aspect of sustainability in every curriculum subject. Some were considering how to include it in every session.

Despite marked differences between the global schools and the UK based colleges as to how much influence teachers can have on their curriculum offer, data analysis found an overarching commitment to considering how to include E/LfS across all curriculum areas to ensure that all students have some opportunity to learn about sustainability. This is a considerable step change in the approach to the curriculum offered in most of the organisations involved in the project and particularly those in the UK.

4.11.5 Developing confidence

The development of self-confidence was a strong theme to come out of the focus groups. Confidence and empowerment are closely linked, as empowerment builds on confidence and enables movement towards action. Chapter 2 highlighted the work of Mulà and Tilbury (2009), in this regard, describing three levels of empowerment: latent, active and transformative. At the deepest level, transformative empowerment, is described as action which has the “desired transformation”.

Whilst transformative empowerment should be the goal of E/LfS PrD, data from the focus groups suggests that the levels of empowerment achieved could best be described as ranging between latent and active. This could be due to the timing of the data collection at the end of the projects. Further research following the projects, when teachers have had time to enact, would be helpful to better understand the impact of their development programmes. Being clear with teachers about what the desired transformation outcome is in terms of their E/LfS PrD, (or its purpose at an individual, collective, organisation or even systems level) right from the start of their PD may also help people better understand the desired transformation level.

In TLT, building self-confidence in new roles and relationships is the phase required before one can reintegrate transformative learning back into day-to-day life and is linked to learning leading to developing a ‘new world view’ (Mezirow, 1991). Changes in self-confidence were an oft-repeated and sometimes unexpected reflection in both projects:

I’ve developed confidence through this which I didn’t expect ... but confidence to approach people and to put suggestions forward without

thinking, 'I'm a bit old, basically shut up' and actually people have been receptive? (GC)

People often referred to how their growing confidence was tied up with other things that had also changed for them, such as their mindset, having increasing levels of trust in themselves and making significant shifts in their praxis:

So I guess I've learnt to lean into possibility, I've learnt to trust myself, to trust my process. (GC)

The development of educators' confidence as a key enabler for action seems to be the important link identified in this study between recalibration and alignment of the inner and outer orientations. The projects enabled this by considering educators' purpose and role in E/LfS and making this explicitly an additional responsibility in developing their praxis. This illustrates the criticality of the inner orientation stage before action can take place.

4.11.6 Student engagement

At the centre of all teachers' reflections was students—the careful consideration of the students they work with, in terms of their own actions around student engagement (with particular concern for those students who have not chosen to study sustainability), using the situated knowledges/life experiences of students and moving students to action.

These findings mirror the literature reviewed in Chapter 2, identifying a wide range of student motivations: from a deep passion and interest in sustainability to being disengaged—a continuum on which the latter might go from lack of interest and motivation to extreme eco-anxiety. The diversity of AE means that AE educators may

be especially likely to encounter a mixture of student motivations within any class at any given time.

Perhaps illustrating the centrality of students for teachers, analysis of this data revealed a more tangible or perhaps heartfelt balance between concern for potentially negative effects on students' learning experiences and wanting to share and problem solve this particular issue in the focus groups by sharing positive, practical, personal experiences and possibilities. There were passionate reflections about changes some teachers, in the GC project, have seen in student motivation in general, particularly among younger students.

I think learners learn differently now, they're having two years and taking a gap... that they don't want to learn in a four-year pattern? And we're still trying to teach them, banana and orange, square and circle, aren't we? 'You will do this'. But actually, they don't see the same importance as what we do... we're archaic. and they don't want it. (GC)

By contrast, an educator in a specialist sports school found that students

actually did know more than I thought they would know about the current state of the world and a lot of theory. And that was a nice surprise. But they don't know how to act on it. And I don't always know how to help. (PFL)

Good student engagement was seen as directly related to the amount of time people do or do not have with students. There was a clear lament from GC teachers about the lack of time and space within the English system to develop the skills of independent and critical thinking as a starting point in E/LfS. Some of the folk schools and colleges in the PFL project, particularly in Denmark, do have subject specialisms, such as sport, music, and film, but, as in UK colleges, most offer a wide-ranging curriculum. The challenge this created for both projects was 'how do you get

students to engage with the subject of sustainability when it's not their primary subject choice?'

The big problem that I face in my department, and we had too many students, they come through on a conveyor belt and we don't have enough time, we don't have enough quality time with them. The students themselves aren't independently minded, at all. They're incapable of solving their own problems. (GC)

Possibilities to maximise student engagement included more time and space to explore the subject in any curriculum area, with one educator excited and confident about the possibilities of working with the time pressure and turning it on its head:

giving them more thinking time, giving them more... spending more time chatting to them. Not actually being - you're very funnelled in FE, I teach English, and it's all towards the exam that... yeah... that actually, you know, you have time whether you get the exam or not, you've got time in this space. (GC)

Adapting your practice in the classroom/learning environment and developing students' own independent thinking were recognised as valuable E/LfS praxis, with the changes observed in students as a result being particularly rewarding:

trying to find those new ways and avenues of letting the students think for themselves as we have thought of us for ourselves and helping them make that change at their own level, whether that is personal or family. (GC)

If nothing else has changed in me, it's seeing them actually engage more, them come off their phones, them be in the whole hug of that course, that topic, that conversation - completely engaged... just because of the way that we've adapted our teaching to that environment. (GC)

These findings provide several examples of educators clearly signalling that when developing E/LfS PD, what would support them is an opportunity to explore their

realities early in a programme and then test out and reflect with others about practical ideas and possibilities for effectively engaging their own students in E/LfS.

4.11.7 Using students' situated knowledge and life experiences

In order to overcome the challenge of student engagement, using the situated knowledges and life experiences of students was a common suggestion from teachers. Discovering what the students know, their lived experiences of social and climate/environmental justice within their own communities and then starting within the particular contexts of the school/college were seen as crucial to creating foundations on which to build connections, knowledge, skills and action too.

Shifting perspectives, behaviours and actions, the ambitious outcome of TLT, necessitates students consider their own life experiences. Many teachers in both projects reflected on using the experiences that students bring to the classroom and learning from and alongside each other.

So it's like proper adult education in that sense it's not... 'I will empty my knowledge into your head', it's actually sort of bringing out a much more equal conversation of learning. (GC)

I think by doing that we can actually learn from the students and see what their view is on where we are in the world, what needs to be done by prompting the conversations. (PFL)

4.11.8 Moving students to action

Being able to help students in their own transformative learning for sustainability, to finding their own answers to the question, 'What can I do? that they can then act on, emerged in the data analysis as a common ambition of educators in the PFL and GC projects.

Based on their experiences of being involved in the projects, they recommended that future E/LfS PD opportunities and programmes include the practical 'how to' of what educators can do in their praxis, in their pedagogy, and in their learning environments to support students to develop the knowledge, skills and behaviours to take-action. And how to do so without creating eco-anxiety or placing responsibility for solving the climate crisis on the shoulders of their students or communities,

always influencing our communities and our society and that brings us in a position where we have to kind of make clear what we want to change and how we want to do it and we need to express that as well in the classroom. (PFL)

that we shouldn't put the onus on them to sort out the dilemmas and the climate emergency because at the end of the day its previous generations that have made the mistakes and continued making mistakes. (PFL)

As they did when reflecting on their own roles as teacher/changemaker/activist, participants reflected on their own earliest moves to action, drawing on the transformative learning hand orientation of Sipos et al. (2008), head, heart, hand model, to identify practical possibilities for action. These ranged from experimenting with and encouraging life-style changes like recycling and re-use, to opportunities to take action within the safety of the school or college environment, and to engaging in action beyond the school/college in their families and local communities, including things like volunteering, being 'green ambassadors', and campaigning.

It is clear from the data in this theme that in order to answer the 'What can I do?' question for both ourselves as educators and to support our students moving to action, context and place are crucial. Educators, therefore, need PD that offers space to reflect on how to bring their learning into their own classrooms and the students

that they work with. Some of this is building a foundation of confidence through which the development of praxis can be nurtured and developed.

4.11.9 Context and place

A recurring theme in the data was the importance of our own context and place.

Starting from our own contexts, what our students know, what their lived experiences are, how they and their communities have responded, that is where we need to start to build on. (PFL)

Singleton (2015) built on the Sipos et al. (2008) head, heart, hand model by adding the dimensions of context and place to transformative learning theory: “Place provides a context, an internal and external landscape, that frames, organizes and anchors experience which is needed to extract meaning and construct knowledge” (Singleton, 2015: 4).

As well as considering the context of students, although it was framed in different ways across the projects, the importance of the teacher’s considerations of their own local context also recurred in the data.

The international partnership schools in the PFL project took to varying degrees, inspiration from the Danish FHS model of education and the philosophy and practice of N.F.S Grundtvig. Their schools are all distinctly different because of their place and context. Some of the educators in the project were themselves the founders of their international schools. So, whilst for many inspirations came from a different place or context, there was also the desire to hold true to their approach in their particular context and place, illustrated in this quote:

I know that I do not want to copy Danish style, but we have to grow in our own soil. (PFL)

We can see, therefore, from the data, that the importance of contextualising learning within E/LfS was critical for teachers and learners. For students, this means sense-making through focusing on contextualising their learning, based on their own experiences. For teachers, it means taking back learning from the projects into their own context and adapting their pedagogy and curriculum to this. Reimagining support for praxis development in E/LfS will therefore need to address the importance of context and place.

4.11.10 Universalisms, particularisms and language (the global to local challenge)

In the consideration of context, place and action, 'Think global – act local' became a common sustainability mantra with a long and rich history in its application.

Having global and local projects and practitioners involved in this project added a plurality of voices to this research as well as another dimension to the challenges around language through the debate about universalisms/particularisms, which emerged from PFL participants. This was, in part, a challenge around the context and place in which education and learning is taking place, leading to a wariness on the part of some educators in thinking and acting universally. The focus, for many of the global PFL teachers, was an emerging criticality of universalisms. As one explained:

But I think I have learnt how it's very important to be very wary of thinking and acting universally. And like not forgetting that we have very different contexts. And they say, like situated knowledge should

never be forgotten. And this concept of the local curriculum that we discussed earlier today. (PFL)

PFL project educators had an acute awareness of the challenges in the language used within sustainability, and a particular awareness of the colonial application of such terms. As discussed previously, the term sustainability itself is increasingly contested, particularly in its economic framing:

Language is culturally weighted: The words we use to interpret and make sense of the world colour the way we see it. They are not 'objective' tools for description, as the natural sciences would claim. The language used is imbued with power and the knowledge framework or system it draws on is equally representative of specific power relations. (Von Kotze and Walters, 2023: 20)

PFL participants described this as, "The occupation of the words we use leads us to move onto something else, a different context, not our own." (PFL) and "exhaustion and internal divides and then prevents the possibility to convey the message of our own contexts". (PFL) Many of the global teachers reflected that "the term sustainability is a difficult and Western concept." (PFL) and that "Regeneration is now the new word to use." (PFL).

Not being afraid to use language which points to contextual realities was identified as vital; it was about what one teacher called 'truth-telling' and others saw as inclusion, "Using the words in an inclusive way that is practical, pointing to the real lived life of the people." (PFL)

we should not be afraid to call things out for what they are. (PFL)

To tell people that it is because of a crazy extractivism that there is now polluted water in their community is truth-telling. (PFL)

we should not get caught in terminologies, “even though the words are important. I do think this like a lot of words, can be like very like pale. But I also learned, that actually, and I think it's a new learning for me, that I shouldn't be afraid to use big words but to say colonialism as long as you apply it to the everyday life of people, as long as you use the words, explain it in order to mobilize. (PFL)

We can spend a lot of time on the debates about the wording and the terms about definitions but the truth of the matter is that we achieve this universality by looking for the best way to cover our needs and to benefit our communities. I find it in fact very simple but it's difficult to keep things simple so we need to become ourselves adaptive adults in order to teach that or facilitate it. (PFL)

This debate was specific to the global PFL project. Being together and having these discussions, which were in the main led by teachers from the global south, made the global north teachers reflect on the use of language within their classrooms/schools/colleges and the need to reach across boundaries within E/LfS. It also adds another level of complexity to the importance of context and place.

This has to be a consideration in the design of the support for the development of praxis in E/LfS because many described the exhaustion they felt from the continual debates on the use of words and terms, which can ultimately paralyse action within schools, colleges and communities. ‘Regeneration’ was offered by global participants as an acceptable alternative and will be used to frame the approaches outlined in Chapter 5.

4.11.11 Conclusion

As will be explored further in the context of the forward orientation section of this chapter, if, as educators, we are to see the development of our praxis in E/LfS as a collective one, to work in solidarity globally, then we must learn from and act on the

situated experiences and knowledge of those of us living and teaching on the frontline of the climate and environmental crisis.

All E/LfS is situated within a global context, and universalisms can be easily applied, sometimes without due consideration, particularly of the language we use in our educational contexts. Learning from each other, therefore, in particular from educators living and working at the frontline of the climate and environmental crises, has to be considered in the development of PD, and will require a practice of humility from those of us working in the global north.

4.12 Context of the forward orientation reflection-for-action

This section of Chapter 4 focuses on analysis of the data obtained from the focus groups in the context of the extended forward orientation (Weinberg et al., 2020) and corresponds to the reflection style level Farrell (2012) identifies as 'reflection-for-action'. The forward orientation is about sustaining collaborative and collective action.

The third focus group question invites participants in the PFL and GC projects to re-imagine future possibilities in AE/LfS through their reflections-for-action as a consequence of participating in their respective E/LfS professional development programme. Data analysis and findings in this section relate specifically to teachers' reflections in response to the third focus group question:

What is possible for the future? (extended forward orientation)

Participants reflections in relation to this question will help to answer the following research sub-question: **What could a future orientated reimagining of supporting in-service adult educator praxis development in E/LfS look like?**

Figure 11: The extended forward orientation in the focus groups—sustaining collaborative and collective action



Figure 11: The extended forward orientation—sustaining collaborative and collective action

Using the analytical framework described in Chapter 3 the RTA process identified six emerging sub-themes. Table 17 below illustrates how these themes correlate to the extended dimensions in the forward orientation. Data analysis in the forward orientation will be presented in a slightly different format to the preceding inner and outer orientations (where finding were presented theme by theme). In this section the analysis is presented under the headings of the extended dimensions in the forward orientation:

- +1 a recognition of barriers to reintegration
- +2 A recognition of what is required to sustaining and maintaining the perspective shift
- +3 A space to dream of possibilities

Table 17: Emergent sub-themes identified in the data analysis in the context of the three extended dimensions of the forward orientation

Emergent sub-themes identified in the extended forward orientation through RTA	No.	Extended dimensions in the forward orientation
Power and hierarchy—barriers to reintegration	+1	A recognition of barriers to reintegration
Time and space Caring for ourselves as teachers What is needed to sustain Building connections with others (outside) Networks and movements	+2	A recognition of what is required to sustaining and maintaining the perspective shift (learning and outcomes)
Thinking about the future Space for values A quandary Adaptation Our great work	+3	A space to dream of possibilities

Table 17: Emergent sub-themes identified in the data analysis in the context of the extended forward orientation

4.12.1 Barriers to reintegration—power and hierarchy

What can stop the process of reintegration? As described in my 2021 open letter to adult educators in England (see appendix 1), developing PD support for adult educators in E/LfS requires an explicit understanding that AE and its educators exist in a sector dominated by “pervasive neo-liberal, advanced capitalist ideology ... manifested in education policy, funding and compliance regimes that engulf us, haunt our classrooms, our identity and our agency as adult educators.”

So, what’s the plan? Do adult educators recognise the global climate and environmental crises and E/LfS as the moment? How do they/we seize, create and recreate opportunities for challenge and change where they exist?

Globally and locally, that's exactly what the PFL and GC projects are doing. In trying to find out 'how in-service adult educators can be supported to develop their praxis in E/LfS', it's what this research is hopefully doing too. How? As Sidebottom (2021: 49) urges us to do, by recognising that adult educators are "embedded in systems and need affirmative action in which to shift the status quo" and in response to Bowl's (2014: 47) call out for, research that "evaluates and documents educators' strategies of resistance and what can be learned from their day to day dilemmas of practice in neo-liberal times". Together, as Sterling recommends, by creating transformative educational experiences for adult educators, to support and grow teacher agency in sustainability and climate education "both in the immediate learning situation but also in the context of dominant educational paradigms that essentially are not themselves transformed or sufficiently critically reflexive" (Sterling 2011: 29).

An increasing emphasis globally on the centrality of teachers to support the green transition, particularly in adult education, was identified in the literature review in Chapter 2, but so too was the context, locally and globally, in which teachers work—in systems that are not open to change. Reflections from green changemakers, in the context of the English AFE system, highlighted significant barriers. These included: underfunding of the AFE sector over decades, systems of hierarchy and power within colleges, the Ofsted inspection regime and teachers' pay: Neither new issues nor particularly specific to E/LfS, but GC participants were clear about how their professionalism and agency in their classroom practice have been eroded over many years. They called in particular for changes in the framework and process of Ofsted inspection to shift the sometimes-obsessive focus on inspection within college structures and practices.

Many viewed developing their praxis in E/LfS as something else for them to do. To expect teachers to take on this additional responsibility in both their work and their roles AFE is asking a lot. Added to which, there is little or no support in terms of professional development and most importantly time and space is constrained by the day to day realities of the job.

Though each college in the GC project is distinct, these teachers were all working in one part of the education sector, within a geographical boundary in the UK. This was framed as both a challenge to change and also a dream of possibility. The challenges to change were about power, hierarchy and leadership in AFE colleges and organisations, as the following 3 examples illustrate:

Thinking about power, because it's not really talked about much in FE - for all sorts of reasons - to openly talk about power in institutions and how you might challenge that, influence it... work with it, work against it - all those sorts of things, is just not really... it's almost taboo I would say, to talk about power in FE. (GC)

there doesn't seem to be the spaces... well not in my institution to make those... connections that you need in order for that productive power to exist. (GC)

I think it goes hand in hand with social justice... less hierarchical structures. (GC)

These frustrations reflected how they felt about their own abilities to take action in their organisations. Their agency, as professional educators, has been eroded and they were challenged to see how any deep level of transformation could take place without substantive structural changes to power and hierarchy and implicitly culture. GC teachers were sceptical about the AFE sector's ability to make structural change:

It also remains to be seen whether institutions like FE or HE is actually structurally capable of... empowering people or just being part of the problem. (GC)

Something new needs to emerge from within the old - but it's whether the old is actually standing in the way. (GC)

the education system in the UK, needs tearing apart and putting back together again. (GC)

There was also widespread recognition of the challenges created by underfunding, under-resourcing and the new normal of short-term yearly funding cycles, on the sector's ability to change, develop and adapt,

Colleges are under resourced, aren't they? So would be good to get the colleges what they need to be taken seriously and to then be at the forefront of identifying those green jobs and the green skills needed for those jobs. It's all full circle really. (GC)

because education is so tight, we work on such a tight schedule - we don't even have a year and everything changes again and all the pressures. You enrol students and as soon as you enrol students you start teaching and you haven't got time to stop and think and change things. We've gotta think long-term not short-term, we've gotta do things that can start being embedded in the culture. (GC)

Their internal organisational frustrations also raised the massive challenge within the sector in the UK of teacher pay and remuneration for taking on more responsibility when it comes to sustainability. One teacher shared:

I've now got my Head of Sustainability - after taking no interest whatsoever - saying, 'can we meet up so you can embed this in the curriculum?' And me thinking, 'A.) I'm not paid to do that and B.) You know, how can you say this after completely ignoring everything for the last two years?' (GC)

Another raised the issue of pay from an equity perspective, which is so far invisible in the sector's teacher pay debates,

I know this question of like starting to say 'I don't get paid for that' - but I think that's an important question. Like, you know, I feel like that at the moment, I feel there's much I could do but I'm very aware I don't get paid for it and I need to, you know? As a woman, as an equal person you know, I need that. (GC)

A fundamental difference between the PFL and GC projects was the English education sector inspectorate, Ofsted. All colleges within the GC project come within its scope. Following the suicide of a headteacher as a result of an Ofsted judgement in 2022, there have been calls from across the education sector for reform. At the data collection points for this research sustainability was not part of the Ofsted inspection framework but teachers in the GC project still spoke of the Ofsted regime as presenting a challenge to this work and being desperately in need of change,

in terms of the... we'll call them 'The Big O', if they can change their practices to look at what we should really be doing to benefit society. (GC)

We're too OFSTED driven, that needs to change and the only way we can do that is forums like this, we need to drive change. (GC)

At the time of writing, sustainability remains out of scope in the most recently (November 2025) published Ofsted inspection framework. A relief for those who participated in the GC project. Possibly. Or, given that everything Ofsted does is ultimately subject to DfE funding and approval, evidence of sustainability's invisibility and a powerful message by omission that it is not really seen as important to policy makers.

For the last two decades, the AFE sector has been characterised by sustained and often disruptive policy reform, reflecting shifting governmental priorities and broader socio-economic pressures. More recent policy interventions, including the post 16

skills agenda and proposals to strengthen the role of FE in economic renewal, further illustrate the extent to which the sector has been continually reshaped. To the GC teachers in this project this continual intervention feels like a ‘real and present danger’ and that E/LfS could end up as just another add-on, another thing to do, rather than supporting the societal transformation and transitions required.

4.12.2 Recognising what is needed to sustain and maintain the perspective shift

Alongside identifying barriers to reintegration, the data analysis also provides insight into the conditions that were part of the PFL and GC projects’ PD/support opportunities in E/LfS. Conditions that nourished and supported their learning and development, namely: time and space and wellbeing.

4.12.2.1 Time and space

We need to create the space for ourselves that we create in our own classrooms. (PFL)

Time and space for thinking and reflection were key themes to emerge from the data. This is not commonly part of support/PD in E/LfS, which is mostly online, often asynchronous and generic across the post-16 sector. The reasoning behind such models tends to be about responding to teachers’ time-poverty. Not only does it fail to address the fundamental issue of teacher workload but exacerbates it. Educators repeatedly expressed the importance of creating time and space for this learning and how much they valued it:

Having that time and talking to like-minded people - role/rank at the door works. (GC)

So, stuff around time, allowing time for myself, which has been really interesting in terms of making decisions as regards to work and things like that... it intersects with power as well. And that... I think the knock-on effect of someone giving you time to think about these things, to reflect on things - it has a knock-on effect on other things. (GC)

One teacher described it as a gift,

the ability to allow myself time and not feel guilty about giving myself the gift of time... to think - and not constantly on the bandwagon. (GC)

Teachers questioned why these spaces had never happened before,

I don't think I've done this since I started to learn to become an educator... I haven't had that opportunity, space and time and I've certainly not been facilitating for somebody to sit around the table and say - 'right, okay - who are you?' Or 'What do you want? How do you work on yourself?' (GC)

nobody actually takes the time to think about me and how I am going to continue to deliver what it is I want to deliver and how I want to deliver it. So, this has, for the first time in a long, long time... given me an opportunity to actually sit and think. (GC)

The emphasis on time and space articulated in the focus groups mirrors findings in the literature review: “one of the most often mentioned for a fruitful transformative learning process is providing time and space for reflection” (Aboytes and Barth, 2020: 1003). For many of the teachers in this study, the time and space they were afforded in their projects was their first experience of it in professional development for a very long time. Some had not experienced it since their ITT. UNESCO UIL (2022: 36) similarly identifies creating safe spaces “for reflection, learning and co-creation, and building trust ... [as] ... important enabling factors for supporting transformative skills and associated changes”.

4.12.2.2 *Wellbeing and sustainability—caring for ourselves as teachers*

“Teachers and educators need their own emotional well-being considered as well, and programmes and initiatives that can offer that would no doubt be beneficial.” (Verlie et al., 2020: 20). Sources identified in the literature review (Hickman et al. 2021) raise concern about increasing levels of eco-anxiety, especially among young people. Now, findings from this research reveal how increasing levels of mental health challenges among their student populations may harm teachers’ own emotional wellbeing. This makes embedded time, space, and support in E/LfS professional development important to help prevent and mitigate the effects and protect and support teachers’ own wellbeing as well as their E/LfS praxis.

Project participants had clearly thought about how E/LfS might heighten the emotional and embodied nature of teaching and learning and could see the importance of rest and “looking after ourselves”, particularly in the context of increasing activism/changemaking. As an antidote to these challenges for teachers, both development projects had looked explicitly at teacher wellbeing, because, as has been previously noted, “this stuff is hard to teach”. (PFL). For many of the teachers this was something new in their own development,

Because we are missing... we’re missing self-care as educators, we’re missing the time to develop in important ways that we can then share with our students, you know? Missing being able to develop ourselves as people, to share that with our students because everything is so tick-box here and driven by the stats and this, that and the other. (GC)

This idea about looking after ourselves,

it’s the promotion of strategies that will promote wellbeing for staff and students because we’re all on this massive treadmill all the time and we all have these deadlines to meet. Nobody is taking the time to rest actually. (GC)

As noted in the literature review, the link between wellbeing and sustainability is an emerging field. Verlie et al. (2020) highlight it as an extremely challenging area for teachers in E/LfS who require more support and resources. And not necessarily the same kind of support PD programme commissioners and designers might anticipate or recognise. Introducing and exploring ideas of rest and recovery, that are more prevalent in social movements such as Extinction Rebellion and the Ella Baker School of Organising, could be ground breaking.

4.12.2.3 *What do teachers need to sustain their learning?*

Alongside insights into what is needed to support PD, this research also provides insights into support to sustain teachers' learning. The review of frameworks for adult educator development in and out of E/LfS in Chapter 2 found that none of the frameworks covers the area of sustaining praxis. Yet it is now becoming manifestly clear that doing so will be critical to effective E/LfS PrD support programmes for adult educators.

4.12.2.4 *Building connections and relationships*

A strong theme to emerge from the focus group data analysis in the forward orientation was the high value attributed to the connections and the relationships they formed in their project peer groups. This was identified as a gap in the literature review, perhaps reflecting the lack of research generally into the development of adult educator praxis in E/LfS.

The development of friendships in the projects was not just about liking each other. It was described as being about a sense of joint action, responsibilities and solidarity.

The development of such relationships was a key driver behind both projects and the connections and relationships that developed had a profound effect on some people. Several of the international educators in the PFL project described these as political friendships, a perspective that might cause alarm to UK policy makers, sector organisations and some FE leaders:

but I can say one thing definitely is like the importance of political friendships. (PFL)

So I think, suddenly realizing that connection was very, very big for me, and it's kind of very internalised as well. (PFL)

I can now see connections where I didn't see connections before. (PFL)

4.12.2.5 *Networks, communities and movements—different perspectives*

A direct consequence of the connections and relationships formed was the importance of and opportunity to hear different perspectives and how that shifts thinking:

we all have different ways of operating - but how powerful that can be when combined? (GC)

you don't want to hang around with like-minded people you want different sorts of people because they're the people that are gonna make some sort of change happen. (GC)

For one teacher, these connections became stages in their journey:

each connection that is made is an important connection and without that I can't quite get where I want to go so... the stages are really important for me. (PFL)

Research participants called them “conversations of learning” (PFL) and “global dialogues” (PFL). Mezirow (1980) would describe them as ‘transformative perspective shifts’. A GC teacher also reflected

most useful for me and something I'd like to learn is learning from each other. So, each of those changemakers, - the practice they engage with, what's working, what's not working. The big stuff but all the little stuff that is gonna make a difference. So definitely a community of practice and sharing. (GC)

This learning from others at different points of a learning journey was seen as important and sometimes described as helping people to open up:

I've learnt a lot obviously from others in this group because we're all in different stages based on where we work, - somebody needs to go first so you can go. (GC)

coming here and being open to other people's perspectives and other people's views is that there are many other different ways of thinking about the same thing and... not being more open...but it has given me the time to really think about other people's views and where they're coming from, which has been quite revealing. (GC).

I don't actually have any control over the change, because I just have been changed in each conversation. And that's the dialogue that to me that is the importance of people talking to each other, because it is only by talking to people that that change can occur. (PFL)

You talk to people from all over the world and you get loads of different perspectives on things. And each person that I've spoken to has made me think differently and learn something. (PFL).

As described earlier, there were some stark differences between projects. One of these was the framing of these relationships in terms of global and local connections. This was to be expected given the geographical differences of the projects and the locations of the participant teachers. In the PFL project, there was also a relearning and confirmation of the importance of the work of the FHS community internationally. The word 'movement' was repeated often.

I think what I've learned is definitely. I've learned how it works, how it works splendidly. All different parts of the world how we work on very similar issues with such a diverse way. (PFL)

What I have learned. It may sound strange, but I have learned that we are important, that what we do is important in the world. (PFL)

I've kind of been reaffirmed or reminded that we are stronger together, and how important this movement is, how important we are to the world. And that even little schools, little ideas can make it. (PFL)

The theme of being inspired and the importance of continuing to work together was repeated frequently and some of the Danish project team noted,

It has also taught me about how complicated it is to make projects like this in a corporation forth and back in communication with people. A lot of people from Denmark, and a lot of people from all over the world, but also how important it is to do it, and how energising it is to do it. (PFL)

One educator described why this was so important in the context of the global challenges we are seeking to tackle, whilst another described how their involvement in the project had given them hope and a sense of belonging, when they had felt quite isolated in their own international context,

I really feel that you know it's so important as people that work in education or activism to constantly have our fire lit up once in a while, because it just goes off. (PFL)

that there is a world of educators, that I can be a part of and that they too exist elsewhere, gives me hope for the future and the energy to keep going. (PFL)

But there was evidence that some were concerned about a potential downside when inspiration brings with it new challenges and dilemmas:

Of course, you get inspiration from folk high schools, it's easy to compare and see, and borrow ideas. (PFL)

you can feel like you're not doing enough, or you can't find out how to do it. (PFL)

It is important to acknowledge that the learning and inspiration were also felt by the Danish educators and schools and that sharing global practice within Denmark was a key aspect of the PFL project.

Among the GC project educators, acquiring new networks through a PD experience gave a sense of support that “I feel I can call upon if I need it”. (GC) and how important maintaining them will be to the future, to keeping the fire alight, keeping their momentum going and keeping learning.

I think we need a bit more time, we need to come together from time to time? But without this I do wonder whether the fire we still be in our bellies. (GC)

I’m gonna need a bit of a kick up the butt I think to not lose my momentum? I feel I run the risk of falling back into old habits and the way it’s... it’s normally done. So yeah, I’m not strong enough yet and I’m not there enough yet to sort of maintain it on my own I guess. (GC)

into a community of practice because there’s an amount of learning but what’s also happened on this course is that we’ve learnt from each other because no-one’s ever done this before. There’s not a right answer, there’s plenty of wrong answers I’m sure, but there’s not a set way and no one has ever done this before so what we need too is develop a community of practice between us all and new people that come in. (GC)

4.12.3 A space to dream of possibilities

4.12.3.1 *Thinking about the future*

Dreams and possibilities are an important part of the work of a sustainable future as they enable an alternative, different story to emerge, which can challenge dominant ideologies. When asked about their dreams and what might be possible, educators spoke of how they wanted thinking to expand outwards within their communities, to

change mindsets inside their organisations and one to achieve a carbon negative organisation by the time they retire.

The dream is to get everyone involved with this to come together and meet - and I think coming together, meeting... I think that's how we expand this further. (GC)

Changing mindsets within the organisation in terms of green skills and that being really impactful... that being implemented really well into the curriculum - and more importantly being embraced across the organisation as it being part of the actual curriculum as well. (GC)

Reminding our students about structures - might be big structures but they were created by human beings and those big structures should be changed by human beings. (GC)

A historical approach to social change is my approach to activism in the education space. (PFL)

Drawing up history and how change has happened over a number/many of generations we should remind ourselves that's what it means to be human. (PFL)

4.12.3.2 *Space for values*

Teachers' dreams included the conditions that they wanted to create within their classrooms, not least of all values in terms of teachers and students was a commonly expressed aspiration.

Creating conditions for any participant in the room to be able to find their own values and meanings and be able to express it. (PFL)

In my practice, I really try to emphasise the value of being in doubt – our times are threatened by those are very secure who have taken a stand and will not change – being in doubt and changing opinions is a very big value in my practice. (PFL)

Another value is about being humble and curious and asking more questions than replying with answers (PFL)

What is it that we want to bring into the world that is coming? Who are we? What are the values we want to base our lives on? (PFL)

4.12.3.3 *A quandary*

Reflecting on possibilities also revealed a quandary for some teachers:

At the minute they are limited but at the same time limitless. (GC)

The possibilities are wide but the opportunities have been slim but just takes a bit more digging and I'm definitely moving to that. (GC)

Possibilities lie in the cracks in between the bureaucracy - I feel really inspired to identify and stretch them since I've been here. (GC)

somehow starting with what doesn't feel possible and finding the spaces within that. (PFL)

Some of the English teachers in both projects pointed to their own particular contexts,

We have a cost of living crisis in England we have people using foodbanks, people who are in poverty- crisis in health and mental health. (PFL)

Another pointed to the lack of joined up policy,

There is a lot of confusion at the moment - a lot of disparity and mismatch between the government, the labour market and education. (GC)

Compared to anywhere, even everywhere else, the quotes below bring into sharp focus how compared to the international projects, the perceived paucity of possibilities in the UK creates a stark contrast because of differences in the respective countries' education systems:

We are restricted in the UK education system – more so than in the Danish Folk High school model by exam boards and funding streams and assessment processes. (PFL)

Possibilities are endless in that way for us to create challenge and for us to create a movement ourselves for us to be able to create our own narrative, redefine, rewrite in some ways what education is. (PFL)

Possibilities for us teaching for our times are tremendously big and I think one thing I learnt from these days is that we should not underestimate our role in the awakening of societies. (PFL)

Opportunities are limitless because we have a voice, I have a voice as an educator. (PFL)

4.12.3.4 *Adaptation*

Adaptation ‘to the times’ was also identified as key:

traditional ways of doing things and being flexible so we adapt and adjust to meet the goal which is learning in the long term. (PFL)

This is also important as we face the global challenges. A flexible space in curriculum in short or long run can be found and public awareness so we can enable students to address the challenges at a local level. (PFL)

4.12.3.5 *Thinking about our times—Our Great Work*

For many of the teachers, the work ahead will be:

Great responsibility for the human kind – maybe a bit big but we really have something to bring to table. We have to keep on doing what we are doing and to remember to celebrate the small victories and then slowly becoming stronger and bigger together. (PFL)

For me it’s starting to feel more like a responsibility and something that is inextricable from what we are doing as teachers. (GC)

When you are beholden and obliged to do something you perhaps you search out for more possibilities than were there before. (GC)

Bubbling its way to the surface there was talk and imaginings of joy and hope.

we have talked a lot about joy and hopefulness and those are linked to that semantic field of possibility. (PFL)

I really hope we can create a strong alliance between all of us built on trust, love and respect for each other's work. (PFL)

We need each other to learn and be inspired from each other because it is huge task we have in front of us. (PFL)

Taken together, these final reflections illustrate how developing adult educator praxis in E/LfS critically depends on cultivating spaces where values, uncertainties, and possibilities can be meaningfully explored. The teachers' desires expressed above to foreground humility, curiosity, doubt, and authentic meaning-making signal a pedagogical orientation that aligns closely with the transformative aims of E/LfS, an orientation grounded not in transmitting fixed answers but in nurturing critical, reflective, and values-based inquiry. At the same time, the quandaries expressed, between constraint and possibility, bureaucracy and creativity, hardship and hope, highlight the lived tensions teachers must navigate as they seek to act responsibly and imaginatively within their own particular contexts. These challenges highlight the adaptive capacity required of educators who are working 'for our times,' where sustainability demands both responsiveness to immediate realities and the courage to envision alternative futures hopefully.

Ultimately, the teachers' sense of *Great Work*, their shared responsibility, their hopefulness, and their commitment to collective learning points to a praxis that is relational, emergent, and deeply ethical. In embracing flexibility, fostering alliances, and recognising their role as supporting their students to find their capacity for action, teachers position themselves not only as knowledge constructors but as co-creators

of more sustainable ways of living, learning, and becoming together as a collective endeavour.

4.13 Conclusion

Considering how PrD can be supported and sustained for adult educators in E/LfS PD is not common. There are particular conditions such as time and space for reflection and a consideration of teacher well-being that this research has revealed are currently lacking in much PD for adult educators that need to form the culture and conditions for all E/LfS PrD – part of what the quality of PD opportunities are planned with in mind and measured against in their evaluation. What is clear from this research, is that sustaining praxis requires a community of educators, working collectively and collaboratively and learning from each other, whether globally or locally. In doing this, in this forward orientation of transformative learning, we move from the “what can I do?” question to the shared endeavour of “what can we do?”.

Chapter 5: Discussion and conclusion

“Between all of us we know everything”

**Zapatista knowledge quote, Highlander
Centre for Education and Research**

5.1 Introduction

This chapter will discuss the implications emerging from the analysis of the data in the previous chapter for the main research question, which asks, how can adult education in-service teachers be supported to develop their praxis in E/LfS? In considering this main research question and the sub-questions, which have framed the analysis, this chapter will offer several contributions to new ideas and knowledge propositions in this field.

This research contributes to new knowledge by bringing together the perspectives of educators operating on both the global and local AE frontlines, offering a depth and breadth of insight that is not evident in comparable studies within the existing literature.

Through its diverse participant base, this research advances theoretical understanding by extending established TLT models, introducing three additional stages to the transformative learning process and refining the Weinberg et al. (2020) Inner–Outer–Forward orientations to better capture the dynamic, multidimensional nature of adult educator praxis development in E/LfS.

The research also contributes an original green research framework for education, providing a conceptual structure, through self-reflection, to integrate green considerations into educational research stages. Synthesised from the literature and

the findings of this research are ‘Ten core tasks’ a practical tool for adult educators working within E/LfS and the Teacher Development Goals. The latter is a research-based framework for the development of adult educator praxis in E/LfS, which currently does not exist. Finally, the study introduces new ‘activator/activist’ roles for teachers—framing the potential roles of adult educators to support social, climate and environmental justice. Collectively, these contributions enrich theoretical discourse, inform professional practice, and open new avenues for research in adult education.

As explored in the introduction, the language around AE and sustainability is problematic in terms of the actual words used, their application, context, and impact. This was an unexpected area of exploration in this research. Words matter, and the language around adult education and lifelong learning has led to unintended consequences for how the sector and its contribution to sustainability are viewed, measured and celebrated: Consequences that are far-reaching as we see from the invisibility and lack of research on adult educators themselves and their praxis within sustainability education.

Within the language of sustainability, some theorists (Daly 1996) have been critical of the connection between sustainability and economic development, and, latterly, economic growth. For others (Sutoris, 2022), there are fundamental issues with the SDGs that need to be addressed as the priority. This research, therefore, consciously chooses to use the language of E/LfS in recognition of the inherent problems with the language of ‘development’, discussed in the literature review.

5.2 ‘Our Great Work’? — What can I do [to support global sustainable transitions]?’

As discussed in chapters 1 and 2, AE in the UK has forgotten its roots and lost its social purpose. But where to start with purpose? It’s unlikely, in the current policy and funding context (no matter what the political party in government), that a fundamental shift away from the economically deterministic focus on adult skills will happen in the short to medium term. Maybe, as Lazaridou and Papageorgiou (2011), suggest, it’s time for adult educators to reclaim our purpose for ourselves. Lange (2024) sees educators as pivotal to the shared goals of mitigating the worst impacts of the climate and environmental crisis and to “anticipating possible futures” (2024: 245) suggesting that this may be ‘Our Great Work’, as educators.

Undertaking this research has shown that critical to AE/LfS is developing a pedagogy for global sustainable just transitions: one that will look and feel different depending on context and place; one that, at its core, considers transformative learning through the heart, head, and hand process and the inner, outer, and forward orientations. A pedagogy for sustainable transitions grounded in place and context, has the potential for us to assert that our fundamental role as adult educators in E/LfS is to support students to find their own answers to that question ‘What can I do [to support global sustainable transitions]?’ . Defining a purpose for adult educators in E/LfS in this way, then frames the purpose and need for AE praxis development in E/LfS PD as supporting educators to find their own answers to ‘What can I do as an adult educator to support global sustainable transitions?’

5.3 So, what exactly can we do as adult educators?

Teaching in and about sustainability and supporting students to action is complex, daunting and currently unsupported in the main through praxis development opportunities for in-service adult educators. Michael Apple (2016) speaks to the possibilities of interrupting the neo-liberal dominance in education. His nine tasks for critical scholar/activists have been a guiding light in both my research journey and professional life. In the spirit of Apple's nine tasks to interrupt, disrupt and consider possibilities, I suggest 'ten tasks for adult educators' to begin to articulate what this research has highlighted as important for E/LfS.

To paraphrase Smith and Duckworth (2022), I have researched hopefully. I synthesised the ten tasks from my review of the literature in Chapter 2 and the data analysis in Chapter 4. One of my many hopes now is that these achievable tasks will help have a new dialogue around what exactly it is that we can do in E/LfS as adult educators. Make no mistake, I am not suggesting a slow, timid dialogue in the shadows; there is no time left for that. I mean for us to begin a difficult dialogue, one that, as Donna Haraway (2016: 4) tells us, must:

... make trouble, to stir up potent response to devastating events,
as well as settle troubled waters and rebuild quiet places.

5.4 Ten tasks for adaptable adult educators in E/LfS

5.4.1 Tasks in the inner orientation:

- 1) Know and tell their students that they don't have all the answers, and believe that teachers and students are all learners now

- 2) Practice an ethics of care for themselves and their students
- 3) Recognise the embodied, embedded and emotional nature of teaching and learning

5.4.2 Tasks in the outer orientation:

- 4) Develop critical, creative, curious and reflective thinking in their students and themselves
- 5) Create spaces to hold onto doubt, fire imaginations and create hope
- 6) Use the life experiences and situated knowledge of their students
- 7) Start simple and local in context, and then build complexity and scale
- 8) Include a range of alternative voices, experiences and examples which challenge the status quo and give hope

5.4.3 Tasks in the forward orientation:

- 9) Identify as activators (in the classroom) and/or change agents/ activists (beyond the classroom) of change
- 10) Work collaboratively as 'WE', in solidarity with other adult educators locally and/or globally

5.5 Theoretical underpinnings and rationale for each task

5.5.1 Task 1: Inner orientation—Know and tell their students that they don't have all the answers, and believe that teachers and students are all learners now

This task relates to the inner orientation, requiring humility and openness to shared and collaborative learning. It challenges adult educators to embrace a rethinking of the role of the teacher and to acknowledge, to themselves and their students, that they do not have all the answers.

Identifying this task draws on the work of theorists reviewed earlier (Clover, 1999; Cranton, 1996 Fischer and Mandell, 2021; Freire, 1998a; Mezirow, 1991; 1997; 2000; Mycroft and Sidebottom, 2018a; UNESCO UIL, 2025). This perspective positions teachers and students as learners and co-learners, a tradition grounded in the social justice history of adult educator praxis. As one participant put it, “We’re all students now.” (PFL).

5.5.2 Task 2: Inner orientation—Practice an ethics of care for themselves and their students

Of equal importance in the ten tasks is the practice of an ethics of care, for adult educators and for students. Owens and Leggett. (2012) and Verlie et al. (2020) highlight the need for educators to create nurturing spaces that mirror the care they cultivate in classrooms. A principle echoed in the project data: “We need to create the space for ourselves that we create in our classrooms” (PFL). Such care reflects the inner orientation, grounded in supporting the well-being of students and teachers in E/LfS.

5.5.3 Task 3: Inner orientation—Recognise the embodied, embedded and emotional nature of teaching and learning

Adult educators in E/LfS also need to recognise the embodied, embedded, and emotional nature of teaching and learning. Many authors (Owens et al., 2012; Sipos et al., 2008; Wamsler, 2018; Wahlgren, 2016) stress that teaching is not only cognitive but deeply emotional and situated. As one participant admitted, “This stuff is hard to teach” (PFL). This recognition reflects an inner orientation, acknowledging the complexity of the adult educator’s role in E/LfS.

5.5.4 Task 4: Outer orientation—Develop critical, creative, curious and reflective thinking in their students and themselves

Fostering their own and students' critical, creative, curious, reflective, independent thought is another central task for adult educators in E/LfS (EAUC, 2008; Freire, 1998a; Mezirow, 1991; Sleurs, 2008). Educators in this study described “trying to find new ways and avenues of letting the students think for themselves in the classroom” (GC). This represents a distinctive pedagogical approach focused on cognitive and epistemological agency within the outer orientation.

5.5.5 Task 5: Outer orientation Create spaces to hold onto doubt, fire imaginations and create hope

Creating spaces that hold onto doubt, fire imaginations, and nurture hope is also vital in E/LfS in their transformative potential (European Commission Joint Research Centre, 2022; Freire, 1998a; UNESCO, 2021a). One PFL participant reflected, “I’ve learnt that there is space for a different approach, I feel more hopeful about that”. This is positioned within the outer orientation, directed toward pedagogies which help to develop future hopeful possibilities and imagination.

5.5.6 Task 6: Outer orientation— Use the life experiences and situated knowledge of their students

Learning begins with what students already know (Freire, 1998a; Mezirow, 1991; 1997; Rubin and Brown, 2019; Sharp et al., 2021), and adult educators are encouraged to use the life experiences and situated knowledge of their students. As one participant explained, “Any good teacher will start off with what the students

know and bring that out” (GC). This is an outer orientation, rooted in the contextual relevance of both the curriculum and pedagogical approaches.

5.5.7 Task 7: Outer orientation—Start simple and local in context, and then build complexity and scale

In terms of a curriculum for E/LfS, starting simple and local, then building complexity and scale, is task 7. Owens and Leggett (2012) and Singleton (2015) argue for grounding sustainability education in local contexts and the importance of place before expanding outward. This was captured wonderfully in the phrase from one PFL project educator: “I want to grow this in my own soil” (PFL). Such practice in the outer orientation brings to life the move from the local to the global.

5.5.8 Task 8: Outer orientation—Include a range of alternative voices, experiences and examples which challenge the status quo and give hope

Including a range of alternative voices, experiences, and examples that challenge the status quo and inspire hope is also an essential task as is the importance of diverse perspectives (AimHi Earth, 2024; Apple, 2016; Owens and Leggett., 2012; Verlie et al., 2020). Participants spoke of “global dialogues” (PFL). This is a curriculum and pedagogical task within the outer orientation, opening up plural pathways of learning.

5.5.9 Task 9: Forward orientation—Identify as activators (in the classroom) and/or change agents/ activists (beyond the classroom) of change

Educators are further tasked to consider their role within E/LfS, identifying themselves as activators in the classroom and catalysts for change beyond it (Apple, 2016; Macagno et al., 2024; Timm and Barth, 2020; UNESCO 2015; Weinberg et al.,

2020). One participant affirmed, “We’re all changemakers, we have the ability to do what we can within our own sphere of influence” (GC). This is grounded in the forward orientation, linking the role of teaching with activism and supporting students to take action.

5.5.10 Task 10: Forward orientation—Work collaboratively as ‘WE’, in solidarity with other adult educators locally and/or globally

Finally, adult educators must work collaboratively as a collective “WE,” in solidarity with others locally and globally (Bostrum, 2018; CSET, 2008; Learning for the Future Competencies, 2012; UNESCO, 2021). This was echoed in the data: “That’s where my learning is, from my friends here” (PFL). This task is positioned within the forward orientation, emphasising collective action and a shared local and global responsibility.

5.6 Going forward: tasks and roles

5.6.1 Local, national and global discussions

My plan going forward is for the ten achievable tasks to be considered and discussed widely in the sector, locally, nationally, and globally through the international folk high schools’ movement.

5.6.2 Refining the roles for educators in E/LfS

Concurrent with adopting the ten tasks, we urgently need a further refining of the roles of adult educators as activators/activists in the field of AE/LfS. Data analysis in Chapter 4 found a spectrum of reflections on the teacher activist/changemaker role.

Some embraced it, others found it problematic. We can conclude from this that generally, the role is not universally understood or considered to be part of a teaching role in AFE. Evidence, from the PFL project and especially the partnerships in those countries most profoundly affected by the climate and environment crises is that it needs to be and very much sooner than later.

In this refining of the possible roles for educators in E/LfS, figure 12 below shows how activators primarily focus their work on the classroom and through their work with students, planting the seeds through supporting student engagement, using the life experiences of students and moving them to action. Activists/changemakers, whilst also engaging with this work, will also want to move beyond the classroom to their organisations or even the wider sector. These roles are interchangeable with a fluidity between them depending on inner (personal), outer (organisational/sector) and forward (support networks) factors.

Extending the definition of the role of adult educators in E/LfS in this way may make engaging with the responsibilities more realistic and achievable for teachers.

Although some teachers in the GC project were keen to engage in this work, they were also reluctant to take on any additional responsibilities or work without this being recognised and rewarded. One participant in particular framed this as a gendered position, reflecting the unpaid labour which is a feature of most women's lives and a core facet of patriarchy. This reflects deep structural issues found to some degree across the entire English education system, but especially AFE, where pay and conditions are falling behind the rest of the education sector. Recent (2024) National Foundation for Educational Research (NFER) analysis found that: AFE

teachers earn about 27% less than secondary school teachers on average and further that AFE teacher pay has fallen by around 18% in real terms since 2010 (2024:34-40). Facilitators and designers of PD need to be cognisant of this potential contradiction for even the most engaged of AE teachers.

Figure 12: Adult educators’ activator/activist/changemaker levels of influence and action for E/LfS

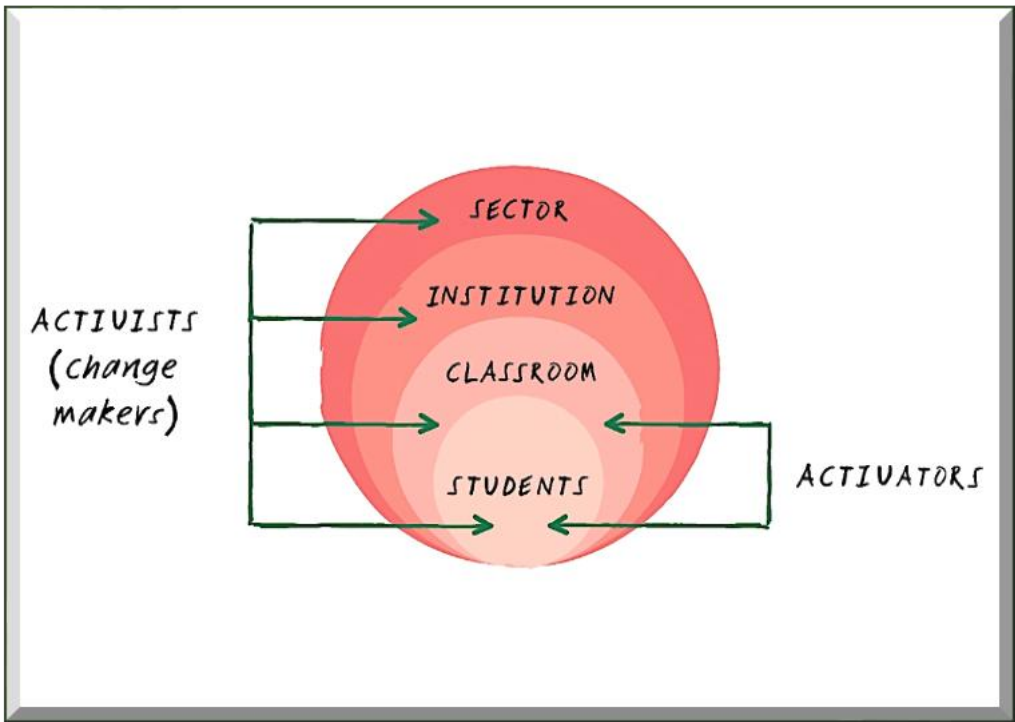


Figure 9: Adult educators’ levels of influence and action for E/LfS

Whatever the level and focus of the activist/changemaker element of their role identity, space for reflection is required to explore the political nature of both education and how educators present their activism to their students. The data indicated strong reflections across a range of views about the political nature of education. Many wanted this aspect of the teacher role to be more explicit, particularly in terms of their own positionality, as it linked strongly with their personal

and professional values. Others saw this as a way of inspiring students in terms of engagement and their own actions and activism. Some saw it as a way of finally creating distance from what they described as the 'old models' of teaching. Models where students are still the empty vessels to be filled with the expert input of teachers. This meant a direct link to living democracy within the classroom and also empowering people to make a difference and take action.

Analysis of the projects' data has also brought meaning to the role and identity of adult educators in E/LfS, particularly around:

- purpose and activism/changemaking
- the importance of building communities of support and learning
- moving from 'I' to 'We'
- the practical suggestions for adult educators working in any educational setting that are contained in the ten tasks for E/LfS

5.7 Teacher development goals

5.7.1 The TDGs model

Undertaking the work in the ten tasks and reflecting on the role of the adult educator in E/LfS demands a new approach to developing adult educators' E/LfS praxis, as no framework exists currently. The Teacher Development Goals (TDGs) are proposed to provide such a conceptual framework for adult educator praxis in E/LfS.

The exploring, developing and sustaining TDG framework (illustrated in figure 13 below) is adaptable to any of the multitude of heterogeneous education settings in

which adult educators do their work. Unlike so much traditional PD (learn this = do this), the goals are explicitly not about transferring knowledge at a transmissive level. Rather, they are about building relational approaches to E/LfS. They involve finding inner connections, recognising (shared) disorienting dilemmas, scaffolding shared learning on a praxis contextualised to place, and building teacher communities that support action and ongoing PrD.

Figure 13: The Teacher Development Goals

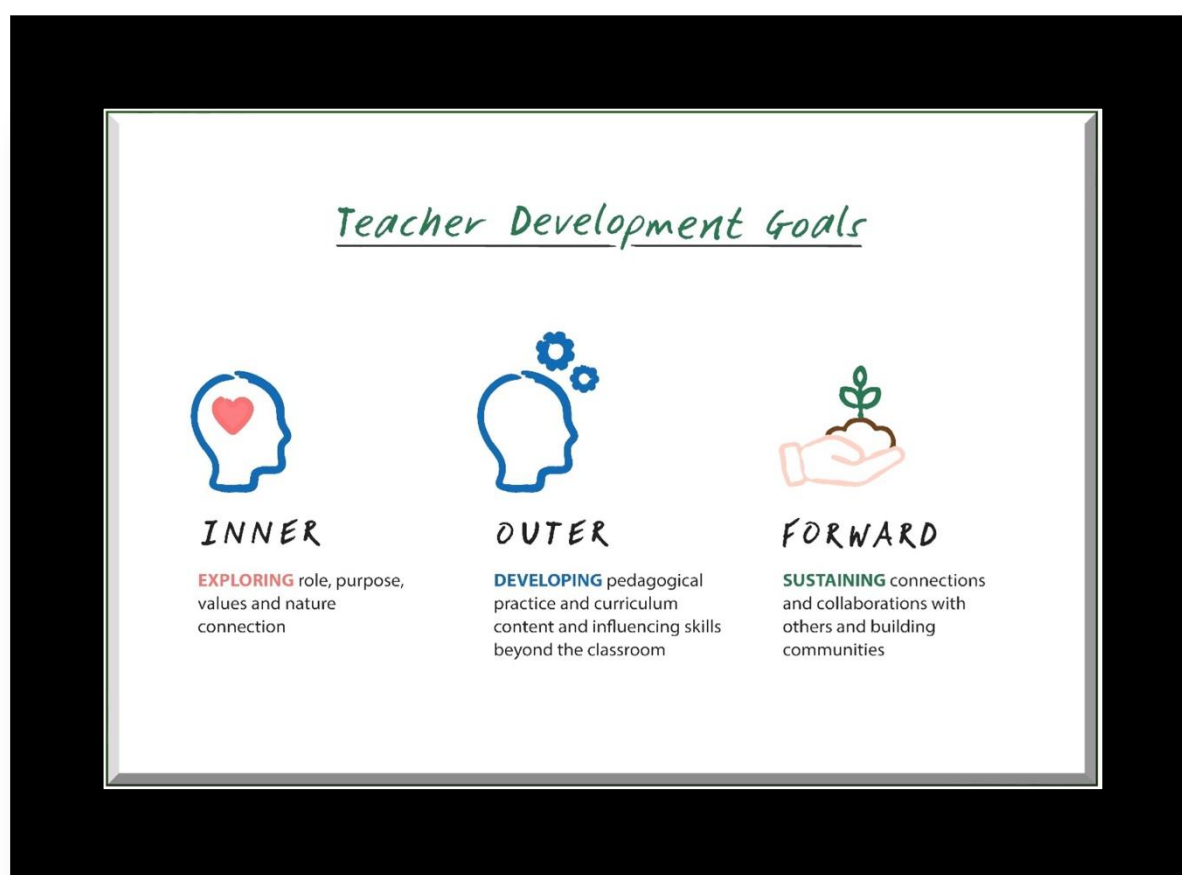


Figure 10: The inner, outer, and forward teacher development goals

Much like the Wamsler et al. (2021) model, this too is 'heuristic', with outcomes that are always emergent. "thus, enabling learning that is about discovery, rather than

fixed solutions” (Wals, 2011: 178) and ultimately about enabling adult educators to find, grow and share their own answers to ‘What can I do?’ How the Sipos (2008) and Weinberg et al. (2020) transformative learning models are used to frame the TDGs is illustrated in Table 18, below.

Table 18: Framing the teacher development goals through the extended inner, outer, forward orientations (Weinberg, et al., 2020) and the heart, head, hands dimensions (Sipos, et al., 2008).

Weinberg et al. (2020)	INNER	OUTER	FORWARD
Sipos (2008)	Heart – feelings	Head – knowing	Hand – doing
Teacher development goals	EXPLORING Purpose and role and nature/ environmental connection	DEVELOPING Competencies and skills – praxis	SUSTAINING Collaborations and networks
The teacher is able to:	Explore their personal connection to nature and the environment Explore their role as a teacher in E/LfS through the lens of activator/activist	Develop their own skills and competencies in E/LfS which can be applied within their own educational contexts	Sustain learning into the future through the building of collaborations and networks with other E/LfS teachers

Table 18: Framing the teacher development goals through the heart, head hands and inner, outer, forward orientations

Thus, within their sustainability PrD, adult educators get to experience the entire transformative learning process for themselves in the role of adult learners. The value in creating transformative learning environments like this for students is frequently identified in the literature as important (Aboytes and Barth, 2020; Cranton, 1996; Sterling, 2024) but is unusual in PD for adult educators in E/LfS. As described in Chapter 1, PrD for adult educators focuses almost entirely on the outer dimension, aiming to support the development of teachers' skills and competencies alone. Giving teachers experience of the head, heart and hand pedagogical dimensions 'in practice' will explicitly enable them to move through the levels of transformative learning as adult learners, mirroring the approach that we are asking them to develop in their praxis for E/LfS.

5.7.2 The inner orientation – heart – the goal of exploring role, purpose and values

In the inner orientation, the goal is to explore the teacher's role, purpose and values within E/LfS. Analysis of PFL and GC projects' participants' reflections on the support they need to develop their E/LfS praxis identified the need to start with the articulation of a teacher's personal connection to nature/the environment. This acted as a source of inspiration and rejuvenation, looking different for each individual. The literature review described the re-orientation of the climate crisis not as a technical problem but as a problem of relationships (Fischer and Mandell, 2021), making the rebuilding of the relationship with nature important for teachers working in E/LfS.

Data analysis also found that creating opportunities to explore educators' roles in E/LfS through the lens of activator/activist was a valued form of support. This can be

framed through the activator/activist continuum described above. As illustrated in Table 19, below, nature connectivity and role connect to the Weinberg et al. (2020) inner orientation and to the Sipos et al. (2008) pedagogical dimension of the heart. In developing their E/LfS praxis, many, if not all adult educators involved in E/LfS will experience disorienting dilemmas, display a lack of confidence in the field and may be overwhelmed both by the very nature of the climate and environmental crisis and their own position as teachers: powerful feelings which can lead to disengagement and anxiety unless they are addressed and supported through praxis development. The building-in of time and space to explore these aspects of the inner dimension in PrD aims to create a solid foundation for the outer and extended forward orientations.

5.7.3 The outer orientation - head – the goal of developing educators' competencies and skills

In the TDG outer orientation, the goal is development of pedagogical and curriculum praxis. These will be specific to curriculum and subject areas, as well as the student groups that teachers work with.

There are several different options which can be explored within this orientation. The skills required to develop pedagogical praxis in E/LfS will be wide and varied. Space and time for reflection on the part of the teachers will be needed. For some, working in vocational areas which support sustainability, such as in construction, specific skills around retrofit may need to be developed. For those working in vocational subjects, these are specified by the technical qualification awarding bodies. For many adult educators working in different non-vocational curriculum subjects, the skills will be more varied. But they should be defined and then developed by the teachers

themselves, considering their current pedagogical praxis and the context and place in which they teach.

Table 19 below, illustrates how the AIMHi Earth 15 green skills (which were used extensively in the GC development project) and the inner, outer, and forward orientations of the TDGs align. This offers a particular framing of skills predominantly in the outer orientation where there is scope to further develop E/LfS praxis in the inner and forward spaces.

Table 19: Alignment between the AimHi Earth 15 green skills and the TDGs inner, outer, and forward transformative learning orientations

No.	AimHi Earth 15 green skills	Teacher Development Goals transformative learning orientations		
		Exploring/ heart/inner	Developing/ head/outer	Sustaining/ hands/forward
1.	Critical, systems and nature-centric thinking		Yes Pedagogical praxis	
2.	Scientific understanding		Yes Curriculum development	
3.	Nature connectivity	Yes		
4.	Practical and technical “hard skills”		Yes Curriculum development	
5.	Long-term thinking		Yes Pedagogical praxis	
6.	Dynamic operations and crisis management		Yes Pedagogical praxis	
7.	Historical and cultural understanding		Yes Pedagogical praxis	

No.	AimHi Earth 15 green skills	Teacher Development Goals transformative learning orientations		
		Exploring/ heart/inner	Developing/ head/outer	Sustaining/ hands/forward
8.	Monitoring skills		Yes Curriculum development	
9.	Baseline fallback skills		Yes Curriculum development	
10.	Pioneer and entrepreneurial skills			Yes
11.	Interpersonal skills and kindness	Yes		
12.	Informational skills		Yes Pedagogical praxis	
13.	Defence skills			Yes
14.	Diverse thinking and non-neurotypicality		Yes Pedagogical praxis	
15.	Artistry and storytelling skills		Yes Pedagogical praxis	
	No. of green skills in alignment	2	11: 7 x pedagogical praxis 5 x curriculum development	2

Table 19: Alignment between the AimHi Earth 15 green skills and the inner, outer and forward transformative learning orientations

The importance of place and context

The debate around the dialectic of universalisms and particularisms explored through the analysis in Chapter 4 provided some interesting perspectives on the importance of context and place as considerations when developing adult educators' praxis in E/LfS. As one participant from the PFL project said, "I want to grow this in our own soil".

PD needs to allow for the contextualisation and application of learning to be applied in very different place and context. Singleton (2015), who further developed the Sipos et al. (2008) heart, head, hand model, argues that adding the dimension of 'place' to the model

...offers a stimulating, authentic context for meaningful educational experiences that hold potential for personal growth for learners beyond academics ...[and that] Place provides a context, an internal and external landscape, that frames, organises and anchors experience which is needed to extract meaning and construct knowledge. (Singleton, 2015: 5)

Pedagogical porosity

The concept of pedagogical porosity serves as a metaphorical bridge in this thesis between the rigid, often stifling structures of the English adult education (AE) sector and the fluid, transformative nature of the (social) learning required for a just transition. It is intended to provide a way to articulate the need for both resistance and hope and a repurposing of the adult education system in England. It was first considered in Denmark and is influenced by the folk high school philosophies of

education which promotes community and collaboration, active citizenship and self - actualisation.

The idea itself was born from a "beautiful encounter" where music and pedagogical dialogue merged, framing each other. This mirrors the interconnectedness required for sustainability education. Porosity gives us the opportunity to break down the silos of rigid pedagogical praxis, curriculum and learning outcomes, allowing sustainability to move from a discrete, "add-on" subject to a pervasive element that influences every interaction in the classroom.

Pedagogical porosity is the act of finding and stretching the "cracks in between". It acknowledges that while adult educators may not be able to dismantle entire systems immediately, they can encourage learning to "seep through" individual and collective praxis. This makes the "Great Work" of sustainability feel achievable rather than overwhelming.

Whilst the climate emergency fosters a sense of urgency, a central finding of this research is the value of 'slowing down'. Pedagogical porosity is the intentional creation of open space where dialogue and reflection can occur without the pressure of pre-determined outcomes. By allowing for this porosity, educators move from being transmissive "experts" to facilitators of a heuristic process focused on discovery rather than fixed solutions. Finally, in my professional and research journey where persistence is key, pedagogical porosity can help us to envision a space of radical possibility where new, regenerative futures can be imagined and where adult education, as part of the wider education eco-system can play its part.

Figure 14: “I want to see what grows between the cracks – a quotation from the data analysis made by one of the PFL educators

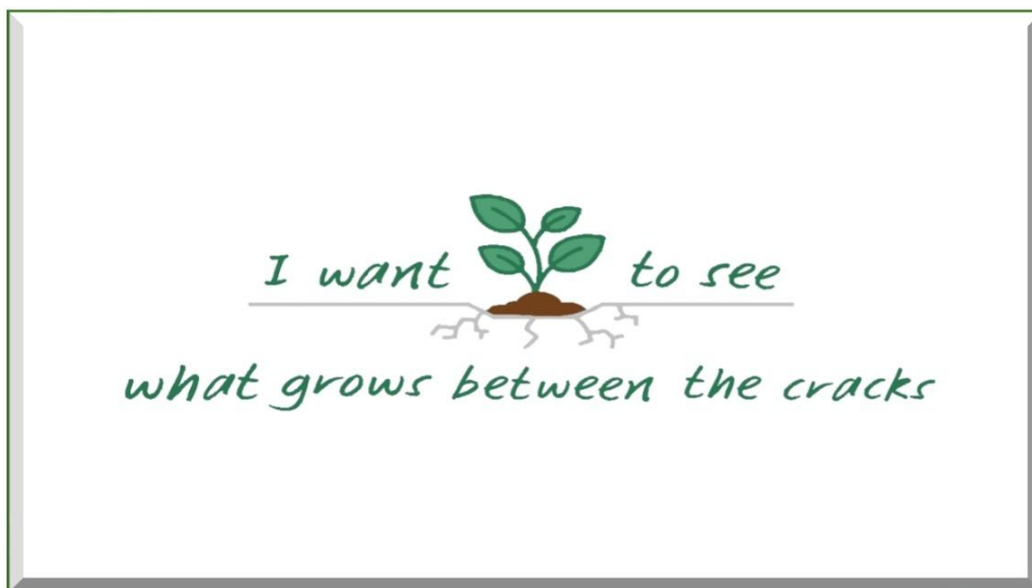


Figure 114: "I want to see what grows between the cracks" – a quotation from the data analysis made by one of the PFL educators

Other aspects in the outer dimension which emerged from this research included the use of dialogical methods, building hope and being hopeful in pedagogical praxis. Dialogical methods were viewed by many of the participants as a way of challenging the inherent power dynamics of the teacher/student relationship. It was also acknowledged that such methods take more time, which can be difficult to accommodate in current classrooms and colleges. For many of the teachers, building hope in themselves and into their pedagogical praxis emerged as an antidote to the complexity and enormity of the climate and environmental crises.

5.7.4 The forward orientation

In the extended forward orientation, the focus is on sustaining of praxis through collaboration and collective action with other adult educators. In this orientation, a

fundamental shift occurs, where the question of ‘What can I do?’ is transformed into the question ‘What can we do?’

The building of connections and relationships with other educators had a profound effect on many participants. These connections supported teachers’ personal development, their praxis and their sense of belonging to something important for E/LfS that is bigger and beyond themselves and their school/college context. A strong theme to emerge from these connections was the importance of hearing different perspectives and how they can shift thinking. One educator called these ‘conversations of learning’, another referred to ‘global dialogues’. Learning from each other about the macro and the micro was, for some teachers, what really made a difference for them.

In line with the argument presented in the introduction, we can learn from social movements. Borrowing from the international Transitions Network communities organising movement, Stimm and Dinkelaker (2024) describe the aim in developing networks that emphasise and are structured around learning to as ‘collective self-pedagogization’ enabling:

... each and every individual to make a contribution in their own way to collectively bring about a change ...*[in which the focus is on]* claiming a problem of joint action ... *[that]* ...arises out of shared concerns and a shared commitment to change. (Stimm and Dinkelaker, 2024: 290-291)

A shared need and desire, and the instilling of a sense of political imagination, both globally and locally to continue to work together emerged in both the PFL and GC

projects. Of all the orientations in the TDGs teachers may see the forward as the most challenging—not least because it is rarely a feature of their own PD opportunities.

Resources to support ongoing networks and communities will be a challenge in both the global and local fields. There will be many questions as to how they can be sustained that will need to be explored further, for example, should they use a form of technology? Should they be self-contained or managed/led? In the GC project, the network is being sustained via a busy WhatsApp group. The PFL project is publishing a book with contributions from many of the project participants.

For many of the educators, their reflections on connections and the building of relationships extended beyond themselves and their schools/colleges to their local communities. This reflects the activist/changemaker actions, in which teachers view their actions as existing beyond the classroom.

The heart, head, and hand model within the context of the global and local is illustrated in figure 15, below.

Educators in this research demonstrated how both the feelings/connection (heart) and knowledge and understanding (head) can be influenced by the local and the global context. In most E/LfS PD, it will therefore be important to build up in complexity from the local to the global. Supporting student action (hand) focusing on the local (within a school/college or a local community) was seen as important and achievable.

Figure 15: Applying the local and global dimensions to the Sipos et al. (2008) head, heart, hand model



Figure 15: Applying the local and global dimensions to the head, heart and hand model (Sipos et al., 2008)

Encouraging adaptation and adaptability on the part of the adult educators will be a valuable, if possibly unexpected, aspect of regenerative and transformative development of their E/LfS praxis. The placing of support for adult educators within the wider context of the social learning required for a sustainable, just transition enables us to consider PrD as both the adaptable environment that occurs as a result of that social interaction and as an adaptive learning goal.

This research has shown that transformative learning can be challenging for teachers engaging in support to develop their praxis in E/LfS. Designing transformative educational experiences and learning systems is also challenging, in the immediate learning situation and in the context of the “dominant educational paradigms and structures that essentially are not themselves transformed or sufficiently critically

reflexive...” (Mycroft and Sidebottom, 2018: 210). Because transformative PD challenges the norms in teaching and learning policies and practices it requires an adaptable and flexible framework such as the TDGs and as we have seen above, the freedom, time and space to explore to explore them.

The creation of a regenerative atmosphere in spaces for learning will be crucial to the delivery AE/LfS PD built on the TDGs. Verlie et al. (2020: 120) argue that regenerative atmospheres “provide the conditions for people to contemplate, experiment with, rehearse and enact that change”. A regenerative atmosphere doesn’t simply happen; it has to be composed. Designating specific times and spaces is important in creating such atmospheres. In terms of the pedagogical praxis of regenerative atmospheres, the key,

... is asking questions or designing activities that encourage and support people to consider, dwell with, explore and respond to their own and others’ affective entanglements with climate change ... [and] ... ensuring these atmospheres are both unsettling and regenerative requires a critical and compassionate approach from facilitators. (Verlie et al., 2020: 120)

Many of the themes that have emerged in this research are not new and have been included, to some degree in the various TLT frameworks reviewed in the literature and used to develop the theoretical and analytical frameworks for the study; the tools developed to support data collection and analysis; and to propose the applicability of TL models and research findings, such as the Ten Tasks and the TDGs. Reflection, in particular, is an often-repeated practice in both transformative learning and E/LfS (EAUC, 2008; Sleurs et al., 2008; Wahlgren, 2016). Reflection and reflexivity have been key features in both the process and findings of this research. Reflection,

however, requires prioritising the space and time needed to enable us to build our E/LfS praxis muscle. Owen et al. (2012: 54) say this is “to account for the subjectivity of inner transformation and ethical importance of being aware of one’s positionality as a researcher or practitioner”.

5.8 Future possibilities for the English adult education sector

This research has specifically focused on reimagining the support needed to develop adult educator praxis in E/LfS. It’s clear that the scale of this challenge is large and requires substantive adjustment for the sector as a whole. In their report on teacher education, Mulà and Tilbury (2023: 11) propose eight catalytic points and actions that can provide core pathways for changing the provision and mainstreaming of LfS in teacher education. The eight points are listed below with summaries on the current state of play in the UK with recommendations for AE based on the findings of this research.

- 1) *Political and policy commitment:* the DfE climate action strategy (2022) currently covers the whole education ecosystem but is primarily focused on schools and children. There is no equivalent strategy for AFE or Lifelong Learning, nor is there provision to support teacher development for new or in-service educators. The recommendation from this research is therefore to develop a cross-departmental adult education strategy with E/LfS and social justice at its core, including a framework for embedding E/LfS praxis through the TDGs.
- 2) *Development of professional competencies and standards:* Sustainability has been included in ITT since 2023, but the standards remain generic. To strengthen this area, piloting and

testing of the TDG model within AFE is recommended, ensuring that professional development is tailored to the sector's, organisational and educators' needs.

- 3) *Recognition and reward*: Mechanisms are beginning to emerge, for example, the ETF rolled out the Specialist Status in Education for Sustainable Development (SSED) standard in 2025 a paid for status which the ETF (2025: n.p.) asserts sets “the benchmark for what excellence looks like in the integration of sustainability within educational practice.” Recommendations include the introduction of a Green Gown Award for teachers (a TDG award) and ensuring that sector awards consistently celebrate and recognise teacher contributions to sustainability education. However, broader recognition is needed than this.
- 4) *Micro credentials and certification of learning*: When it comes to the recommendations on micro-credentials and certification of learning, there is currently nothing in place for the sector. Following the UNCC: CE model and linking to digital badges is proposed, alongside the development of resources to support and sustain this initiative.
- 5) *Resources for a sustainable future*: existing platforms such as the EAUC sustainability exchange (currently members-only and focused on higher education) and the West Midlands and Warwickshire green skills tutor hub (still in development) may provide partial support. The recommendation is to expand and simplify these knowledge hubs, making them accessible and relevant to educators across the whole adult education sector.
- 6) *Collaborative enquiry and peer learning*: The importance of collaborative enquiry and peer learning is highlighted by initiatives such as FESustains, an informal network sharing practice in England for teachers in AFE, and EAUC regional meetings. To build

on this, communities of praxis should be developed across colleges, regions, and globally, supported by a simple framework to explore and communicate impact stories.

7) *Framing E/LfS as innovation or renewal*: This is often treated as an add-on to the curriculum, with pedagogy framed around Ofsted-driven teaching and learning strategies. To shift this, engaging with wider international debates, research, and reports is recommended. This could be supported by the creation of a dedicated research and development infrastructure body specifically for adult education, which would also support the eighth and final catalytic point.

8) *Fresh insights and visions (using technology) for the future*: Mulà and Tilbury, 2023: 117-179). Support for emerging researchers exists but is peripheral and not focused on E/LfS. The recommendation, therefore, is to establish an adult education research infrastructure body to support educator development and innovation in sustainability education and learning.

5.9 Limitations and future possibilities for this research

Comparison of the global, PFL, and local, GC, projects and any assessment or analysis of their effectiveness or wider impacts was outside the scope of this research and would have been impossible within the timeframes. As data for this research was captured at the end of each programme, data collection and analysis of the development of adult educator praxis in E/LfS and the impact of this on teachers and their students was not possible. Future research could test the impact over a much longer period.

The study places at its centre the voices of educators working at the global and local AE frontlines. Data capture was solely dependent on teachers' self-reflections, which have not been tested further. While there was a positive rationale for using thinking environment principles within the focus groups, it is possible that doing so may have stifled debate between participants. Future research, such as in-depth interviews with some of the original project participants to follow-up their praxis development beyond the life of the projects they participated in, would be useful.

Only two teacher development projects were involved in this research, which may have limited the data produced. Although there are limited examples of E/LfS in-service development programmes, examples of PD and support in AE are now slowly emerging, making further research in the future a realistic proposition. The use of additional or different research methods specifically to inform and improve the quality of policy development and decisions in relation to the contribution AE could and should be making to E/LfS. It will be important to continue to enrich our knowledge and current understandings of adult educators' needs—what really makes a difference and does or does not help them to develop their E/LfS praxis over time.

Using TL as the methodological underpinning is one way of thinking about the development of praxis; other theories might present a different analysis of data and therefore of the conclusions. Finally, the green/sustainable framing of the research could be further refined in terms of the areas in scope and the reflection questions, as this becomes a more common practice within the field of education research.

This research focused on an under-researched sector and group of educators in AE/LfS and has given a voice to AE teachers at both the global and local levels, which was an unusual and unique opportunity.

The data revealed the extent of disorienting dilemmas faced by adult educators when considering E/LfS and the multiple shared discontents within the profession. Inviting practitioners in the field to reimagine future possibilities highlighted the potential for E/LfS PrD to be a catalyst for finding / reclaiming our radical social purpose in AE.

As a result of the research process and findings, and in response to the question that started this journey: ‘What can we do?’ several reimagining’s in the data have been worked up as ideas and practical tools to support E/LfS PD. These include:

- The continuum to describe adult educators’ new role as E/LfS activators and activists
- The ten tasks for adult educators in E/LfS
- The TDGs: A transformative learning model, specifically designed to support the development of adult educator praxis in E/LfS, including what the research highlighted as the conditions needed to implement the TDGs and potential barriers currently within the English AFE system.
- The GRFfE for the field of adult education research.

This research is a snapshot in time within adult education. Further research is needed to expand and develop the learning, conclusions and recommendations grew through and out of participants’ engagement in this study. Piloting of the TDGs as a framework for developing educator praxis within E/LfS will enable a real-life testing of

its impact. This would need to be followed up with the participants to examine its success in terms of meeting its purpose. Further research could also explore the proposed activator/activist model in terms of the development of adult educator roles. The ten tasks for adult educators in E/LfS will need dissemination to practitioners in the sector and could be followed up with further research to publish some real-life, practical examples of each task.

First-level learning explored previously can be described as a transmissive approach or greenwashing, as it is really just “doing more of the same” (Sterling 2024:152). The second order of learning refers to “a significant change in thinking or in what you are doing as a result of examining assumptions and values and is about understanding the inner or subjective world”. Second-level learning is much deeper and more challenging as it “involves the learner critically examining and if necessary, changing their values, beliefs and assumptions.” (Sterling 2024; 153)

The voices, reflections and perceptions of the teachers in the study have shown that elements of second-order learning, discussed in the literature, were achieved but whilst it has been possible to make some judgements about the levels of transformation achieved in these projects, there remains a debate to be had about whether third-level transformative learning is possible in the English AFE system without radical change. This raises the question of whether and how third-level learning, that is required for transformation, is even possible within professional development spaces? According to Lange (2024), third-level or deep sustainability is best pursued outside of regular institutions because the philosophy of ‘knowing’ in deep transformative sustainability conflicts with most existing structures in education.

This level of deep transformation or third order learning may therefore require a new vision for and the emergence of different organisations in adult education, the likes of which we saw historically between the 1890's and 1920's in England. If so, where might the inspiration and funding for these new organisations come from? Research which gives space to explore developing global adult education examples will be critical to this.

Finally, though not the core focus of this study, the further development of a green/sustainable research framework specifically for the field of education is a current gap and will, as research on E/LfS continues to grow and develop, be needed.

Lather (1991: 68) uses the term catalytic validity to describe the level to which the process of research “re-orient, focuses and energises participants toward knowing reality to transform it”. Whilst this focuses on research which ultimately leads to personal and social transformation, by extending this to a ‘sustainable catalytic validity’, we could begin to frame the transformation at a personal and social level through the lens of a sustainable future. Though this is an early attempt to develop a framework, Table 20 below, shows some success with using the GRFfE in this study.

Table 20: Applying the green framework for research in the field of education to this research

Research choices	Questions to consider	This research analysis	How/where evidenced in this thesis
Researcher positionality	Does the researcher position themselves as an active researcher/ learner within the field of E/LfS?	Yes	Chapter 1
Research question	Does the research question relate to some aspect of E/LfS (e.g.17 SDGs)?	Yes	The question focuses on the development of adult Educator praxis in E/LfS
Theoretical underpinnings	Does the theory used have some relationship to sustainability or is it being applied in a new way that focuses on E/LfS?	Yes	TLT is increasingly used within the field of sustainability An extended version of the stages of transformation has been developed for this research.
Participants	Are participants seen as active partners in the research?	Yes	All participants had taken part in the development projects—their perceptions and voices are central to this research.
Research method(s)	Do the research methods used consider minimising the resources used, travel, time etc.? Does the research use opportunities which are already in existence? Does data collection happen where the participants are?	Yes	The focus groups took place in the final stages of the projects so there was no extra travel. The two study projects already existed.

Research choices	Questions to consider	This research analysis	How/where evidenced in this thesis
Analysis and conclusions	Does the analysis of the data and the conclusions of the research contribute new knowledge to E/LfS?	Yes	New knowledge produced through developing the green research framework Centring global and local adult educators' voices Teacher development goals Activist/activator roles for adult educators Ten tasks for adult educators in E/LfS
Publication of the research	Will the research be published outside of journals and in spaces in where participants/ focus of the research can easily access it?	Yes	The full research thesis will be offered through blogs and articles which will be shared with the participants.
Dissemination of recommendations/ findings	Are the recommendations and findings to be widely shared within the relevant sector and outside of academia?	Yes	My own extended global and local networks will be used to share the findings.

Table 20: Applying the green framework for research in the field of education to this research

The GRFfE is currently being disseminated and explored in the AFE sector through the Learning and Skills Research Network, a sector-led, practitioner-focused network through a recent conference and forthcoming chapter publication (Lenehan and Mycroft, 2026).

I intend disseminating this research through conferences and recently submitted abstracts to the Nordic conference on adult education (May 2026) and the International Transformative Learning Conference (October 2026). A Summer

Symposium at Fircroft College is planned in 2026 on the theme of 'Reimagining adult education for the future', which may hopefully produce an edited anthology.

I am also keen to publish think-pieces in the sector press (e.g. FENews, FE week). I would love to further develop and deliver the TDGs and work with other adult educators to publish a practical pedagogical guide that develops the ten tasks for adult educators in E/LfS. Completing this thesis feels like an endpoint. It also feels like a beginning for me.

My day job is fast-paced and does not offer many spaces for pause and reflection. This research process has given me some time for pause and reflection.

Understanding that good research takes time, that it requires a distinct set of skills and disciplines, has been challenging for me, not least because I have undertaken it alongside my day job. Going forward, I will certainly pay more attention to those aspects of the research process that I have found most challenging, for example, using a referencing system.

My purpose as an adult educator has always been clear to me. I first read Freire (1998) as part of my undergraduate studies. Through this research process, I have found my voice in articulating that purpose to the adult education sector itself.

Raising my voice, regionally, nationally and globally, is the next stage for my career.

5.10 Final comments

This thesis has argued that it is now critical that adult education in England plays its part in contributing to a just transition and a sustainable future for all. A

transformative (social) learning revolution is required. The educators and teachers who work within adult education across all curriculum areas and levels of learning are a critical part of this change and have the potential to contribute greatly to a just transition. Pedagogical praxis is a site of possibility. This requires a re-thinking of the adult educator for our times.

Re-thinking the adult educator in E/LfS, as this research has shown requires us to move from multiple, shared dilemmas to transformative action. This means investment in our teachers and educators, which means rethinking how we support our in-service adult educators in their E/LfS praxis. This research has shown that it requires regenerative development. Rethinking adult educator PrD is an example of a deep leverage point in the education ecosystem. Leverage points are “conceptualised as places to intervene in a system with increasing impacts on collective and system change” (Wamsler et al., 2021: 2). The practical tools developed: the TDG’s, the widening of our roles as activators/activists and the 10 core tasks for adult educators need be supported and invested in. Investment in AE—a vital, though ignored, part of our education system—is long overdue and, as this research suggests, is needed by teachers working in the sector across very different types of organisations and curriculum areas.

Being an adult educator and working with E/LfS comes with additional responsibilities, which perhaps have not been considered sufficiently previously. Having a sense of purpose, at the individual, organisational and sector levels, is critical to connecting to our values and the development of our own inner sustainability, which helps frame these responsibilities. Only then can we use

purpose and values to build our pedagogical praxis in E/LfS. Once engaged in developing our praxis, we must work together to sustain it and ourselves.

Personally, this research has definitely been about finding answers to my own question: 'What can I do?' and as this journey turned into an exploration of 'What can we do?' It became about finding hope and being hopeful. Because asking 'What can we do?' catches you: once you start to say it and then do it, others see what is possible. Engaging with the PFL and GC adult educator development projects and their participants through this research has been joyful. For me too, it has sometimes been a much-needed antidote to the realities of the day job. For lots of reasons—a lack of strategy and policy, a lack of funding and investment in innovation and its teachers, a lack of knowledge of our history and heritage and a lack of imagination—the adult education sector in England is in crisis. It has lost its purpose beyond a narrow neo-liberal focus on skills and productivity. For a sector in crisis, one must ask if this is an opportunity, a point in time, to refocus our purpose. Could such a repurposing of the adult education sector and a turn towards addressing the interlinked social, racial, climate and environmental crises stem the decimation of adult education in the UK and beyond? In short, for both the sector, those who work and study within it and the planet, it *must*.

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Appendix 1: Open letter from Melanie Lenehan to adult educators

Originally written in 2021

Dear Colleagues

After an incredibly tough two years, and as we move towards and start to look to the future, I wanted to share some personal and professional reflections on what “being” and “becoming” an adult educator is in our current social and global context. My reflections have many questions and challenges to ourselves as adult educators. The intention is not despair but hope for a collective endeavour to come together to explore these ideas and thoughts further.

I'd just like to take a moment to remind you that what we do matters. It matters to our students, and it matters to our world. So, I'd like to say thank you and hope that our collaborative efforts, both now and in the future, to meet the many challenges of our world, within our classrooms and through our work with our students, might inspire others.

I believe it's time for us as adult educators to change the conversation. We need a focus on the future and the incredible challenges that lie ahead of us and future generations. But let's not forget our past. Let's reclaim our social purpose as a sector, let's stand for social and planetary justice. Let's not wait for it to happen through strategies and policies defined by those with and in power. Let's challenge ourselves to do more. Let's create hope, and at the same time, hope for more.

After twenty-five years of working in adult education in England, what I see now more than ever before is a crisis of identity and imagination in the possibilities of what adult education can contribute to our world. The external view of adult education has been reduced to measurable impacts and outcomes of educational interventions, which, if they do not contribute to economic productivity and growth, have no value, purpose, or meaning. The pervasive neo-liberal, advanced capitalist ideology is manifested in education policy, funding and the compliance regimes that engulf us, haunt our classrooms, our identity and our agency as adult educators.

What I know for certain is that the tensions will continue to heighten between old paradigms and new perspectives, which seek transformative transitions for “collective sustainable futures”. Our work as adult educators surely is not just about interventions, correcting the deficiencies in the other parts of the education ecosystem, but transitions, hope and imagining new futures. Our work is participating in and creating moments of learning in individual and collective transformative change. Not just for our students, but also for ourselves.

Sixty years ago, in an open letter to WEA tutors (which has inspired me to write this one), Raymond Williams wrote about educational organisations such as ours, saying that “We are always in danger of losing that which we can never afford to lose. The organisations of social justice and the institutions of democracy are worth working for.”¹ Despite the many challenges the college has faced in its 112-year and recent history, Fircroft College endures. As its custodians for the now and the near future, we have an ethical imperative to act.

Calls to action for educators are appearing globally. These calls to action ask, what is the future we are educating our students for? What does that mean for us now? UNESCO, following a consultation involving over one million people globally, have produced a powerful and evocative report which acknowledges the power of education to bring about profound change. The title of the report, “Imagining our Futures Together”, asks us to imagine, but to also create spaces in our classrooms for imagination. The report also recognises the urgency of this conversation, “humanity and earth are under threat, the pandemic has served to prove both our fragility as a species on earth but also our interconnectedness, urgent action is required.”²

In his opening essay for the Great Transitions Initiative, exploring the pedagogy of transitions, Professor Stephen Sterling starts by saying, “Our ability to achieve a liveable future for all depends on whether we can foster an unprecedented degree of social learning. There is no change without learning and no learning without change. But with the stakes higher than ever before, time is worryingly short”.³ How, he asks under such urgency, do we affect such a large paradigm shift?

Blake Poland⁴ argues the sustainability crisis is not actually a technical problem that some clever scientists and entrepreneurs will be able to “fix” but a crisis of our imaginations. Perhaps, he says, it could even be said that the sustainability crisis is a relationship problem. “We have fallen out of right relationships with ourselves, with each other and the more than human world”. How do we, as adult educators help to build and rebuild these relationships? What social learning, both intended and unintended, can we help to foster at Fircroft College?

¹ Raymond Williams, (1961) An Open Letter to WEA tutors, downloaded from <https://weaeducation.typepad.co.uk/files/raymond-williams-an-open-letter-to-wea-tutors.pdf>

² UNESCO, (2021) Reimagining our futures together: A new social contract for education downloaded from <https://en.unesco.org/futuresofeducation/>
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³ Stephen Sterling, (2021) “Educating for the Future We Want,” opening essay for GTI Forum “The Pedagogy of Transition,” *Great Transition Initiative*, <https://greattransition.org/gti-forum/pedagogy-transition-sterling>

⁴ Blake Poland, (2021) “From Classrooms to Social Movements,” contribution to GTI Forum “The Pedagogy of Transition,” *Great Transition Initiative* <https://greattransition.org/gti-forum/pedagogy-transition-poland>

UNESCO's report requires a new social contract for education, "to repair past injustices whilst transforming the future". I think this calls for adaptive adult educators. For us to be able to hold onto doubt, to not have all the answers. To be comfortable in not being an expert. To see our classrooms as spaces where questions and answers can be explored together with our students. Where new possibilities can be imagined. Bell Hooks reminds us that "The classroom remains the most radical space of possibility in the academy."⁵

What does this mean for the learning environments within our classrooms and beyond? Can we consider those beautiful encounters that happen within the classroom? Those teachable moments where your meticulous lesson plan stays firmly on your desk whilst you go with the flow with the question/challenge/discussion that might have been wholly unanticipated. UNESCO's vision for the future, is one I share; as peaceful, just and sustainable, others have called this my "idealism". I prefer Angela Davies' position, whereby "You have to act as if it were possible to radically transform the world. And you have to do it all the time." But this is not an individual endeavour, it is a collective one. We may not be cared about by policy makers but we can care about each other and work together on this. "Thinking together so we can act together to make the future we want."⁶

I have returned to this quote from Raymond Williams again and again in my work as an adult educator, so let's remind ourselves of this universal truth, "in times of change, people turn to learning in order to understand what is going on, to adapt to it and shape that change."⁷ What then for us as the current adult educators?

Melanie Lenehan
Principal and CEO
Fircroft College of Adult Education



⁵ Bell Hooks, (1994) Teaching to Transgress. Routledge.

⁶ Angela Davies, <https://www.facebook.com/okayplayer/videos/you-have-to-act-as-if-it-were-possible-to-radically-transform-the-world-and-you-/4411215402228628/>

⁷ Raymond Williams (1983) Adult education and social change, in Lectures and reminiscences in honour of Tony McLean (Southampton, WEA Southern District).

Appendix 2: Contributions to new knowledge presented in this thesis

(Table 21) List of 6 original contributions to new knowledge presented in this thesis

Area/theme	What was known previously (literature review)	Gap identified	Original contribution to knowledge	Where evidenced (chapters)
Representation of adult educators' voices and reflections at a global and local level in E/LfS.	No studies found which used adult educator perspectives to consider PD in E/LfS.	The voices and experiences of adult educators are under researched.	The voices and reflections of 60 adult educators from 41 different institutions. 12 different countries involved in this research.	3 and 4
Extending established TLT models by introducing 3 additional stages to the TL process and refining the inner, outer, forward orientations.	TLT is a well-established and widely used theory in adult education but has limited application to the professional development of teachers.	Established theories and models of TLT do not consider barriers to reintegration; what is required to sustain and maintain transformation; or a space to dream of possibilities.	Extended the TLT process by adding 3 more stages. Refined the Weinberg et al. (2020) inner, outer, forward orientations to include these additional stages.	3 and 4
A framework to support green research in education	No framework was identified specific to education.	No self-reflection framework exists to support green research in education.	Developed the green research framework for education with a series of self-reflection	3 and 5

through self-reflection questions.			questions at each stage of the research process.	
The role of the adult educator in E/LfS.	Some research on the roles of teachers in schools.	Limited research in activism/changemaking in adult educators in E/LfS.	Developed the activator/activist roles.	5
A model for professional/praxis development specifically for adult educators in E/LfS.	Various frameworks identified.	No frameworks specific to adult educators' PD in E/LfS.	Developed the Teacher Development Goals (TDGs) based on the findings from this research.	5
A practical guide for adult educators working in E/LfS.	Some limited guidance for school teachers.	Lack of practical ideas for adult educators in E/LfS.	Developed the 10 tasks for adult educators in E/LfS.	5

(Table 21) Appendix 2: List of 6 original contributions to new knowledge presented in this thesis